

**DELTA
2019
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2018-05**

October 2018

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 2019 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.

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2019 Planning Budgets

Budgets for Agricultural Enterprises

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

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

- by farmers for planning,
- by extension personnel 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 2018. (Appendix Tables 1, 2, and 3).

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

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

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

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

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

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

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2018 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 through 18. 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, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.5000	16.25	_____
App by Air (3 gal)	appl	5.00	5.2500	26.25	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	34.3582	42.60	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	4.5000	24.17	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	2.0000	2.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$30	acre	30.00	1.0000	30.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
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	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3993	5.69	_____
Self-Propelled	hour	14.23	0.2310	3.29	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	14.21	0.5043	7.17	_____
DIESEL FUEL					
Tractors	gal	2.60	4.6248	12.02	_____
Self-Propelled	gal	2.60	5.0512	13.13	_____
REPAIR & MAINTENANCE					
Implements	acre	7.09	1.0000	7.09	_____
Tractors	acre	2.39	1.0000	2.39	_____
Self-Propelled	acre	21.68	1.0000	21.68	_____
INTEREST ON OP. CAP.	acre	17.56	1.0000	17.56	_____
TOTAL DIRECT EXPENSES				734.96	_____
FIXED EXPENSES					
Implements	acre	11.14	1.0000	11.14	_____
Tractors	acre	16.47	1.0000	16.47	_____
Self-Propelled	acre	95.43	1.0000	95.43	_____
TOTAL FIXED EXPENSES				123.04	_____
TOTAL SPECIFIED EXPENSES				858.00	_____

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

Table 1.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1200.0000	889.68	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				1051.68	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	72.60	1.0000	72.60	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	113.95	1.0000	113.95	_____
INSECTICIDES	acre	93.38	1.0000	93.38	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
OPERATOR LABOR	hour	14.23	0.6304	8.98	_____
UNALLOCATED LABOR	hour	14.21	0.5043	7.17	_____
DIESEL FUEL	gal	2.60	9.6761	25.15	_____
REPAIR & MAINTENANCE	acre	31.16	1.0000	31.16	_____
INTEREST ON OP. CAP.	acre	17.56	1.0000	17.56	_____

TOTAL DIRECT EXPENSES				734.96	_____
RETURNS ABOVE DIRECT EXPENSES				316.72	_____

TOTAL FIXED EXPENSES				123.04	_____

TOTAL SPECIFIED EXPENSES				858.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				193.68	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 1.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
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
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
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					17.1791				
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
CSeed B3XF/W3RE/GLTP	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 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
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					17.1791				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt\$30	acre					1.0000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Centric 40WG	oz					2.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38 (500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.63	0.39	0.95	0.50

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 1.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	12R-38		1.62	1.66	1.38			0.28	4.94	4.83
Bed/Disk (Hipper)	12R-38		0.74	0.33	0.63			0.10	1.80	1.55
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Select Max	pt	12.71						0.51	13.22	13.22
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.14	4.26	2.98
UAN (32%)	gal	21.30						0.75	22.05	22.05
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91
Plant - Folding	12R-38		1.49	1.83	1.72			0.15	5.19	5.31
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68	105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60	20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.03	0.95	1.30
Dual Magnum	pt	13.81						0.41	14.22	14.22
Liberty 280	oz	17.11						0.51	17.62	17.62
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.02	0.94	1.30
Centric 40WG	oz	10.74						0.27	11.01	11.01
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98
UAN (32%)	gal	21.30						0.53	21.83	21.83
App by Air (3 gal)	appl	5.00						0.13	5.13	5.13
Diamond .83EC	oz	8.40						0.21	8.61	8.61
Imidacloprid 4F	oz	2.00						0.05	2.05	2.05
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.07	3.33	2.25
Diuron	pt	4.64						0.09	4.73	4.73
Liberty 280	oz	17.11						0.34	17.45	17.45
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
Acephate 90%	lb	6.53						0.13	6.66	6.66
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Bifenthrin	oz	4.86						0.10	4.96	4.96
App by Air (3 gal)	appl	1.25						0.03	1.28	1.28
Lambda	oz	1.09						0.02	1.11	1.11
Bidrin 8EC	oz	2.52						0.05	2.57	2.57
Incidental Pest										
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
IncidentalPestTrt\$30	acre	30.00						0.60	30.60	30.60
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	6.53						0.10	6.63	6.63
Bifenthrin	oz	4.86						0.07	4.93	4.93
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Centric 40WG	oz	13.43						0.20	13.63	13.63
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
App by Air (5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01
Gin & Haul	lb	132.00						0.66	132.66	132.66
Stalk Shredder-Flail	20'		2.48	2.58	2.11			0.04	7.21	4.80
TOTALS		642.01	25.15	31.16	19.08	0.00	17.56	734.96	123.04	858.00

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 1.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1051.68
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	30.00	0.00	0.00	0.00	0.00	21.30	0.00	21.30	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	22.95	0.00	69.25	0.00	21.75	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	21.14	45.00	24.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	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	25.31	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	2.01	0.00	0.00	0.00	0.00	1.56	4.18	1.91	1.34	0.00	0.00	8.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.36	0.00	0.00	0.00	0.00	1.56	3.93	1.95	1.34	0.00	0.00	14.01
REPAIR & MAINTENANCE	1.99	0.00	0.00	0.00	0.00	1.00	2.91	1.18	0.58	0.00	0.00	23.50
INTEREST ON OP. CAP.	4.35	0.00	0.00	0.00	1.21	0.89	6.44	1.34	1.66	0.53	0.25	0.89
TOTAL DIRECT EXPENSES	76.85	0.00	0.00	0.00	31.38	26.31	221.45	55.10	84.20	35.35	25.84	178.48
NET INCOME	-76.85	0.00	0.00	0.00	-31.38	-26.31	-221.45	-55.10	-84.20	-35.35	-25.84	873.20
NET INCOME TO DATE	-76.85	-76.85	-76.85	-76.85	-108.23	-134.54	-355.99	-411.09	-495.29	-530.64	-556.48	316.72

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-173 -296	-150 -273	-128 -251	-106 -229	-84 -207	-61 -184	-39 -162	-17 -140	4 -118	27 -95	49 -73
60	720.00	lb	-119 -242	-92 -215	-66 -189	-39 -162	-12 -135	13 -109	40 -82	67 -55	93 -29	120 -2	147 24
70	840.00	lb	-66 -189	-34 -157	-3 -126	27 -95	58 -64	89 -33	120 -2	151 28	183 59	214 91	245 122
80	960.00	lb	-12 -135	22 -100	58 -64	94 -28	129 6	165 42	200 77	236 113	272 149	307 184	343 220
90	1080.00	lb	40 -82	80 -42	120 -2	160 37	200 77	241 117	281 158	321 198	361 238	401 278	441 318
100	1200.00	lb	94 -28	138 15	183 60	227 104	272 149	316 193	361 238	405 282	450 327	494 371	539 416
110	1320.00	lb	147 24	196 73	245 122	294 171	343 220	392 269	441 318	490 367	539 416	588 465	637 514
120	1440.00	lb	201 78	254 131	307 184	361 238	414 291	468 345	521 398	574 451	628 505	681 558	735 611
130	1560.00	lb	254 131	312 189	370 247	428 305	485 362	543 420	601 478	659 536	717 594	775 652	832 709
140	1680.00	lb	308 185	370 247	432 309	494 371	557 434	619 496	681 558	744 621	806 683	868 745	930 807
150	1800.00	lb	361 238	428 305	495 372	561 438	628 505	695 572	761 638	828 705	895 772	962 839	1028 905

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

Table 2.A Estimated costs per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.5000	16.25	_____
App by Air (3 gal)	appl	5.00	5.7500	28.75	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	34.3582	42.60	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	4.5000	24.17	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	2.0000	2.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	48.0000	3.84	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
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	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5025	7.16	_____
Self-Propelled	hour	14.23	0.2310	3.29	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	14.21	0.5240	7.45	_____
DIESEL FUEL					
Tractors	gal	2.60	5.6368	14.65	_____
Self-Propelled	gal	2.60	5.0512	13.13	_____
Roll-Out Pipe Irr.	gal	2.60	8.5535	22.23	_____
REPAIR & MAINTENANCE					
Implements	acre	7.47	1.0000	7.47	_____
Tractors	acre	2.93	1.0000	2.93	_____
Self-Propelled	acre	21.68	1.0000	21.68	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	18.68	1.0000	18.68	_____
TOTAL DIRECT EXPENSES				811.33	_____
FIXED EXPENSES					
Implements	acre	12.80	1.0000	12.80	_____
Tractors	acre	20.21	1.0000	20.21	_____
Self-Propelled	acre	95.43	1.0000	95.43	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____
TOTAL FIXED EXPENSES				189.94	_____
TOTAL SPECIFIED EXPENSES				1001.27	_____

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

Table 2.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1500.0000	1112.10	_____
Cotton Seed	lb	0.10	2025.0000	202.50	_____

TOTAL INCOME				1314.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.00	1.0000	45.00	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	72.60	1.0000	72.60	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	113.95	1.0000	113.95	_____
INSECTICIDES	acre	85.88	1.0000	85.88	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	3.84	1.0000	3.84	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.23	0.7336	10.45	_____
UNALLOCATED LABOR	hour	14.21	0.5240	7.45	_____
DIESEL FUEL	gal	2.60	19.2417	50.01	_____
REPAIR & MAINTENANCE	acre	38.97	1.0000	38.97	_____
INTEREST ON OP. CAP.	acre	18.68	1.0000	18.68	_____

TOTAL DIRECT EXPENSES				811.33	_____
RETURNS ABOVE DIRECT EXPENSES				503.27	_____

TOTAL FIXED EXPENSES				189.94	_____

TOTAL SPECIFIED EXPENSES				1001.27	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				313.33	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 2.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
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	1.00	Nov		0.04	0.04	0.04	0.03
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
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					17.1791				
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
CSeed B3XF/W3RE/GLTP	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 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
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					17.1791				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air (3 gal)	appl					1.5000				
IncidentalPestTrt\$15	acre					1.5000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Centric 40WG	oz					2.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
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	1500.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
Roll-Out Pipe Irr.	acre				Jan	1.0000	0.07	0.07	0.44	0.06
TOTALS							0.73	0.50	1.42	0.52

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

Table 2.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80		31.80
Bed-Paratill Fold	12R-38		1.62	1.66	1.38			0.28	4.94	4.83	9.77
Bed/Disk (Hipper)	12R-38		1.49	0.65	1.26			0.20	3.60	3.08	6.68
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Clarity	pt	5.76						0.23	5.99		5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
Select Max	pt	12.71						0.51	13.22		13.22
Surfactant	pt	0.72						0.03	0.75		0.75
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.14	4.26	2.98	7.24
UAN (32%)	gal	21.30						0.75	22.05		22.05
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91	5.77
Plant - Folding	12R-38		1.49	1.83	1.72			0.15	5.19	5.31	10.50
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68		105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60		20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Cotoran	pt	12.84						0.39	13.23		13.23
Surfactant	pt	0.72						0.02	0.74		0.74
Cotton Consultant	acre	8.00						0.24	8.24		8.24
Eradication	acre	1.00						0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.03	0.95	1.30	2.25
Dual Magnum	pt	13.81						0.41	14.22		14.22
Liberty 280	oz	17.11						0.51	17.62		17.62
Acephate 90%	lb	2.17						0.07	2.24		2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Dual Magnum	pt	13.81						0.41	14.22		14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Bidrin 8EC	oz	0.25						0.01	0.26		0.26
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.02	0.94	1.30	2.24
Centric 40WG	oz	10.74						0.27	11.01		11.01
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98	7.20
UAN (32%)	gal	21.30						0.53	21.83		21.83
App by Air (3 gal)	appl	5.00						0.13	5.13		5.13
Diamond .83EC	oz	8.40						0.21	8.61		8.61
Imidacloprid 4F	oz	2.00						0.05	2.05		2.05
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.07	3.33	2.25	5.58
Diuron	pt	4.64						0.09	4.73		4.73
Liberty 280	oz	17.11						0.34	17.45		17.45
App by Air (3 gal)	appl	5.00						0.10	5.10		5.10
Acephate 90%	lb	6.53						0.13	6.66		6.66
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Bifenthrin	oz	4.86						0.10	4.96		4.96
App by Air (3 gal)	appl	1.25						0.03	1.28		1.28
Lambda	oz	1.09						0.02	1.11		1.11
Bidrin 8EC	oz	2.52						0.05	2.57		2.57
Incidental Pest											
App by Air (3 gal)	appl	7.50						0.15	7.65		7.65
IncidentalPestTrt\$15	acre	22.50						0.45	22.95		22.95
App by Air (3 gal)	appl	5.00						0.08	5.08		5.08
Acephate 90%	lb	6.53						0.10	6.63		6.63
Bifenthrin	oz	4.86						0.07	4.93		4.93
App by Air (3 gal)	appl	5.00						0.08	5.08		5.08
Centric 40WG	oz	13.43						0.20	13.63		13.63
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25		2.25
Ethephon 6E	pt	7.06						0.07	7.13		7.13
App by Air (5 gal)	appl	3.25						0.03	3.28		3.28
Tribufos 6lb	pt	5.45						0.05	5.50		5.50
Ethephon 6E	pt	1.10						0.01	1.11		1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01	128.62
Gin & Haul	lb	165.00						0.83	165.83		165.83
Stalk Shredder-Flail	20'		2.48	2.58	2.11			0.04	7.21	4.80	12.01
Roll-Out Pipe Irr.	acre	8.25	24.11	7.49	4.42			0.92	45.19	65.37	110.56
TOTALS			679.54	50.01	38.97	24.13	0.00	18.68	811.33	189.94	1001.27

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

Table 2.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1314.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	13.75	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	165.00
FERTILIZERS	30.00	0.00	0.00	0.00	0.00	21.30	0.00	21.30	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	22.95	0.00	69.25	0.00	21.75	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	21.14	37.50	24.82	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	2.56	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	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	25.31	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	2.64	0.00	0.00	0.00	0.00	1.56	4.41	4.49	1.57	0.23	0.61	8.62
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	3.11	0.00	0.00	0.00	0.00	1.56	3.93	9.85	8.75	7.41	0.43	14.97
REPAIR & MAINTENANCE	2.31	0.00	0.00	0.00	0.00	1.00	2.91	5.60	1.89	1.31	0.13	23.82
INTEREST ON OP. CAP.	4.45	0.00	0.00	0.00	1.21	0.89	6.45	1.96	1.73	0.66	0.26	1.07
TOTAL DIRECT EXPENSES	78.65	0.00	0.00	0.00	31.38	26.31	221.69	80.15	88.22	44.43	27.02	213.48
NET INCOME	-78.65	0.00	0.00	0.00	-31.38	-26.31	-221.69	-80.15	-88.22	-44.43	-27.02	1101.12
NET INCOME TO DATE	-78.65	-78.65	-78.65	-78.65	-110.03	-136.34	-358.03	-438.18	-526.40	-570.83	-597.85	503.27

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-108 -298	-81 -271	-53 -243	-25 -215	2 -187	30 -159	57 -132	85 -104	113 -76	141 -48	169 -20
60	900.00	lb	-42 -231	-8 -198	24 -165	58 -131	91 -98	124 -65	158 -31	191 1	224 34	258 68	291 101
70	1050.00	lb	24 -165	63 -126	102 -87	141 -48	180 -9	219 29	258 68	297 107	336 146	375 185	414 224
80	1200.00	lb	91 -98	136 -53	180 -9	225 35	269 79	314 124	358 168	402 213	447 257	491 302	536 346
90	1350.00	lb	158 -31	208 18	258 68	308 118	358 168	408 218	458 268	508 318	558 368	608 418	658 468
100	1500.00	lb	225 35	280 90	336 146	392 202	447 257	503 313	558 368	614 424	670 480	725 535	781 591
110	1650.00	lb	292 102	353 163	414 224	475 285	536 346	597 407	659 469	720 530	781 591	842 652	903 713
120	1800.00	lb	358 168	425 235	492 302	559 369	625 435	692 502	759 569	825 636	892 702	959 769	1026 836
130	1950.00	lb	425 235	498 308	570 380	642 452	714 524	787 597	859 669	931 741	1004 814	1076 886	1148 958
140	2100.00	lb	492 302	570 380	648 458	726 536	803 613	881 691	959 769	1037 847	1115 925	1193 1003	1271 1081
150	2250.00	lb	559 369	642 452	726 536	809 619	892 703	976 786	1059 869	1143 953	1226 1036	1310 1120	1393 1203

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

Table 3.A Estimated costs per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (3 gal)	appl	5.00	3.7500	18.75	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	34.3582	42.60	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	4.5000	24.17	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	2.0000	2.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	48.0000	3.84	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
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	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3993	5.69	_____
Self-Propelled	hour	14.23	0.2310	3.29	_____
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	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	14.21	0.5043	7.17	_____
DIESEL FUEL					
Tractors	gal	2.60	4.6248	12.02	_____
Self-Propelled	gal	2.60	5.0512	13.13	_____
1/4-mi. Pivot Irr.	gal	2.60	11.2011	29.13	_____
REPAIR & MAINTENANCE					
Implements	acre	7.09	1.0000	7.09	_____
Tractors	acre	2.39	1.0000	2.39	_____
Self-Propelled	acre	21.68	1.0000	21.68	_____
1/4-mi. Pivot Irr.	acre	21.65	1.0000	21.65	_____
INTEREST ON OP. CAP.	acre	18.85	1.0000	18.85	_____
TOTAL DIRECT EXPENSES				821.15	_____
FIXED EXPENSES					
Implements	acre	11.14	1.0000	11.14	_____
Tractors	acre	16.47	1.0000	16.47	_____
Self-Propelled	acre	95.43	1.0000	95.43	_____
1/4-mi. Pivot Irr.	acre	84.43	1.0000	84.43	_____
TOTAL FIXED EXPENSES				207.47	_____
TOTAL SPECIFIED EXPENSES				1028.62	_____

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

Table 3.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1500.0000	1112.10	_____
Cotton Seed	lb	0.10	2025.0000	202.50	_____

TOTAL INCOME				1314.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.00	1.0000	48.00	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	72.60	1.0000	72.60	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	113.95	1.0000	113.95	_____
INSECTICIDES	acre	85.88	1.0000	85.88	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	3.84	1.0000	3.84	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	14.23	0.6304	8.98	_____
UNALLOCATED LABOR	hour	14.21	0.5043	7.17	_____
DIESEL FUEL	gal	2.60	20.8772	54.28	_____
REPAIR & MAINTENANCE	acre	52.81	1.0000	52.81	_____
INTEREST ON OP. CAP.	acre	18.85	1.0000	18.85	_____

TOTAL DIRECT EXPENSES				821.15	_____
RETURNS ABOVE DIRECT EXPENSES				493.45	_____
TOTAL FIXED EXPENSES					
				207.47	_____

TOTAL SPECIFIED EXPENSES				1028.62	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				285.98	_____

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

Table 3.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
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
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
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					17.1791				
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
CSeed B3XF/W3RE/GLTP	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 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
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					17.1791				
App by Air (5 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air (3 gal)	appl					1.5000				
IncidentalPestTrt\$15	acre					1.5000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Centric 40WG	oz					2.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
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	1500.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
1/4-mi. Pivot Irr.	acre				Jan	1.0000			0.20	
TOTALS							0.63	0.39	1.15	0.50

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

Table 3.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	12R-38		1.62	1.66	1.38			0.28	4.94	4.83
Bed/Disk (Hipper)	12R-38		0.74	0.33	0.63			0.10	1.80	1.55
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Select Max	pt	12.71						0.51	13.22	13.22
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.14	4.26	2.98
UAN (32%)	gal	21.30						0.75	22.05	22.05
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91
Plant - Folding	12R-38		1.49	1.83	1.72			0.15	5.19	5.31
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68	105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60	20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.03	0.95	1.30
Dual Magnum	pt	13.81						0.41	14.22	14.22
Liberty 280	oz	17.11						0.51	17.62	17.62
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.02	0.94	1.30
Centric 40WG	oz	10.74						0.27	11.01	11.01
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98
UAN (32%)	gal	21.30						0.53	21.83	21.83
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Diamond .83EC	oz	8.40						0.21	8.61	8.61
Imidacloprid 4F	oz	2.00						0.05	2.05	2.05
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.07	3.33	2.25
Diuron	pt	4.64						0.09	4.73	4.73
Liberty 280	oz	17.11						0.34	17.45	17.45
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
Acephate 90%	lb	6.53						0.13	6.66	6.66
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Bifenthrin	oz	4.86						0.10	4.96	4.96
App by Air (3 gal)	appl	1.25						0.03	1.28	1.28
Lambda	oz	1.09						0.02	1.11	1.11
Bidrin 8EC	oz	2.52						0.05	2.57	2.57
Incidental Pest										
App by Air (3 gal)	appl	7.50						0.15	7.65	7.65
IncidentalPestTrt\$15	acre	22.50						0.45	22.95	22.95
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	6.53						0.10	6.63	6.63
Bifenthrin	oz	4.86						0.07	4.93	4.93
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Centric 40WG	oz	13.43						0.20	13.63	13.63
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethepon 6E	pt	7.06						0.07	7.13	7.13
App by Air (5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Ethepon 6E	pt	1.10						0.01	1.11	1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01
Gin & Haul	lb	165.00						0.83	165.83	165.83
Stalk Shredder-Flail	20'		2.48	2.58	2.11			0.04	7.21	4.80
1/4-mi. Pivot Irr.	acre		29.13	21.65	1.84			1.14	53.76	84.43
TOTALS		674.29	54.28	52.81	20.92	0.00	18.85	821.15	207.47	1028.62

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 3.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1314.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	6.50	13.75	11.50	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	165.00
FERTILIZERS	30.00	0.00	0.00	0.00	0.00	21.30	0.00	21.30	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	22.95	0.00	69.25	0.00	21.75	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	21.14	37.50	24.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	2.56	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	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	25.31	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	2.01	0.00	0.00	0.00	0.00	1.56	5.52	2.06	1.54	0.15	0.00	8.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.36	0.00	0.00	0.00	0.00	1.56	3.93	10.69	12.99	8.74	0.00	14.01
REPAIR & MAINTENANCE	1.99	0.00	0.00	0.00	0.00	1.00	2.91	19.56	2.45	1.40	0.00	23.50
INTEREST ON OP. CAP.	4.35	0.00	0.00	0.00	1.21	0.89	6.48	2.08	1.83	0.70	0.25	1.06
TOTAL DIRECT EXPENSES	76.85	0.00	0.00	0.00	31.38	26.31	222.83	85.89	93.09	47.31	25.84	211.65
NET INCOME	-76.85	0.00	0.00	0.00	-31.38	-26.31	-222.83	-85.89	-93.09	-47.31	-25.84	1102.95
NET INCOME TO DATE	-76.85	-76.85	-76.85	-76.85	-108.23	-134.54	-357.37	-443.26	-536.35	-583.66	-609.50	493.45

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92		
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-118	-90	-63	-35	-7	20	48	75	103	131	159
			-326	-298	-270	-242	-214	-187	-159	-131	-103	-75	-48
60	900.00	lb	-51	-18	14	48	81	114	148	181	215	248	281
			-259	-225	-192	-159	-125	-92	-59	-25	7	40	74
70	1050.00	lb	14	53	92	131	170	209	248	287	326	365	404
			-192	-153	-114	-75	-36	2	41	79	118	157	196
80	1200.00	lb	81	126	170	215	259	304	348	393	437	482	526
			-125	-81	-36	7	52	96	141	185	230	274	319
90	1350.00	lb	148	198	248	298	348	398	448	498	548	599	649
			-58	-8	41	91	141	191	241	291	341	391	441
100	1500.00	lb	215	271	326	382	437	493	549	604	660	715	771
			7	63	119	174	230	285	341	397	452	508	564
110	1650.00	lb	282	343	404	465	526	588	649	710	771	832	893
			74	135	197	258	319	380	441	502	564	625	686
120	1800.00	lb	349	415	482	549	615	682	749	816	882	949	1016
			141	208	275	341	408	475	541	608	675	742	808
130	1950.00	lb	415	488	560	632	705	777	849	921	994	1066	1138
			208	280	353	425	497	569	642	714	786	859	931
140	2100.00	lb	482	560	638	716	794	871	949	1027	1105	1183	1261
			275	353	430	508	586	664	742	820	898	975	1053
150	2250.00	lb	549	632	716	799	883	966	1049	1133	1216	1300	1383
			342	425	508	592	675	759	842	925	1009	1092	1176

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

Table 4.A Estimated costs per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.5000	16.25	_____
App by Air (3 gal)	appl	5.00	5.2500	26.25	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	25.4000	31.50	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	4.5000	24.17	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	4.0000	4.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
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	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.2712	3.86	_____
Self-Propelled	hour	14.23	0.2310	3.29	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
hour	hour	14.23	0.4018	5.72	_____
DIESEL FUEL					
Tractors	gal	2.60	3.1417	8.17	_____
Self-Propelled	gal	2.60	5.0512	13.13	_____
REPAIR & MAINTENANCE					
Implements	acre	5.15	1.0000	5.15	_____
Tractors	acre	1.62	1.0000	1.62	_____
Self-Propelled	acre	21.68	1.0000	21.68	_____
INTEREST ON OP. CAP.	acre	16.44	1.0000	16.44	_____
TOTAL DIRECT EXPENSES				699.69	_____
FIXED EXPENSES					
Implements	acre	7.72	1.0000	7.72	_____
Tractors	acre	11.18	1.0000	11.18	_____
Self-Propelled	acre	95.43	1.0000	95.43	_____
TOTAL FIXED EXPENSES				114.33	_____
TOTAL SPECIFIED EXPENSES				814.02	_____

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

Table 4.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1200.0000	889.68	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				1051.68	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	61.50	1.0000	61.50	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	113.95	1.0000	113.95	_____
INSECTICIDES	acre	80.38	1.0000	80.38	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3014	2.72	_____
OPERATOR LABOR	hour	14.23	0.5023	7.15	_____
UNALLOCATED LABOR	hour	14.23	0.4018	5.72	_____
DIESEL FUEL	gal	2.60	8.1930	21.30	_____
REPAIR & MAINTENANCE	acre	28.45	1.0000	28.45	_____
INTEREST ON OP. CAP.	acre	16.44	1.0000	16.44	_____

TOTAL DIRECT EXPENSES				699.69	_____
RETURNS ABOVE DIRECT EXPENSES				351.99	_____

TOTAL FIXED EXPENSES				114.33	_____

TOTAL SPECIFIED EXPENSES				814.02	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				237.66	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 4.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.10	0.04
CSeed B3XF/W3RE/GLTP	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 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
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					25.4000				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					4.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt\$15	acre					1.0000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Centric 40WG	oz					2.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.50	0.27	0.80	0.40

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

Table 4.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80		31.80
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Clarity	pt	5.76						0.23	5.99		5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
Select Max	pt	12.71						0.51	13.22		13.22
Surfactant	pt	0.72						0.03	0.75		0.75
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91	5.77
NT Plant-Folding	12R-38		1.56	2.11	1.80			0.16	5.63	5.96	11.59
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68		105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60		20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Cotoran	pt	12.84						0.39	13.23		13.23
Surfactant	pt	0.72						0.02	0.74		0.74
Cotton Consultant	acre	8.00						0.24	8.24		8.24
Eradication	acre	1.00						0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.03	0.95	1.30	2.25
Dual Magnum	pt	13.81						0.41	14.22		14.22
Liberty 280	oz	17.11						0.51	17.62		17.62
Acephate 90%	lb	2.17						0.07	2.24		2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Dual Magnum	pt	13.81						0.41	14.22		14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Bidrin 8EC	oz	0.25						0.01	0.26		0.26
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.02	0.94	1.30	2.24
Centric 40WG	oz	10.74						0.27	11.01		11.01
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98	7.20
UAN (32%)	gal	31.50						0.79	32.29		32.29
App by Air (3 gal)	appl	5.00						0.13	5.13		5.13
Diamond .83EC	oz	8.40						0.21	8.61		8.61
Imidacloprid 4F	oz	4.00						0.10	4.10		4.10
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.08	3.34	2.25	5.59
Diuron	pt	4.64						0.12	4.76		4.76
Liberty 280	oz	17.11						0.43	17.54		17.54
App by Air (3 gal)	appl	5.00						0.10	5.10		5.10
Acephate 90%	lb	6.53						0.13	6.66		6.66
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Bifenthrin	oz	4.86						0.10	4.96		4.96
App by Air (3 gal)	appl	1.25						0.03	1.28		1.28
Lambda	oz	1.09						0.02	1.11		1.11
Bidrin 8EC	oz	2.52						0.05	2.57		2.57
Incidental Pest											
App by Air (3 gal)	appl	5.00						0.10	5.10		5.10
IncidentalPestTrt\$15	acre	15.00						0.30	15.30		15.30
App by Air (3 gal)	appl	5.00						0.08	5.08		5.08
Acephate 90%	lb	6.53						0.10	6.63		6.63
Bifenthrin	oz	4.86						0.07	4.93		4.93
App by Air (3 gal)	appl	5.00						0.08	5.08		5.08
Centric 40WG	oz	13.43						0.20	13.63		13.63
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25		2.25
Ethephon 6E	pt	7.06						0.07	7.13		7.13
App by Air (5 gal)	appl	3.25						0.03	3.28		3.28
Tribufos 6lb	pt	5.45						0.05	5.50		5.50
Ethephon 6E	pt	1.10						0.01	1.11		1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01	128.62
Gin & Haul	lb	132.00						0.66	132.66		132.66
Stalk Shredder-Flail	20'		2.48	2.58	2.11			0.04	7.21	4.80	12.01
TOTALS		617.91	21.30	28.45	15.59	0.00	16.44	699.69	114.33	814.02	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 4.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1051.68
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	30.00	0.00	0.00	0.00	0.00	0.00	0.00	31.50	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	22.95	0.00	69.25	21.75	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	23.14	30.00	24.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	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	25.31	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	0.00	0.00	4.26	3.25	0.00	0.00	0.00	8.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	4.00	3.29	0.00	0.00	0.00	14.01
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.19	1.76	0.00	0.00	0.00	23.50
INTEREST ON OP. CAP.	3.97	0.00	0.00	0.00	1.21	0.00	6.45	2.28	0.86	0.53	0.25	0.89
TOTAL DIRECT EXPENSES	70.11	0.00	0.00	0.00	31.38	0.00	221.89	93.25	43.39	35.35	25.84	178.48
NET INCOME	-70.11	0.00	0.00	0.00	-31.38	0.00	-221.89	-93.25	-43.39	-35.35	-25.84	873.20
NET INCOME TO DATE	-70.11	-70.11	-70.11	-70.11	-101.49	-101.49	-323.38	-416.63	-460.02	-495.37	-521.21	351.99

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-137 -252	-115 -229	-93 -207	-71 -185	-48 -163	-26 -140	-4 -118	17 -96	40 -74	62 -51	84 -29
60	720.00	lb	-84 -198	-57 -171	-30 -145	-4 -118	22 -91	49 -65	75 -38	102 -11	129 14	155 41	182 68
70	840.00	lb	-30 -145	0 -114	31 -82	62 -51	93 -20	124 10	156 41	187 72	218 103	249 135	280 166
80	960.00	lb	22 -91	58 -56	93 -20	129 15	164 50	200 86	236 121	271 157	307 193	342 228	378 264
90	1080.00	lb	76 -38	116 1	156 41	196 81	236 121	276 161	316 201	356 242	396 282	436 322	476 362
100	1200.00	lb	129 15	174 59	218 104	263 148	307 193	351 237	396 282	440 326	485 371	529 415	574 460
110	1320.00	lb	183 68	231 117	280 166	329 215	378 264	427 313	476 362	525 411	574 460	623 509	672 558
120	1440.00	lb	236 122	289 175	343 228	396 282	450 335	503 389	556 442	610 495	663 549	716 602	770 655
130	1560.00	lb	289 175	347 233	405 291	463 349	521 406	579 464	636 522	694 580	752 638	810 696	868 753
140	1680.00	lb	343 229	405 291	467 353	530 415	592 478	654 540	717 602	779 665	841 727	903 789	966 851
150	1800.00	lb	396 282	463 349	530 415	597 482	663 549	730 616	797 682	863 749	930 816	997 883	1064 949

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

Table 5.A Estimated costs per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.5000	16.25	_____
App by Air (3 gal)	appl	5.00	5.2500	26.25	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	32.5498	40.36	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	1.6700	23.06	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.1000	3.19	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	3.8400	20.62	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	2.0000	2.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	30.0000	68.40	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	26.7200	2.14	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
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	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.8605	12.25	_____
Self-Propelled	hour	14.23	0.2075	2.95	_____
HAND LABOR					
Implements	hour	9.06	0.3404	3.07	_____
Self-Propelled	hour	9.06	0.1899	1.72	_____
UNALLOCATED LABOR	hour	14.23	0.8544	12.16	_____
DIESEL FUEL					
Tractors	gal	2.60	9.9659	25.91	_____
Self-Propelled	gal	2.60	3.4215	8.89	_____
REPAIR & MAINTENANCE					
Implements	acre	10.55	1.0000	10.55	_____
Tractors	acre	5.16	1.0000	5.16	_____
Self-Propelled	acre	10.01	1.0000	10.01	_____
INTEREST ON OP. CAP.	acre	15.68	1.0000	15.68	_____
TOTAL DIRECT EXPENSES				639.56	_____
FIXED EXPENSES					
Implements	acre	18.36	1.0000	18.36	_____
Tractors	acre	35.48	1.0000	35.48	_____
Self-Propelled	acre	44.18	1.0000	44.18	_____
TOTAL FIXED EXPENSES				98.02	_____
TOTAL SPECIFIED EXPENSES				737.58	_____

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

Table 5.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	811.0000	601.28	_____
Cotton Seed	lb	0.10	1095.0000	109.50	_____

TOTAL INCOME				710.78	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	70.36	1.0000	70.36	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	107.94	1.0000	107.94	_____
INSECTICIDES	acre	74.84	1.0000	74.84	_____
SEED/PLANTS	acre	68.40	1.0000	68.40	_____
GROWTH REGULATORS	acre	2.14	1.0000	2.14	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5303	4.79	_____
OPERATOR LABOR	hour	14.23	1.0680	15.20	_____
UNALLOCATED LABOR	hour	14.23	0.8544	12.16	_____
DIESEL FUEL	gal	2.60	13.3875	34.80	_____
REPAIR & MAINTENANCE	acre	25.72	1.0000	25.72	_____
INTEREST ON OP. CAP.	acre	15.68	1.0000	15.68	_____

TOTAL DIRECT EXPENSES				639.56	_____
RETURNS ABOVE DIRECT EXPENSES				71.22	_____
TOTAL FIXED EXPENSES					
				98.02	_____

TOTAL SPECIFIED EXPENSES				737.58	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-26.80	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 5.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	8R-38 2x1	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	8R-38 2x1	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	8R-38 2x1	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
CSeed B3XF/W3RE/GLTP	thous					30.0000				
Cotton Seed Trt.	acre					0.6700				
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				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	May		0.04	0.04	0.06	0.03
Dual Magnum	pt					0.6700				
Liberty 280	oz					29.0000				
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				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Centric 40WG	oz					1.3400				
Mepiquat Chloride	oz					10.7200				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.1000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt\$15	acre					1.0000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Centric 40WG	oz					2.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R2x1 (350)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	4R2x1 (350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1 (350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	811.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.06	0.86	1.59	0.85

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

Table 5.D Estimated costs for field operations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	8R-38 2x1		1.62	1.66	1.38			0.28	4.94	4.83
Bed/Disk (Hipper)	8R-38 2x1		0.74	0.33	0.63			0.10	1.80	1.55
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Select Max	pt	12.71						0.51	13.22	13.22
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	8R-38 2x1		1.56	1.01	1.56			0.14	4.27	3.00
UAN (32%)	gal	20.18						0.71	20.89	20.89
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91
Plant - Folding	8R-38 2x1		1.49	1.83	1.72			0.15	5.19	5.31
CSeed B3XF/W3RE/GLTP	thous	68.40						2.05	70.45	70.45
Cotton Seed Trt.	acre	13.40						0.40	13.80	13.80
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Spray (Direct/Layby)	8R-38 2x1		1.34	0.58	1.34			0.10	3.36	2.25
Dual Magnum	pt	9.25						0.28	9.53	9.53
Liberty 280	oz	17.11						0.51	17.62	17.62
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Spray (Direct/Layby)	8R-38 2x1		1.34	0.58	1.34			0.08	3.34	2.25
Centric 40WG	oz	7.20						0.18	7.38	7.38
Mepiquat Chloride	oz	0.86						0.02	0.88	0.88
Fert Appl (Liquid)	8R-38 2x1		1.56	1.01	1.56			0.10	4.23	3.00
UAN (32%)	gal	20.18						0.50	20.68	20.68
App by Air (3 gal)	appl	5.00						0.13	5.13	5.13
Diamond .83EC	oz	8.40						0.21	8.61	8.61
Imidacloprid 4F	oz	2.00						0.05	2.05	2.05
Spray (Direct/Layby)	8R-38 2x1		1.34	0.58	1.34			0.07	3.33	2.25
Diuron	pt	3.19						0.06	3.25	3.25
Liberty 280	oz	17.11						0.34	17.45	17.45
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
Acephate 90%	lb	6.53						0.13	6.66	6.66
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Bifenthrin	oz	4.86						0.10	4.96	4.96
App by Air (3 gal)	appl	1.25						0.03	1.28	1.28
Lambda	oz	1.09						0.02	1.11	1.11
Bidrin 8EC	oz	2.52						0.05	2.57	2.57
Incidental Pest										
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
IncidentalPestTrt\$15	acre	15.00						0.30	15.30	15.30
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	6.53						0.10	6.63	6.63
Bifenthrin	oz	4.86						0.07	4.93	4.93
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Centric 40WG	oz	13.43						0.20	13.63	13.63
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
App by Air (5 gal)	appl	3.25						0.03	3.28	3.28
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Cotton Picker	4R2x1(350)		8.07	9.61	5.97			0.12	23.77	41.36
Boll Buggy	4R2x1(350)		5.19	2.34	4.41			0.06	12.00	10.07
Module Builder	4R2x1(350)		5.19	2.52	5.97			0.07	13.75	10.48
Gin & Haul	lb	89.21						0.45	89.66	89.66
Stalk Shredder-Flail	15'		3.31	2.77	2.82			0.04	8.94	5.94
TOTALS		531.21	34.80	25.72	32.15	0.00	15.68	639.56	98.02	737.58

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 5.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	710.78
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	89.21
FERTILIZERS	30.00	0.00	0.00	0.00	0.00	20.18	0.00	20.18	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	13.40	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.95	0.00	64.69	0.00	20.30	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	17.60	30.00	24.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	68.40	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	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	25.31	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	2.01	0.00	0.00	0.00	0.00	1.56	5.17	2.90	1.34	0.00	0.00	19.17
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	2.36	0.00	0.00	0.00	0.00	1.56	4.88	2.90	1.34	0.00	0.00	21.76
REPAIR & MAINTENANCE	1.99	0.00	0.00	0.00	0.00	1.01	3.31	1.59	0.58	0.00	0.00	17.24
INTEREST ON OP. CAP.	4.35	0.00	0.00	0.00	1.21	0.85	5.15	1.27	1.33	0.53	0.25	0.74
TOTAL DIRECT EXPENSES	76.85	0.00	0.00	0.00	31.38	25.16	177.14	52.30	67.42	35.35	25.84	148.12
NET INCOME	-76.85	0.00	0.00	0.00	-31.38	-25.16	-177.14	-52.30	-67.42	-35.35	-25.84	562.66
NET INCOME TO DATE	-76.85	-76.85	-76.85	-76.85	-108.23	-133.39	-310.53	-362.83	-430.25	-465.60	-491.44	71.22

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92		
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-259 -357	-244 -342	-229 -327	-214 -312	-199 -297	-184 -282	-169 -267	-154 -252	-139 -237	-124 -222	-109 -207
60	486.60	lb	-223 -321	-205 -303	-187 -285	-169 -267	-151 -249	-133 -231	-115 -213	-97 -195	-79 -177	-61 -159	-43 -141
70	567.70	lb	-187 -285	-166 -264	-145 -243	-124 -222	-103 -201	-82 -180	-61 -159	-40 -138	-19 -117	1 -96	22 -75
80	648.80	lb	-151 -249	-127 -225	-103 -201	-79 -177	-55 -153	-31 -129	-7 -105	16 -81	41 -56	65 -32	89 -8
90	729.90	lb	-115 -213	-88 -186	-61 -159	-34 -132	-6 -105	20 -77	47 -50	74 -23	101 3	128 30	155 57
100	811.00	lb	-79 -177	-49 -147	-18 -116	11 -86	41 -56	71 -26	101 3	131 33	161 63	191 93	221 123
110	892.10	lb	-42 -140	-9 -107	23 -74	56 -41	89 -8	122 24	155 57	188 90	221 123	254 156	287 189
120	973.20	lb	-6 -104	29 -68	65 -32	101 3	137 39	173 75	209 111	245 147	281 183	317 219	353 255
130	1054.30	lb	29 -68	68 -29	107 9	146 48	185 87	224 126	263 165	302 204	341 243	381 283	420 322
140	1135.40	lb	65 -32	107 9	149 51	191 93	233 135	275 177	317 219	360 262	402 304	444 346	486 388
150	1216.50	lb	101 3	146 48	191 93	236 138	281 183	327 229	372 274	417 319	462 364	507 409	552 454

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.0000	3.59	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3302	4.69	_____
Harvesters	hour	14.23	0.0851	1.21	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	14.22	0.3738	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.8252	9.94	_____
Harvesters	gal	2.60	1.4243	3.70	_____
REPAIR & MAINTENANCE					
Implements	acre	4.94	1.0000	4.94	_____
Tractors	acre	1.97	1.0000	1.97	_____
Harvesters	acre	3.21	1.0000	3.21	_____
INTEREST ON OP. CAP.	acre	11.69	1.0000	11.69	_____
TOTAL DIRECT EXPENSES				357.05	_____
FIXED EXPENSES					
Implements	acre	11.12	1.0000	11.12	_____
Tractors	acre	13.61	1.0000	13.61	_____
Harvesters	acre	13.81	1.0000	13.81	_____
TOTAL FIXED EXPENSES				38.54	_____
TOTAL SPECIFIED EXPENSES				395.59	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 6.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

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

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

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

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

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 6.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.41	0.41	0.51	0.37

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

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

Table 6.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 6.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	390.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	35.60	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.00	0.00	0.00	0.00	0.00	0.00	2.44	1.78	0.00	0.00	0.00	2.87
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.56	0.00	0.00	0.00	0.00	0.00	2.04	1.70	0.00	0.00	0.00	4.34
REPAIR & MAINTENANCE	2.59	0.00	0.00	0.00	0.00	0.00	2.35	0.76	0.00	0.00	0.00	4.42
INTEREST ON OP. CAP.	5.04	0.00	0.00	0.00	1.57	0.00	3.40	1.15	0.00	0.00	0.41	0.12
TOTAL DIRECT EXPENSES	88.93	0.00	0.00	0.00	40.64	0.00	116.69	47.49	0.00	0.00	40.21	23.09
NET INCOME	-88.93	0.00	0.00	0.00	-40.64	0.00	-116.69	-47.49	0.00	0.00	-40.21	367.51
NET INCOME TO DATE	-88.93	-88.93	-88.93	-88.93	-129.57	-129.57	-246.26	-293.75	-293.75	-293.75	-333.96	33.55

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

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

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-204 -243	-195 -233	-185 -223	-175 -214	-165 -204	-156 -194	-146 -184	-136 -175	-126 -165	-116 -155	-107 -145
60	25.20	bu	-176 -215	-165 -203	-153 -191	-141 -180	-129 -168	-118 -156	-106 -144	-94 -133	-82 -121	-71 -109	-59 -98
70	29.40	bu	-148 -187	-134 -173	-121 -159	-107 -146	-93 -132	-80 -118	-66 -105	-52 -91	-39 -77	-25 -64	-11 -50
80	33.60	bu	-120 -158	-104 -143	-89 -127	-73 -112	-57 -96	-42 -80	-26 -65	-11 -49	4 -33	20 -18	35 -2
90	37.80	bu	-92 -130	-74 -113	-57 -95	-39 -78	-21 -60	-4 -42	13 -25	30 -7	48 9	65 27	83 44
100	42.00	bu	-64 -102	-44 -83	-25 -63	-5 -44	14 -24	33 -4	53 14	72 34	92 53	111 73	131 92
110	46.20	bu	-35 -74	-14 -53	7 -31	28 -10	49 11	71 32	92 54	114 75	135 97	157 118	178 140
120	50.40	bu	-7 -46	15 -22	39 0	62 23	85 47	109 70	132 94	156 117	179 141	203 164	226 188
130	54.60	bu	20 -18	45 7	71 32	96 57	121 83	147 108	172 134	198 159	223 184	248 210	274 235
140	58.80	bu	48 9	75 37	103 64	130 92	157 119	185 146	212 174	239 201	267 228	294 256	321 283
150	63.00	bu	76 38	105 67	135 96	164 126	193 155	223 184	252 213	281 243	311 272	340 301	369 331

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

Table 7.A Estimated costs per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4713	6.70	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	14.22	0.4301	6.12	_____
DIESEL FUEL					
Tractors	gal	2.60	5.2753	13.70	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Roll-Out Pipe Irr.	gal	2.60	7.3316	19.05	_____
REPAIR & MAINTENANCE					
Implements	acre	5.60	1.0000	5.60	_____
Tractors	acre	2.74	1.0000	2.74	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	13.20	1.0000	13.20	_____
TOTAL DIRECT EXPENSES				435.02	_____
FIXED EXPENSES					
Implements	acre	13.59	1.0000	13.59	_____
Tractors	acre	18.92	1.0000	18.92	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____
TOTAL FIXED EXPENSES				107.82	_____
TOTAL SPECIFIED EXPENSES				542.84	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 7.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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

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

TOTAL DIRECT EXPENSES				435.02	_____
RETURNS ABOVE DIRECT EXPENSES				122.98	_____

TOTAL FIXED EXPENSES				107.82	_____

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 7.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.55	0.55	1.01	0.43

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

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

Table 7.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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

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

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

Table 7.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	558.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	35.60	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.94	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.36	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.23	0.00	0.00	0.00	0.00	0.00	2.44	2.01	2.81	0.23	0.00	3.48
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	8.40	0.00	0.00	0.00	0.00	0.00	2.04	1.70	13.19	6.35	0.00	4.77
REPAIR & MAINTENANCE	3.74	0.00	0.00	0.00	0.00	0.00	2.35	0.76	5.73	1.31	0.00	4.55
INTEREST ON OP. CAP.	5.41	0.00	0.00	0.00	1.57	0.00	3.40	1.16	0.59	0.51	0.41	0.15
TOTAL DIRECT EXPENSES	95.52	0.00	0.00	0.00	40.64	0.00	116.69	47.73	30.57	34.51	40.21	29.15
NET INCOME	-95.52	0.00	0.00	0.00	-40.64	0.00	-116.69	-47.73	-30.57	-34.51	-40.21	528.85
NET INCOME TO DATE	-95.52	-95.52	-95.52	-95.52	-136.16	-136.16	-252.85	-300.58	-331.15	-365.66	-405.87	122.98

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

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

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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

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

Table 8.A Estimated costs per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4582	6.49	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR					
	hour	14.22	0.3065	4.36	_____
DIESEL FUEL					
Tractors	gal	2.60	4.3236	11.27	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Contour Flood Irr.	gal	2.60	10.9974	28.59	_____
REPAIR & MAINTENANCE					
Implements	acre	4.85	1.0000	4.85	_____
Tractors	acre	2.35	1.0000	2.35	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	12.54	1.0000	12.54	_____
TOTAL DIRECT EXPENSES				412.15	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	16.21	1.0000	16.21	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Contour Flood Irr.	acre	48.51	1.0000	48.51	_____
TOTAL FIXED EXPENSES				88.84	_____
TOTAL SPECIFIED EXPENSES				500.99	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

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

TOTAL DIRECT EXPENSES				412.15	_____
RETURNS ABOVE DIRECT EXPENSES				80.75	_____
TOTAL FIXED EXPENSES				88.84	_____

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Nov	0.3330				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Valor SX	oz					2.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.54	0.54	0.96	0.30

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

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

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

Table 8.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----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	492.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	6.50	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	26.33	0.00	0.00	47.16	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.94	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	0.00	1.44	0.00	0.36	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.21	0.00	0.00	0.89	0.00	0.00	3.78	2.73	1.61	1.61	0.18	2.87
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.08	0.00	0.00	0.85	0.00	0.00	2.44	11.95	10.86	10.86	0.28	4.24
REPAIR & MAINTENANCE	1.42	0.00	0.00	0.38	0.00	0.00	2.68	9.32	2.96	2.96	0.08	4.41
INTEREST ON OP. CAP.	4.59	0.00	0.00	1.34	0.00	0.00	4.18	0.77	0.83	0.41	0.29	0.13
TOTAL DIRECT EXPENSES	81.04	0.00	0.00	31.23	0.00	0.00	143.58	31.50	42.37	28.28	28.19	25.96
NET INCOME	-81.04	0.00	0.00	-31.23	0.00	0.00	-143.58	-31.50	-42.37	-28.28	-28.19	466.94
NET INCOME TO DATE	-81.04	-81.04	-81.04	-112.27	-112.27	-112.27	-255.85	-287.35	-329.72	-358.00	-386.19	80.75

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

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

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

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

Table 9.A Estimated costs per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
1/2-mi Pivot Irr.	gal	2.60	16.4057	42.66	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
1/2-mi Pivot Irr.	acre	11.57	1.0000	11.57	_____
INTEREST ON OP. CAP.	acre	10.15	1.0000	10.15	_____
TOTAL DIRECT EXPENSES				384.10	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
1/2-mi Pivot Irr.	acre	47.36	1.0000	47.36	_____
TOTAL FIXED EXPENSES				74.02	_____
TOTAL SPECIFIED EXPENSES				458.12	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

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

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

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.D Estimated costs for field operations, per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.E Estimated monthly income and expense flows per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----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	465.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	17.54	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.72	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.44	0.93	0.04	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.84	17.91	12.80	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.63	1.12	0.55	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.21	3.41	0.75	1.25	0.15	0.13
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	7.05	139.78	38.25	83.39	14.65	25.99
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-7.05	-139.78	-38.25	-83.39	-14.65	439.01
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-82.04	-221.82	-260.07	-343.46	-358.11	80.90

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

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

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

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

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

Table 10.A Estimated costs per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.34	50.0000	67.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.5000	1.80	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.56	1.0000	8.56	_____
TOTAL DIRECT EXPENSES				294.95	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				26.66	_____
TOTAL SPECIFIED EXPENSES				321.61	_____

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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

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

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

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

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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

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

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

Table 10.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----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	232.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	17.54	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.36	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.88	0.00	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.85	0.00	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	0.38	0.00	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.20	2.83	0.39	0.65	0.15	0.09
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	6.70	116.08	20.04	43.29	14.65	19.20
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-6.70	-116.08	-20.04	-43.29	-14.65	213.30
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-81.69	-197.77	-217.81	-261.10	-275.75	-62.45

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

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

Table 10.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

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

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

Table 11.A Estimated costs per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	1.0000	3.59	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3302	4.69	_____
Harvesters	hour	14.23	0.0851	1.21	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	14.22	0.3738	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.8252	9.94	_____
Harvesters	gal	2.60	1.4243	3.70	_____
REPAIR & MAINTENANCE					
Implements	acre	4.94	1.0000	4.94	_____
Tractors	acre	1.97	1.0000	1.97	_____
Harvesters	acre	3.21	1.0000	3.21	_____
INTEREST ON OP. CAP.	acre	12.00	1.0000	12.00	_____
TOTAL DIRECT EXPENSES				367.86	_____
FIXED EXPENSES					
Implements	acre	11.12	1.0000	11.12	_____
Tractors	acre	13.61	1.0000	13.61	_____
Harvesters	acre	13.81	1.0000	13.81	_____
TOTAL FIXED EXPENSES				38.54	_____
TOTAL SPECIFIED EXPENSES				406.40	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

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

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

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

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.41	0.41	0.51	0.37

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	390.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	35.60	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.00	0.00	0.00	0.00	0.00	0.00	2.44	1.78	0.00	0.00	0.00	2.87
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.56	0.00	0.00	0.00	0.00	0.00	2.04	1.70	0.00	0.00	0.00	4.34
REPAIR & MAINTENANCE	2.59	0.00	0.00	0.00	0.00	0.00	2.35	0.76	0.00	0.00	0.00	4.42
INTEREST ON OP. CAP.	5.04	0.00	0.00	0.00	1.57	0.00	3.71	1.15	0.00	0.00	0.41	0.12
TOTAL DIRECT EXPENSES	88.93	0.00	0.00	0.00	40.64	0.00	127.50	47.49	0.00	0.00	40.21	23.09
NET INCOME	-88.93	0.00	0.00	0.00	-40.64	0.00	-127.50	-47.49	0.00	0.00	-40.21	367.51
NET INCOME TO DATE	-88.93	-88.93	-88.93	-88.93	-129.57	-129.57	-257.07	-304.56	-304.56	-304.56	-344.77	22.74

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

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

* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-215 -254	-205 -244	-196 -234	-186 -224	-176 -215	-166 -205	-157 -195	-147 -185	-137 -176	-127 -166	-118 -156
60	25.20	bu	-187 -226	-175 -214	-164 -202	-152 -190	-140 -179	-128 -167	-117 -155	-105 -144	-93 -132	-82 -120	-70 -108
70	29.40	bu	-159 -197	-145 -184	-132 -170	-118 -156	-104 -143	-91 -129	-77 -115	-63 -102	-50 -88	-36 -74	-22 -61
80	33.60	bu	-131 -169	-115 -154	-99 -138	-84 -122	-68 -107	-53 -91	-37 -76	-21 -60	-6 -44	9 -29	25 -13
90	37.80	bu	-103 -141	-85 -124	-67 -106	-50 -88	-32 -71	-15 -53	2 -36	19 -18	37 -0	55 16	72 34
100	42.00	bu	-74 -113	-55 -93	-35 -74	-16 -54	3 -35	22 -15	42 3	61 23	81 42	100 62	120 81
110	46.20	bu	-46 -85	-25 -63	-3 -42	17 -20	39 0	60 22	82 43	103 65	125 86	146 108	168 129
120	50.40	bu	-18 -57	4 -33	28 -10	51 13	75 36	98 60	122 83	145 106	168 130	192 153	215 177
130	54.60	bu	9 -28	34 -3	60 21	85 47	111 72	136 97	161 123	187 148	212 174	238 199	263 224
140	58.80	bu	37 -0	65 26	92 53	119 81	147 108	174 135	201 163	229 190	256 217	283 245	311 272
150	63.00	bu	65 27	95 56	124 85	153 115	183 144	212 173	241 203	270 232	300 261	329 290	358 320

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4713	6.70	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	14.22	0.4301	6.12	_____
DIESEL FUEL					
Tractors	gal	2.60	5.2753	13.70	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Roll-Out Pipe Irr.	gal	2.60	7.3316	19.05	_____
REPAIR & MAINTENANCE					
Implements	acre	5.60	1.0000	5.60	_____
Tractors	acre	2.74	1.0000	2.74	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	13.51	1.0000	13.51	_____

TOTAL DIRECT EXPENSES				445.83	_____
FIXED EXPENSES					
Implements	acre	13.59	1.0000	13.59	_____
Tractors	acre	18.92	1.0000	18.92	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____

TOTAL FIXED EXPENSES				107.82	_____

TOTAL SPECIFIED EXPENSES				553.65	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.B Summary of estimated costs and returns per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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

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

TOTAL DIRECT EXPENSES				445.83	_____
RETURNS ABOVE DIRECT EXPENSES				112.17	_____
TOTAL FIXED EXPENSES				107.82	_____

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.C Estimated resource use for field operations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.55	0.55	1.01	0.43

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

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

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

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

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

Table 12.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	558.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	35.60	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.94	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.36	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.23	0.00	0.00	0.00	0.00	0.00	2.44	2.01	2.81	0.23	0.00	3.48
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	8.40	0.00	0.00	0.00	0.00	0.00	2.04	1.70	13.19	6.35	0.00	4.77
REPAIR & MAINTENANCE	3.74	0.00	0.00	0.00	0.00	0.00	2.35	0.76	5.73	1.31	0.00	4.55
INTEREST ON OP. CAP.	5.41	0.00	0.00	0.00	1.57	0.00	3.71	1.16	0.59	0.51	0.41	0.15
TOTAL DIRECT EXPENSES	95.52	0.00	0.00	0.00	40.64	0.00	127.50	47.73	30.57	34.51	40.21	29.15
NET INCOME	-95.52	0.00	0.00	0.00	-40.64	0.00	-127.50	-47.73	-30.57	-34.51	-40.21	528.85
NET INCOME TO DATE	-95.52	-95.52	-95.52	-95.52	-136.16	-136.16	-263.66	-311.39	-341.96	-376.47	-416.68	112.17

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

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

* Lease costs are based on hourly usage costs.

Table 12.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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

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

Table 13.A Estimated costs per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4582	6.49	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR					
	hour	14.22	0.3065	4.36	_____
DIESEL FUEL					
Tractors	gal	2.60	4.3236	11.27	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Contour Flood Irr.	gal	2.60	10.9974	28.59	_____
REPAIR & MAINTENANCE					
Implements	acre	4.85	1.0000	4.85	_____
Tractors	acre	2.35	1.0000	2.35	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	12.85	1.0000	12.85	_____
TOTAL DIRECT EXPENSES				422.96	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	16.21	1.0000	16.21	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Contour Flood Irr.	acre	48.51	1.0000	48.51	_____
TOTAL FIXED EXPENSES				88.84	_____
TOTAL SPECIFIED EXPENSES				511.80	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

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

TOTAL DIRECT EXPENSES				422.96	_____
RETURNS ABOVE DIRECT EXPENSES				69.94	_____
TOTAL FIXED EXPENSES				88.84	_____

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Valor SX	oz					2.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.54	0.54	0.96	0.30

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

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

Table 13.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----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	492.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	6.50	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	26.33	0.00	0.00	47.16	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.94	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	0.00	1.44	0.00	0.36	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.21	0.00	0.00	0.89	0.00	0.00	3.78	2.73	1.61	1.61	0.18	2.87
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.08	0.00	0.00	0.85	0.00	0.00	2.44	11.95	10.86	10.86	0.28	4.24
REPAIR & MAINTENANCE	1.42	0.00	0.00	0.38	0.00	0.00	2.68	9.32	2.96	2.96	0.08	4.41
INTEREST ON OP. CAP.	4.59	0.00	0.00	1.34	0.00	0.00	4.49	0.77	0.83	0.41	0.29	0.13
TOTAL DIRECT EXPENSES	81.04	0.00	0.00	31.23	0.00	0.00	154.39	31.50	42.37	28.28	28.19	25.96
NET INCOME	-81.04	0.00	0.00	-31.23	0.00	0.00	-154.39	-31.50	-42.37	-28.28	-28.19	466.94
NET INCOME TO DATE	-81.04	-81.04	-81.04	-112.27	-112.27	-112.27	-266.66	-298.16	-340.53	-368.81	-397.00	69.94

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

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

* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

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

Table 14.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
1/2-mi Pivot Irr.	gal	2.60	16.4057	42.66	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
1/2-mi Pivot Irr.	acre	11.57	1.0000	11.57	_____
INTEREST ON OP. CAP.	acre	10.42	1.0000	10.42	_____
TOTAL DIRECT EXPENSES				394.87	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
1/2-mi Pivot Irr.	acre	47.36	1.0000	47.36	_____
TOTAL FIXED EXPENSES				74.02	_____
TOTAL SPECIFIED EXPENSES				468.89	_____

Note: Cost of production estimates are based on 2018 input prices..
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

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

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

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

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

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

Table 14.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

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

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

Table 14.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----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	465.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	17.54	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.72	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.44	0.93	0.04	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.84	17.91	12.80	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.63	1.12	0.55	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.21	3.68	0.75	1.25	0.15	0.13
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	7.05	150.55	38.25	83.39	14.65	25.99
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-7.05	-150.55	-38.25	-83.39	-14.65	439.01
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-82.04	-232.59	-270.84	-354.23	-368.88	70.13

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

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

* Lease costs are based on hourly usage costs.

Table 14.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62
			dollars										
PERCENT	YIELD	UNIT											
50	25.00	bu	-213	-202	-190	-178	-167	-155	-143	-132	-120	-109	-97
			-287	-276	-264	-252	-241	-229	-217	-206	-194	-183	-171
60	30.00	bu	-180	-166	-152	-138	-124	-110	-96	-82	-68	-54	-40
			-254	-240	-226	-212	-198	-184	-170	-156	-142	-128	-114
70	35.00	bu	-146	-130	-114	-97	-81	-65	-49	-32	-16	-0	16
			-220	-204	-188	-171	-155	-139	-123	-106	-90	-74	-57
80	40.00	bu	-113	-94	-75	-57	-38	-20	-1	17	35	54	72
			-187	-168	-149	-131	-112	-94	-75	-56	-38	-19	-1
90	45.00	bu	-79	-58	-37	-16	4	24	45	66	87	108	129
			-153	-132	-111	-90	-69	-49	-28	-7	13	34	55
100	50.00	bu	-46	-22	0	23	46	70	93	116	139	163	186
			-120	-96	-73	-50	-27	-3	19	42	65	89	112
110	55.00	bu	-12	12	38	64	89	115	140	166	191	217	243
			-86	-61	-35	-9	15	41	66	92	117	143	169
120	60.00	bu	20	48	76	104	132	160	188	216	244	272	299
			-53	-25	2	30	58	86	114	142	170	197	225
130	65.00	bu	54	84	114	145	175	205	235	266	296	326	356
			-19	10	40	71	101	131	161	191	222	252	282
140	70.00	bu	87	120	153	185	218	250	283	315	348	380	413
			13	46	79	111	144	176	209	241	274	306	339
150	75.00	bu	121	156	191	226	260	295	330	365	400	435	470
			47	82	117	152	186	221	256	291	326	361	396

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

Table 15.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	6.53	2.0000	13.06	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.55	50.0000	77.50	_____
ADJUVANTS					
Surfactant	pt	3.59	0.5000	1.80	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.83	1.0000	8.83	_____
TOTAL DIRECT EXPENSES				305.72	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				26.66	_____
TOTAL SPECIFIED EXPENSES				332.38	_____

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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

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

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

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

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

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

TOTALS							0.21	0.21	0.30	0.18

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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

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

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

Table 15.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----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	232.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	17.54	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.36	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.88	0.00	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.85	0.00	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	0.38	0.00	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.20	3.10	0.39	0.65	0.15	0.09
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	6.70	126.85	20.04	43.29	14.65	19.20
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-6.70	-126.85	-20.04	-43.29	-14.65	213.30
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-81.69	-208.54	-228.58	-271.87	-286.52	-73.22

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

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

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

* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, RR2X, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
PRODUCT			PRICE										
Soybeans			6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-215	-209	-203	-197	-191	-186	-180	-174	-168	-162	-157
			-241	-235	-230	-224	-218	-212	-206	-201	-195	-189	-183
60	15.00	bu	-198	-191	-184	-177	-170	-163	-156	-149	-142	-135	-128
			-225	-218	-211	-204	-197	-190	-183	-176	-169	-162	-155
70	17.50	bu	-181	-173	-165	-157	-149	-140	-132	-124	-116	-108	-100
			-208	-200	-192	-183	-175	-167	-159	-151	-143	-135	-126
80	20.00	bu	-164	-155	-146	-136	-127	-118	-109	-99	-90	-81	-71
			-191	-182	-172	-163	-154	-145	-135	-126	-117	-107	-98
90	22.50	bu	-148	-137	-127	-116	-106	-95	-85	-74	-64	-53	-43
			-174	-164	-153	-143	-132	-122	-111	-101	-91	-80	-70
100	25.00	bu	-131	-119	-108	-96	-84	-73	-61	-49	-38	-26	-15
			-158	-146	-134	-123	-111	-99	-88	-76	-65	-53	-41
110	27.50	bu	-114	-101	-89	-76	-63	-50	-37	-25	-12	0	13
			-141	-128	-115	-102	-90	-77	-64	-51	-38	-26	-13
120	30.00	bu	-97	-83	-69	-55	-42	-28	-14	-0	13	27	41
			-124	-110	-96	-82	-68	-54	-40	-26	-12	1	15
130	32.50	bu	-81	-65	-50	-35	-20	-5	9	24	39	54	70
			-107	-92	-77	-62	-47	-32	-17	-1	13	28	43
140	35.00	bu	-64	-48	-31	-15	0	17	33	49	65	82	98
			-90	-74	-58	-42	-25	-9	6	22	39	55	71
150	37.50	bu	-47	-30	-12	4	22	39	57	74	91	109	126
			-74	-56	-39	-21	-4	12	30	47	65	82	100

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.0000	3.59	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3302	4.69	_____
Harvesters	hour	14.23	0.0851	1.21	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	14.22	0.3738	5.32	_____
DIESEL FUEL					
Tractors	gal	2.60	3.8252	9.94	_____
Harvesters	gal	2.60	1.4243	3.70	_____
REPAIR & MAINTENANCE					
Implements	acre	4.94	1.0000	4.94	_____
Tractors	acre	1.97	1.0000	1.97	_____
Harvesters	acre	3.21	1.0000	3.21	_____
INTEREST ON OP. CAP.	acre	12.47	1.0000	12.47	_____
TOTAL DIRECT EXPENSES				387.84	_____
FIXED EXPENSES					
Implements	acre	11.12	1.0000	11.12	_____
Tractors	acre	13.61	1.0000	13.61	_____
Harvesters	acre	13.81	1.0000	13.81	_____
TOTAL FIXED EXPENSES				38.54	_____
TOTAL SPECIFIED EXPENSES				426.38	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.B Summary of estimated costs and returns per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

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

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

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

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.41	0.41	0.51	0.37

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.D Estimated costs for field operations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.E Estimated monthly income and expense flows per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	390.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	61.61	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.94	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.00	0.00	0.00	0.00	0.00	0.00	2.44	1.78	0.00	0.00	0.00	2.87
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.56	0.00	0.00	0.00	0.00	0.00	2.04	1.70	0.00	0.00	0.00	4.34
REPAIR & MAINTENANCE	2.59	0.00	0.00	0.00	0.00	0.00	2.35	0.76	0.00	0.00	0.00	4.42
INTEREST ON OP. CAP.	5.04	0.00	0.00	0.00	1.57	0.00	3.52	1.81	0.00	0.00	0.41	0.12
TOTAL DIRECT EXPENSES	88.93	0.00	0.00	0.00	40.64	0.00	120.81	74.16	0.00	0.00	40.21	23.09
NET INCOME	-88.93	0.00	0.00	0.00	-40.64	0.00	-120.81	-74.16	0.00	0.00	-40.21	367.51
NET INCOME TO DATE	-88.93	-88.93	-88.93	-88.93	-129.57	-129.57	-250.38	-324.54	-324.54	-324.54	-364.75	2.76

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

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

Table 16.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2019

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

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

Table 17.A Estimated costs per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4713	6.70	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	14.22	0.4301	6.12	_____
DIESEL FUEL					
Tractors	gal	2.60	5.2753	13.70	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Roll-Out Pipe Irr.	gal	2.60	7.3316	19.05	_____
REPAIR & MAINTENANCE					
Implements	acre	5.60	1.0000	5.60	_____
Tractors	acre	2.74	1.0000	2.74	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	_____

TOTAL DIRECT EXPENSES				465.81	_____
FIXED EXPENSES					
Implements	acre	13.59	1.0000	13.59	_____
Tractors	acre	18.92	1.0000	18.92	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____

TOTAL FIXED EXPENSES				107.82	_____

TOTAL SPECIFIED EXPENSES				573.63	_____

Note: Cost of production estimates are based on 2018 input prices
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.B Summary of estimated costs and returns per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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

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

TOTAL DIRECT EXPENSES				465.81	_____
RETURNS ABOVE DIRECT EXPENSES				92.19	_____

TOTAL FIXED EXPENSES				107.82	_____

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

Note: Cost of production estimates are based on 2018 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Zidua	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.55	0.55	1.01	0.43

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.D Estimated costs for field operations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

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

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

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

Table 17.E Estimated monthly income and expense flows per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	558.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	19.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.13	0.00	29.62	61.61	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.94	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.44	0.00	1.44	0.00	0.00	0.36	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.23	0.00	0.00	0.00	0.00	0.00	2.44	2.01	2.81	0.23	0.00	3.48
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	8.40	0.00	0.00	0.00	0.00	0.00	2.04	1.70	13.19	6.35	0.00	4.77
REPAIR & MAINTENANCE	3.74	0.00	0.00	0.00	0.00	0.00	2.35	0.76	5.73	1.31	0.00	4.55
INTEREST ON OP. CAP.	5.41	0.00	0.00	0.00	1.57	0.00	3.52	1.82	0.59	0.51	0.41	0.15
TOTAL DIRECT EXPENSES	95.52	0.00	0.00	0.00	40.64	0.00	120.81	74.40	30.57	34.51	40.21	29.15
NET INCOME	-95.52	0.00	0.00	0.00	-40.64	0.00	-120.81	-74.40	-30.57	-34.51	-40.21	528.85
NET INCOME TO DATE	-95.52	-95.52	-95.52	-95.52	-136.16	-136.16	-256.97	-331.37	-361.94	-396.45	-436.66	92.19

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

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

* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			6.97	7.44	7.90	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-248 -356	-234 -342	-220 -328	-206 -314	-192 -300	-178 -286	-164 -272	-150 -258	-136 -244	-122 -230	-108 -216
60	36.00	bu	-208 -316	-191 -299	-174 -282	-157 -265	-141 -249	-124 -232	-107 -215	-91 -198	-74 -182	-57 -165	-40 -148
70	42.00	bu	-167 -275	-148 -256	-128 -236	-109 -217	-89 -197	-70 -178	-50 -158	-31 -139	-11 -119	7 -100	27 -80
80	48.00	bu	-127 -235	-105 -213	-83 -190	-60 -168	-38 -146	-16 -123	6 -101	28 -79	50 -57	73 -34	95 -12
90	54.00	bu	-87 -195	-62 -170	-37 -145	-12 -120	12 -94	38 -69	63 -44	88 -19	113 5	138 30	163 55
100	60.00	bu	-47 -155	-19 -127	8 -99	36 -71	64 -43	92 -15	120 12	147 40	175 68	203 95	231 123
110	66.00	bu	-7 -114	23 -84	54 -53	84 -22	115 7	146 38	177 69	207 99	238 130	269 161	299 191
120	72.00	bu	33 -74	66 -41	100 -7	133 25	167 59	200 92	234 126	267 159	300 193	334 226	367 260
130	78.00	bu	73 -34	109 1	145 38	182 74	218 110	254 146	290 183	327 219	363 255	399 291	436 328
140	84.00	bu	113 5	152 44	191 83	230 122	269 161	308 201	347 240	386 279	426 318	465 357	504 396
150	90.00	bu	153 45	195 87	237 129	279 171	321 213	363 255	404 297	446 338	488 380	530 422	572 464

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

Table 18.A Estimated costs per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.15	16.0000	2.40	_____
Sodium Chlorate 5L	gal	5.40	0.6000	3.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	12.71	1.0000	12.71	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
Zidua	oz	9.05	1.5000	13.58	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	1.1000	3.95	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4582	6.49	_____
Harvesters	hour	14.23	0.0851	1.21	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR					
	hour	14.22	0.3065	4.36	_____
DIESEL FUEL					
Tractors	gal	2.60	4.3236	11.27	_____
Harvesters	gal	2.60	1.4243	3.70	_____
Contour Flood Irr.	gal	2.60	10.9974	28.59	_____
REPAIR & MAINTENANCE					
Implements	acre	4.85	1.0000	4.85	_____
Tractors	acre	2.35	1.0000	2.35	_____
Harvesters	acre	3.21	1.0000	3.21	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	13.72	1.0000	13.72	_____
TOTAL DIRECT EXPENSES				456.92	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	16.21	1.0000	16.21	_____
Harvesters	acre	13.81	1.0000	13.81	_____
Contour Flood Irr.	acre	48.51	1.0000	48.51	_____
TOTAL FIXED EXPENSES				88.84	_____
TOTAL SPECIFIED EXPENSES				545.76	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.B Summary of estimated costs and returns per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

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

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

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.C Estimated resource use for field operations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
							-----hours-----				
Soil Test	acre			0.33	Nov	0.3330					
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07	
Lime (Spread)	ton			0.33	Nov	0.3330					
Custom Apply Fert	acre			1.00	Nov	1.0000					
Phosphorus(46% P2O5)	cwt					0.8700					
Potash (60% K2O)	cwt					1.3300					
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02	
Glyphosate 3lbs a.e	oz					32.0000					
Select Max	pt					1.0000					
Surfactant	pt					0.4000					
Valor SX	oz					2.0000					
Soybeans Consultant	acre			1.00	May	1.0000					
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06	
Soybean Seed LL	lb					50.0000					
CruiserMaxx	oz					1.6000					
Inoculant -Soybean	acre					1.0000					
Boundary	pt					2.0000					
Gramoxone SL 2.0	oz					48.0000					
Surfactant	pt					0.4000					
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02	
Liberty 280	oz					29.0000					
Dual Magnum	pt					1.0000					
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02	
Liberty 280	oz					29.0000					
Zidua	oz					1.5000					
App by Air (5 gal)	appl			1.00	Jul	1.0000					
Quadris Top SBX	oz					7.0000					
Surfactant	pt					0.1000					
App by Air (5 gal)	appl			1.00	Aug	1.0000					
Acephate 90SP	lb					0.7500					
Incidental Pest				1.00	Sep						
App by Air (5 gal)	appl					1.0000					
IncidentalPestTrt \$8	acre					1.0000					
App by Air (5 gal)	appl			1.00	Sep	1.0000					
Gramoxone SL	oz					16.0000					
Sodium Chlorate 5L	gal					0.6000					
Surfactant	pt					0.2000					
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07	
Haul Soybeans	bu					53.0000					
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01	
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51		
TOTALS								0.54	0.54	0.96	0.30

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.D Estimated costs for field operations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

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

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

Table 18.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----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	492.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	6.50	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	26.33	0.00	0.00	60.54	30.69	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.94	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.44	0.00	0.00	1.44	0.00	0.36	0.00	0.72	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.21	0.00	0.00	0.89	0.00	0.00	3.78	2.73	1.61	1.61	0.18	2.87
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.08	0.00	0.00	0.85	0.00	0.00	2.44	11.95	10.86	10.86	0.28	4.24
REPAIR & MAINTENANCE	1.42	0.00	0.00	0.38	0.00	0.00	2.68	9.32	2.96	2.96	0.08	4.41
INTEREST ON OP. CAP.	4.59	0.00	0.00	1.34	0.00	0.00	4.70	1.43	0.83	0.41	0.29	0.13
TOTAL DIRECT EXPENSES	81.04	0.00	0.00	31.23	0.00	0.00	161.48	58.37	42.37	28.28	28.19	25.96
NET INCOME	-81.04	0.00	0.00	-31.23	0.00	0.00	-161.48	-58.37	-42.37	-28.28	-28.19	466.94
NET INCOME TO DATE	-81.04	-81.04	-81.04	-112.27	-112.27	-112.27	-273.75	-332.12	-374.49	-402.77	-430.96	35.98

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

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

* Lease costs are based on hourly usage costs.

Table 18.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, LL, stale seedbed, 12R 30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2019

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

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

Table 19.A Estimated costs per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
Quadris Top SBX	oz	2.75	7.0000	19.25	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	29.0000	17.11	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.6000	2.15	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
1/2-mi Pivot Irr.	gal	2.60	16.4057	42.66	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
1/2-mi Pivot Irr.	acre	11.57	1.0000	11.57	_____
INTEREST ON OP. CAP.	acre	10.53	1.0000	10.53	_____
TOTAL DIRECT EXPENSES				401.86	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
1/2-mi Pivot Irr.	acre	47.36	1.0000	47.36	_____
TOTAL FIXED EXPENSES				74.02	_____
TOTAL SPECIFIED EXPENSES				475.88	_____

Note: Cost of production estimates are based on 2018 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

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

TOTAL DIRECT EXPENSES				401.86	_____
RETURNS ABOVE DIRECT EXPENSES				63.14	_____
TOTAL FIXED EXPENSES				74.02	_____

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

Note: Cost of production estimates are based on 2018 input prices.
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

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

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

Table 19.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

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

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

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

Table 19.E Estimated monthly income and expense flows per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----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	465.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	19.25	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	30.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.72	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.44	0.93	0.04	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.84	17.91	12.80	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.63	1.12	0.55	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.21	3.52	1.02	1.25	0.15	0.13
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	7.05	143.89	51.90	83.39	14.65	25.99
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-7.05	-143.89	-51.90	-83.39	-14.65	439.01
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-82.04	-225.93	-277.83	-361.22	-375.87	63.14

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

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

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

* Lease costs are based on hourly usage costs.

Table 19.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, 2019

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

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

Table 20.A Estimated costs per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.0000	19.50	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	0.8700	20.66	_____
Potash (60% K2O)	cwt	20.00	1.3300	26.60	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	1.6000	6.85	_____
HERBICIDES					
Boundary	pt	11.21	2.0000	22.42	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Liberty 280	oz	0.59	29.0000	17.11	_____
Dual Magnum	pt	13.81	1.0000	13.81	_____
INSECTICIDES					
Acephate 90SP	lb	7.92	0.7500	5.94	_____
Prevathon	oz	1.32	14.0000	18.48	_____
Bifenthrin	oz	0.76	6.4000	4.86	_____
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.42	50.0000	71.00	_____
ADJUVANTS					
Surfactant	pt	3.59	0.5000	1.80	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3330	12.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.1171	1.66	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR					
	hour	14.26	0.1886	2.69	_____
DIESEL FUEL					
Tractors	gal	2.60	1.3567	3.53	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	3.26	1.0000	3.26	_____
Tractors	acre	0.70	1.0000	0.70	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	8.94	1.0000	8.94	_____
TOTAL DIRECT EXPENSES				312.71	_____
FIXED EXPENSES					
Implements	acre	6.31	1.0000	6.31	_____
Tractors	acre	4.83	1.0000	4.83	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				26.66	_____
TOTAL SPECIFIED EXPENSES				339.37	_____

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 20.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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

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

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

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

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 20.C Estimated resource use for field operations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					25.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.21	0.21	0.30	0.18

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year. The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 20.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

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

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

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

Table 20.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, 1L, 12R 30"
Non-irrigated, All Areas, Mississippi, 2019

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	232.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	6.50	0.00
FERTILIZERS	47.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.85	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.62	30.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.36	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	12.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.88	0.00	0.00	3.26
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.85	0.00	0.00	4.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.35	0.38	0.00	0.00	4.84
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.00	0.00	0.20	2.94	0.66	0.65	0.15	0.09
TOTAL DIRECT EXPENSES	74.99	0.00	0.00	0.00	0.00	0.00	6.70	120.19	33.69	43.29	14.65	19.20
NET INCOME	-74.99	0.00	0.00	0.00	0.00	0.00	-6.70	-120.19	-33.69	-43.29	-14.65	213.30
NET INCOME TO DATE	-74.99	-74.99	-74.99	-74.99	-74.99	-74.99	-81.69	-201.88	-235.57	-278.86	-293.51	-80.21

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

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

* Lease costs are based on hourly usage costs.

Table 20.F Table 21.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, LL, 12R 30"
 Non-irrigated, All Areas, Mississippi, 2019

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

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

Table 21.A Estimated costs per acre
 Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
App by Air (3 gal)	appl	5.00	0.2000	1.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	23.75	1.9570	46.48	_____
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
Fert 10-34-0	gal	2.59	4.0000	10.36	_____
Zinc Plus	pt	4.99	2.0000	9.98	_____
UAN + Sulfur (28%)	gal	1.38	32.1712	44.40	_____
UAN (32%)	gal	1.24	39.5570	49.05	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.51	0.5000	5.76	_____
Select Max	pt	12.71	1.0000	12.71	_____
Atrazine 4L	pt	1.98	4.0000	7.92	_____
Halex GT	pt	7.80	3.6000	28.08	_____
INSECTICIDES					
Bifenthrin	oz	0.76	1.2800	0.97	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.63	34.0000	123.42	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4242	6.04	_____
Harvesters	hour	14.23	0.1009	1.44	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR					
	hour	14.20	0.4020	5.71	_____
DIESEL FUEL					
Tractors	gal	2.60	4.7302	12.29	_____
Harvesters	gal	2.60	1.6890	4.39	_____
Roll-Out Pipe Irr.	gal	2.60	10.5901	27.52	_____
REPAIR & MAINTENANCE					
Implements	acre	7.91	1.0000	7.91	_____
Tractors	acre	2.46	1.0000	2.46	_____
Harvesters	acre	3.81	1.0000	3.81	_____
Roll-Out Pipe Irr.	acre	6.88	1.0000	6.88	_____
INTEREST ON OP. CAP.	acre	18.80	1.0000	18.80	_____
TOTAL DIRECT EXPENSES				584.10	_____
FIXED EXPENSES					
Implements	acre	13.49	1.0000	13.49	_____
Tractors	acre	16.98	1.0000	16.98	_____
Harvesters	acre	16.38	1.0000	16.38	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____
TOTAL FIXED EXPENSES				108.35	_____
TOTAL SPECIFIED EXPENSES				692.45	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 21.B Summary of estimated costs and returns per acre
 Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.80	220.0000	836.00	_____

TOTAL INCOME				836.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.50	1.0000	7.50	_____
FERTILIZERS	acre	190.27	1.0000	190.27	_____
HERBICIDES	acre	58.95	1.0000	58.95	_____
INSECTICIDES	acre	0.97	1.0000	0.97	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	123.42	1.0000	123.42	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	14.23	0.5252	7.48	_____
UNALLOCATED LABOR	hour	14.20	0.4020	5.71	_____
DIESEL FUEL	gal	2.60	17.0094	44.20	_____
REPAIR & MAINTENANCE	acre	21.06	1.0000	21.06	_____
INTEREST ON OP. CAP.	acre	18.80	1.0000	18.80	_____

TOTAL DIRECT EXPENSES				584.10	_____
RETURNS ABOVE DIRECT EXPENSES				251.90	_____
TOTAL FIXED EXPENSES				108.35	_____

TOTAL SPECIFIED EXPENSES				692.45	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				143.55	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 21.C Estimated resource use for field operations, per acre
 Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.9570				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant & Pre-Folding	12R-38	MFWD 225	0.053	1.00	Mar		0.05	0.05	0.10	0.04
Corn Seed BtRR	thous					34.0000				
Fert 10-34-0	gal					4.0000				
Zinc Plus	pt					2.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Corn Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					39.5570				
Header - Corn	8R-38	325 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.52	0.52	1.04	0.40

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 21.D Estimated costs for field operations, per acre
 Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Spin Spreader	5 ton		1.27	0.54	1.52			0.20	3.53	2.39	5.92
Phosphorus (46% P2O5)	cwt	46.48						2.79	49.27		49.27
Potash (60% K2O)	cwt	30.00						1.80	31.80		31.80
Bed/Disk w/roller	12R-30/40		1.88	1.10	1.69			0.28	4.95	4.73	9.68
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
Clarity	pt	5.76						0.23	5.99		5.99
Select Max	pt	12.71						0.51	13.22		13.22
Plant & Pre-Folding	12R-38		1.61	2.14	1.92			0.20	5.87	6.08	11.95
Corn Seed BtRR	thous	123.42						4.32	127.74		127.74
Fert 10-34-0	gal	10.36						0.36	10.72		10.72
Zinc Plus	pt	9.98						0.35	10.33		10.33
Custom Apply Fert	acre	7.50						0.22	7.72		7.72
UAN + Sulfur (28%)	gal	44.40						1.33	45.73		45.73
Spray (Broadcast)	60'		0.85	0.38	0.89			0.06	2.18	1.43	3.61
Atrazine 4L	pt	7.92						0.24	8.16		8.16
Halex GT	pt	28.08						0.84	28.92		28.92
App by Air (3 gal)	appl	1.00						0.03	1.03		1.03
Bifenthrin	oz	0.97						0.02	0.99		0.99
Corn Consultant	acre	6.00						0.15	6.15		6.15
Fert Appl (Liquid)	12R-38		1.56	1.00	1.63			0.10	4.29	2.98	7.27
UAN (32%)	gal	49.05						1.23	50.28		50.28
Header - Corn	8R-38		4.39	5.40	2.73			0.06	12.58	19.02	31.60
Grain Cart Corn	700 bu		0.76	0.41	0.68			0.01	1.86	1.54	3.40
Haul Corn	bu	50.60						0.25	50.85		50.85
Stalk Shredder Flex	20'		2.48	2.61	2.23			0.04	7.36	4.81	12.17
Roll-Out Pipe Irr.	acre	8.25	29.40	7.48	4.65			1.02	50.80	65.37	116.17
TOTALS		482.10	44.20	21.06	17.94	0.00	18.80	584.10	108.35	692.45	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 21.E Estimated monthly income and expense flows per acre
 Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	836.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1.00	0.00	0.00	0.00	0.00
FERTILIZERS	76.48	0.00	0.00	0.00	0.00	20.34	44.40	49.05	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.95	0.00	36.00	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	0.97	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	123.42	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	50.60
CUSTOM LIME	25.31	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	3.75	0.00	0.00	0.00	0.00	1.92	0.89	1.86	3.04	0.23	0.61	5.64
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.11	0.00	0.00	0.00	0.00	1.61	0.85	1.56	21.13	6.88	0.43	7.63
REPAIR & MAINTENANCE	1.96	0.00	0.00	0.00	0.00	2.14	0.38	1.00	6.05	0.98	0.13	8.42
INTEREST ON OP. CAP.	6.90	0.00	0.00	0.00	1.18	5.23	2.69	1.54	0.77	0.12	0.01	0.36
TOTAL DIRECT EXPENSES	121.84	0.00	0.00	0.00	30.63	154.66	92.71	62.98	39.24	8.21	1.18	72.65
NET INCOME	-121.84	0.00	0.00	0.00	-30.63	-154.66	-92.71	-62.98	-39.24	-8.21	-1.18	763.35
NET INCOME TO DATE	-121.84	-121.84	-121.84	-121.84	-152.47	-307.13	-399.84	-462.82	-502.06	-510.27	-511.45	251.90

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 21.F Estimated returns for various price/yield combinations, per acre
 Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Corn	2.85	3.04	3.23	3.42	3.61	3.80	3.99	4.18	4.37	4.56	4.75		
PERCENT	YIELD	UNIT	-----dollars-----										
50	110.00	bu	-245 -353	-224 -332	-203 -311	-182 -290	-161 -269	-140 -249	-119 -228	-98 -207	-77 -186	-57 -165	-36 -144
60	132.00	bu	-187 -295	-162 -270	-137 -245	-112 -220	-87 -195	-62 -170	-37 -145	-12 -120	13 -95	38 -70	63 -45
70	154.00	bu	-129 -238	-100 -209	-71 -179	-42 -150	-12 -121	16 -91	45 -62	74 -33	104 -4	133 25	162 54
80	176.00	bu	-72 -180	-38 -147	-5 -113	27 -80	61 -46	94 -13	128 19	161 53	195 86	228 120	262 153
90	198.00	bu	-14 -123	22 -85	60 -47	98 -10	135 27	173 65	211 102	248 140	286 177	323 215	361 253
100	220.00	bu	42 -65	84 -23	126 18	168 59	210 101	251 143	293 185	335 227	377 268	419 310	460 352
110	242.00	bu	100 -7	146 38	192 84	238 130	284 176	330 222	376 268	422 314	468 360	514 405	560 451
120	264.00	bu	158 49	208 99	258 150	308 200	358 250	408 300	459 350	509 400	559 451	609 501	659 551
130	286.00	bu	215 107	270 161	324 216	378 270	433 324	487 379	541 433	596 487	650 542	704 596	759 650
140	308.00	bu	273 165	331 223	390 282	448 340	507 399	565 457	624 516	683 574	741 633	800 691	858 750
150	330.00	bu	330 222	393 285	456 348	519 410	581 473	644 536	707 598	769 661	832 724	895 786	957 849

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 2018 input prices.

Table 22.A Estimated costs per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
App by Air (3 gal)	appl	5.00	0.2000	1.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	1.6300	38.71	_____
Potash (60% K2O)	cwt	20.00	1.2500	25.00	_____
Fert 10-34-0	gal	2.59	4.0000	10.36	_____
Zinc Plus	pt	4.99	2.0000	9.98	_____
UAN + Sulfur (28%)	gal	1.38	19.3063	26.64	_____
UAN (32%)	gal	1.24	29.6700	36.79	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.51	0.5000	5.76	_____
Select Max	pt	12.71	1.0000	12.71	_____
Atrazine 4L	pt	1.98	4.0000	7.92	_____
Halex GT	pt	7.80	3.6000	28.08	_____
INSECTICIDES					
Bifenthrin	oz	0.76	1.2800	0.97	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.63	28.0000	101.64	_____
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	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3457	4.92	_____
Harvesters	hour	14.23	0.1009	1.44	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR	hour	14.20	0.4020	5.71	_____
DIESEL FUEL					
Tractors	gal	2.60	4.0040	10.41	_____
Harvesters	gal	2.60	1.3770	3.58	_____
REPAIR & MAINTENANCE					
Implements	acre	7.71	1.0000	7.71	_____
Tractors	acre	2.06	1.0000	2.06	_____
Harvesters	acre	3.57	1.0000	3.57	_____
INTEREST ON OP. CAP.	acre	15.36	1.0000	15.36	_____
TOTAL DIRECT EXPENSES				453.76	_____
FIXED EXPENSES					
Implements	acre	12.35	1.0000	12.35	_____
Tractors	acre	14.25	1.0000	14.25	_____
Harvesters	acre	15.34	1.0000	15.34	_____
TOTAL FIXED EXPENSES				41.94	_____
TOTAL SPECIFIED EXPENSES				495.70	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 22.B Summary of estimated costs and returns per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.80	170.0000	646.00	_____

TOTAL INCOME				646.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.50	1.0000	7.50	_____
FERTILIZERS	acre	147.48	1.0000	147.48	_____
HERBICIDES	acre	58.95	1.0000	58.95	_____
INSECTICIDES	acre	0.97	1.0000	0.97	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
OPERATOR LABOR	hour	14.23	0.4466	6.36	_____
UNALLOCATED LABOR	hour	14.20	0.4020	5.71	_____
DIESEL FUEL	gal	2.60	5.3810	13.99	_____
REPAIR & MAINTENANCE	acre	13.34	1.0000	13.34	_____
INTEREST ON OP. CAP.	acre	15.36	1.0000	15.36	_____

TOTAL DIRECT EXPENSES				453.76	_____
RETURNS ABOVE DIRECT EXPENSES				192.24	_____
TOTAL FIXED EXPENSES				41.94	_____

TOTAL SPECIFIED EXPENSES				495.70	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				150.30	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 22.C Estimated resource use for field operations, per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant & Pre-Folding	12R-38	MFWD 225	0.053	1.00	Mar		0.05	0.05	0.10	0.04
Corn Seed BtRR	thous					28.0000				
Fert 10-34-0	gal					4.0000				
Zinc Plus	pt					2.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Corn Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					29.6700				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.44	0.44	0.58	0.40

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

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

Table 22.D Estimated costs for field operations, per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Spin Spreader	5 ton		1.27	0.54	1.52			0.20	3.53	2.39	5.92
Phosphorus (46% P2O5)	cwt	38.71						2.32	41.03		41.03
Potash (60% K2O)	cwt	25.00						1.50	26.50		26.50
Bed/Disk w/roller	12R-30/40		1.88	1.10	1.69			0.28	4.95	4.73	9.68
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
Clarity	pt	5.76						0.23	5.99		5.99
Select Max	pt	12.71						0.51	13.22		13.22
Plant & Pre-Folding	12R-38		1.61	2.14	1.92			0.20	5.87	6.08	11.95
Corn Seed BtRR	thous	101.64						3.56	105.20		105.20
Fert 10-34-0	gal	10.36						0.36	10.72		10.72
Zinc Plus	pt	9.98						0.35	10.33		10.33
Custom Apply Fert	acre	7.50						0.22	7.72		7.72
UAN + Sulfur (28%)	gal	26.64						0.80	27.44		27.44
Spray (Broadcast)	60'		0.85	0.38	0.89			0.06	2.18	1.43	3.61
Atrazine 4L	pt	7.92						0.24	8.16		8.16
Halex GT	pt	28.08						0.84	28.92		28.92
App by Air (3 gal)	appl	1.00						0.03	1.03		1.03
Bifenthrin	oz	0.97						0.02	0.99		0.99
Corn Consultant	acre	6.00						0.15	6.15		6.15
Fert Appl (Liquid)	12R-38		1.56	1.00	1.63			0.10	4.29	2.98	7.27
UAN (32%)	gal	36.79						0.92	37.71		37.71
Header - Corn	8R-38		3.58	5.16	2.73			0.06	11.53	17.98	29.51
Grain Cart Corn	700 bu		0.76	0.41	0.68			0.01	1.86	1.54	3.40
Haul Corn	bu	39.10						0.20	39.30		39.30
Stalk Shredder Flex	20'		2.48	2.61	2.23			0.04	7.36	4.81	12.17
TOTALS		397.78	13.99	13.34	13.29	0.00	15.36	453.76	41.94	495.70	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 22.E Estimated monthly income and expense flows per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	646.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1.00	0.00	0.00	0.00	0.00
FERTILIZERS	63.71	0.00	0.00	0.00	0.00	20.34	26.64	36.79	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.95	0.00	36.00	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	0.97	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
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	25.31	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	3.21	0.00	0.00	0.00	0.00	1.92	0.89	1.63	0.00	0.00	0.00	5.64
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	3.15	0.00	0.00	0.00	0.00	1.61	0.85	1.56	0.00	0.00	0.00	6.82
REPAIR & MAINTENANCE	1.64	0.00	0.00	0.00	0.00	2.14	0.38	1.00	0.00	0.00	0.00	8.18
INTEREST ON OP. CAP.	6.02	0.00	0.00	0.00	1.18	4.47	2.16	1.22	0.00	0.00	0.00	0.31
TOTAL DIRECT EXPENSES	106.37	0.00	0.00	0.00	30.63	132.12	74.42	50.17	0.00	0.00	0.00	60.05
NET INCOME	-106.37	0.00	0.00	0.00	-30.63	-132.12	-74.42	-50.17	0.00	0.00	0.00	585.95
NET INCOME TO DATE	-106.37	-106.37	-106.37	-106.37	-137.00	-269.12	-343.54	-393.71	-393.71	-393.71	-393.71	192.24

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 22.F Estimated returns for various price/yield combinations, per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2019

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			2.85	3.04	3.23	3.42	3.61	3.80	3.99	4.18	4.37	4.56	4.75
			-----dollars-----										
PERCENT	YIELD	UNIT											
50	85.00	bu	-191 -233	-175 -217	-159 -201	-143 -185	-127 -169	-111 -153	-94 -136	-78 -120	-62 -104	-46 -88	-30 -72
60	102.00	bu	-147 -189	-127 -169	-108 -150	-89 -131	-69 -111	-50 -92	-31 -73	-11 -53	7 -34	27 -14	46 4
70	119.00	bu	-102 -144	-80 -122	-57 -99	-34 -76	-12 -54	10 -31	32 -9	55 13	78 36	100 58	123 81
80	136.00	bu	-58 -100	-32 -74	-6 -48	19 -22	45 3	70 28	96 54	122 80	148 106	174 132	200 158
90	153.00	bu	-13 -55	15 -26	44 2	73 31	102 60	131 89	160 118	189 147	218 176	247 205	276 234
100	170.00	bu	30 -11	63 21	95 53	127 85	159 118	192 150	224 182	256 214	289 247	321 279	353 311
110	187.00	bu	75 33	110 68	146 104	181 139	217 175	252 210	288 246	323 282	359 317	395 353	430 388
120	204.00	bu	119 77	158 116	197 155	236 194	274 232	313 271	352 310	391 349	429 387	468 426	507 465
130	221.00	bu	164 122	206 164	248 206	290 248	332 290	374 332	416 374	458 416	500 458	542 500	584 542
140	238.00	bu	208 166	254 212	299 257	344 302	389 347	434 392	480 438	525 483	570 528	615 573	661 619
150	255.00	bu	253 211	301 259	350 308	398 356	447 405	495 453	544 502	592 550	640 599	689 647	737 695

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

Table 23.A Estimated costs per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yield goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
App by Air (3 gal)	appl	5.00	1.2000	6.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	1.9570	46.48	_____
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN + Sulfur (28%)	gal	1.38	32.1712	44.40	_____
UAN (32%)	gal	1.24	39.5570	49.05	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.51	0.5000	5.76	_____
Select Max	pt	12.71	1.0000	12.71	_____
Atrazine 4L	pt	1.98	4.0000	7.92	_____
Halex GT	pt	7.80	3.6000	28.08	_____
INSECTICIDES					
Bifenthrin	oz	0.76	1.2804	0.97	_____
Intrepid 2F	oz	2.03	4.0000	8.12	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.36	34.0000	114.24	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.6930	9.86	_____
Harvesters	hour	14.23	0.1009	1.44	_____
Self-Propelled	hour	14.23	0.0176	0.25	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	14.24	0.6597	9.40	_____
DIESEL FUEL					
Tractors	gal	2.60	7.8429	20.37	_____
Harvesters	gal	2.60	1.3770	3.58	_____
Self-Propelled	gal	2.60	0.1586	0.41	_____
Roll-Out Pipe Irr.	gal	2.60	10.5901	27.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.71	1.0000	9.71	_____
Tractors	acre	4.06	1.0000	4.06	_____
Harvesters	acre	3.57	1.0000	3.57	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
Roll-Out Pipe Irr.	acre	6.88	1.0000	6.88	_____
INTEREST ON OP. CAP.	acre	19.02	1.0000	19.02	_____
TOTAL DIRECT EXPENSES				586.64	_____
FIXED EXPENSES					
Implements	acre	18.71	1.0000	18.71	_____
Tractors	acre	28.07	1.0000	28.07	_____
Harvesters	acre	15.34	1.0000	15.34	_____
Self-Propelled	acre	1.41	1.0000	1.41	_____
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	_____
TOTAL FIXED EXPENSES				125.03	_____
TOTAL SPECIFIED EXPENSES				711.67	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 23.B Summary of estimated costs and returns per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yield goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.80	220.0000	836.00	_____

TOTAL INCOME				836.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	12.50	1.0000	12.50	_____
FERTILIZERS	acre	169.93	1.0000	169.93	_____
HERBICIDES	acre	58.95	1.0000	58.95	_____
INSECTICIDES	acre	9.09	1.0000	9.09	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	114.24	1.0000	114.24	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	14.23	0.8116	11.55	_____
UNALLOCATED LABOR	hour	14.24	0.6597	9.40	_____
DIESEL FUEL	gal	2.60	19.9688	51.88	_____
REPAIR & MAINTENANCE	acre	24.42	1.0000	24.42	_____
INTEREST ON OP. CAP.	acre	19.02	1.0000	19.02	_____

TOTAL DIRECT EXPENSES				586.64	_____
RETURNS ABOVE DIRECT EXPENSES				249.36	_____
TOTAL FIXED EXPENSES				125.03	_____

TOTAL SPECIFIED EXPENSES				711.67	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				124.33	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 23.C Estimated resource use for field operations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yield goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.9570				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond./Roll-Fol	30'	MFWD 225	0.062	1.00	Mar		0.06	0.06	0.06	0.05
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					34.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
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				
Corn Consultant	acre			1.00	May	1.0000				
				0.20	May					
App by Air (3 gal)	appl					0.2000				
Bifenthrin	oz					1.2804				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					39.5570				
Cultivate	12R-38	MFWD 225	0.054	1.00	May		0.05	0.05	0.05	0.04
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.81	0.79	1.32	0.65

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

Table 23.D Estimated costs for field operations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yield goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		3.08	0.81	2.76			0.40	7.05	4.77	11.82
Disk Harrow	24'		2.46	1.46	2.21			0.37	6.50	5.64	12.14
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Spin Spreader	5 ton		1.27	0.54	1.52			0.20	3.53	2.39	5.92
Phosphorus(46% P2O5)	cwt	46.48						2.79	49.27		49.27
Potash (60% K2O)	cwt	30.00						1.80	31.80		31.80
Bed/Disk w/roller	12R-30/40		1.88	1.10	1.69			0.28	4.95	4.73	9.68
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
Clarity	pt	5.76						0.23	5.99		5.99
Select Max	pt	12.71						0.51	13.22		13.22
Row Cond./Roll-Fol	30'		1.88	0.93	1.69			0.16	4.66	4.21	8.87
Plant - Folding	12R-38		1.49	1.83	1.80			0.18	5.30	5.31	10.61
Corn Seed RR2	thous	114.24						4.00	118.24		118.24
Custom Apply Fert	acre	7.50						0.22	7.72		7.72
UAN + Sulfur (28%)	gal	44.40						1.33	45.73		45.73
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.56			0.04	1.21	1.41	2.62
Atrazine 4L	pt	7.92						0.24	8.16		8.16
Halex GT	pt	28.08						0.84	28.92		28.92
Corn Consultant	acre	6.00						0.15	6.15		6.15
App by Air (3 gal)	appl	1.00						0.03	1.03		1.03
Bifenthrin	oz	0.97						0.02	0.99		0.99
Fert Appl (Liquid)	12R-38		1.56	1.00	1.63			0.10	4.29	2.98	7.27
UAN (32%)	gal	49.05						1.23	50.28		50.28
Cultivate	12R-38		1.63	0.89	1.47			0.10	4.09	3.89	7.98
App by Air (3 gal)	appl	5.00						0.10	5.10		5.10
Intrepid 2F	oz	8.12						0.16	8.28		8.28
Header - Corn	8R-38		3.58	5.16	2.73			0.06	11.53	17.98	29.51
Grain Cart Corn	700 bu		0.76	0.41	0.68			0.01	1.86	1.54	3.40
Haul Corn	bu	50.60						0.25	50.85		50.85
Stalk Shredder Flex	20'		2.48	2.61	2.23			0.04	7.36	4.81	12.17
Roll-Out Pipe Irr.	acre	8.25	29.40	7.48	4.65			1.02	50.80	65.37	116.17
TOTALS		465.70	51.88	24.42	25.62	0.00	19.02	586.64	125.03	711.67	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 23.E Estimated monthly income and expense flows per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yield goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	836.00
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	76.48	0.00	0.00	0.00	0.00	0.00	44.40	49.05	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.95	0.00	36.00	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	0.97	8.12	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	114.24	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	50.60
CUSTOM LIME	25.31	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	8.72	0.00	0.00	0.00	0.00	3.49	0.56	3.33	3.04	0.23	0.61	5.64
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	9.65	0.00	0.00	0.00	0.00	3.37	0.41	3.19	21.13	6.88	0.43	6.82
REPAIR & MAINTENANCE	4.23	0.00	0.00	0.00	0.00	2.76	0.20	1.89	6.05	0.98	0.13	8.18
INTEREST ON OP. CAP.	7.67	0.00	0.00	0.00	1.18	4.34	2.67	1.64	1.03	0.12	0.01	0.36
TOTAL DIRECT EXPENSES	135.39	0.00	0.00	0.00	30.63	128.20	91.74	67.07	52.62	8.21	1.18	71.60
NET INCOME	-135.39	0.00	0.00	0.00	-30.63	-128.20	-91.74	-67.07	-52.62	-8.21	-1.18	764.40
NET INCOME TO DATE	-135.39	-135.39	-135.39	-135.39	-166.02	-294.22	-385.96	-453.03	-505.65	-513.86	-515.04	249.36

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 23.F Estimated returns for various price/yield combinations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yield goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2019

PRODUCT	-----PERCENT-----												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Corn	2.85	3.04	3.23	3.42	3.61	3.80	3.99	4.18	4.37	4.56	4.75		
PERCENT	YIELD	UNIT	-----dollars-----										
50	110.00	bu	-247 -372	-226 -351	-205 -330	-185 -310	-164 -289	-143 -268	-122 -247	-101 -226	-80 -205	-59 -184	-38 -163
60	132.00	bu	-190 -315	-165 -290	-139 -264	-114 -239	-89 -214	-64 -189	-39 -164	-14 -139	10 -114	35 -89	60 -64
70	154.00	bu	-132 -257	-103 -228	-73 -198	-44 -169	-15 -140	13 -111	43 -81	72 -52	101 -23	130 5	160 35
80	176.00	bu	-74 -199	-41 -166	-7 -133	25 -99	58 -66	92 -32	125 0	159 34	192 67	226 101	259 134
90	198.00	bu	-17 -142	20 -104	57 -67	95 -29	133 8	170 45	208 83	246 121	283 158	321 196	358 233
100	220.00	bu	40 -84	82 -42	123 -1	165 40	207 82	249 124	291 166	332 207	374 249	416 291	458 333
110	242.00	bu	97 -27	143 18	189 64	235 110	281 156	327 202	373 248	419 294	465 340	511 386	557 432
120	264.00	bu	155 30	205 80	255 130	306 181	356 231	406 281	456 331	506 381	556 431	607 482	657 532
130	286.00	bu	213 88	267 142	321 196	376 251	430 305	484 359	539 414	593 468	647 522	702 577	756 631
140	308.00	bu	270 145	329 204	387 262	446 321	504 379	563 438	621 496	680 555	738 613	797 672	856 730
150	330.00	bu	328 203	391 266	453 328	516 391	579 454	641 516	704 579	767 642	830 705	892 767	955 830

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

Table 24.A Estimated costs per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
App by Air (3 gal)	appl	5.00	1.2000	6.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	1.6300	38.71	_____
Potash (60% K2O)	cwt	20.00	1.2500	25.00	_____
UAN + Sulfur (28%)	gal	1.38	19.3063	26.64	_____
UAN (32%)	gal	1.24	29.6700	36.79	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.51	0.5000	5.76	_____
Select Max	pt	12.71	1.0000	12.71	_____
Atrazine 4L	pt	1.98	4.0000	7.92	_____
Halex GT	pt	7.80	3.6000	28.08	_____
INSECTICIDES					
Bifenthrin	oz	0.76	1.2804	0.97	_____
Intrepid 2F	oz	2.03	4.0000	8.12	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.36	28.0000	94.08	_____
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	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5690	8.09	_____
Harvesters	hour	14.23	0.1009	1.44	_____
Self-Propelled	hour	14.23	0.0176	0.25	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	14.23	0.6188	8.81	_____
DIESEL FUEL					
Tractors	gal	2.60	6.5903	17.13	_____
Harvesters	gal	2.60	1.3770	3.58	_____
Self-Propelled	gal	2.60	0.1586	0.41	_____
REPAIR & MAINTENANCE					
Implements	acre	8.23	1.0000	8.23	_____
Tractors	acre	3.40	1.0000	3.40	_____
Harvesters	acre	3.57	1.0000	3.57	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	15.53	1.0000	15.53	_____
TOTAL DIRECT EXPENSES				454.78	_____
FIXED EXPENSES					
Implements	acre	14.27	1.0000	14.27	_____
Tractors	acre	23.46	1.0000	23.46	_____
Harvesters	acre	15.34	1.0000	15.34	_____
Self-Propelled	acre	1.41	1.0000	1.41	_____
TOTAL FIXED EXPENSES				54.48	_____
TOTAL SPECIFIED EXPENSES				509.26	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 24.B Summary of estimated costs and returns per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.80	170.0000	646.00	_____

TOTAL INCOME				646.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	12.50	1.0000	12.50	_____
FERTILIZERS	acre	127.14	1.0000	127.14	_____
HERBICIDES	acre	58.95	1.0000	58.95	_____
INSECTICIDES	acre	9.09	1.0000	9.09	_____
SEED/PLANTS	acre	94.08	1.0000	94.08	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
OPERATOR LABOR	hour	14.23	0.6876	9.78	_____
UNALLOCATED LABOR	hour	14.23	0.6188	8.81	_____
DIESEL FUEL	gal	2.60	8.1261	21.12	_____
REPAIR & MAINTENANCE	acre	15.40	1.0000	15.40	_____
INTEREST ON OP. CAP.	acre	15.53	1.0000	15.53	_____

TOTAL DIRECT EXPENSES				454.78	_____
RETURNS ABOVE DIRECT EXPENSES				191.22	_____
TOTAL FIXED EXPENSES				54.48	_____

TOTAL SPECIFIED EXPENSES				509.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				136.74	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 24.C Estimated resource use for field operations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
Bed/Disk (Hipper)Rd	8R-38	MFWD 225	0.074	1.00	Oct		0.07	0.07	0.07	0.06
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				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	Mar		0.05	0.05	0.05	0.05
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2804				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					29.6700				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.68	0.67	0.81	0.61

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

Table 24.D Estimated costs for field operations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Subsoiler	3 shank		3.08	0.81	2.76		0.40	7.05	4.77	11.82
Disk Harrow	24'		2.46	1.46	2.21		0.37	6.50	5.64	12.14
Soil Test	acre	3.33					0.20	3.53		3.53
Lime (Spread)	ton	25.31					1.52	26.83		26.83
Spin Spreader	5 ton		1.27	0.54	1.52		0.20	3.53	2.39	5.92
Phosphorus(46% P2O5)	cwt	38.71					2.32	41.03		41.03
Potash (60% K2O)	cwt	25.00					1.50	26.50		26.50
Bed/Disk (Hipper)Rd	8R-38		2.23	0.78	2.00		0.30	5.31	4.06	9.37
App by Air (5 gal)	appl	6.50					0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48					0.18	4.66		4.66
Clarity	pt	5.76					0.23	5.99		5.99
Select Max	pt	12.71					0.51	13.22		13.22
Row Cond Rigid	26'		1.80	0.60	1.61		0.14	4.15	3.59	7.74
Plant - Folding	12R-38		1.49	1.83	1.80		0.18	5.30	5.31	10.61
Corn Seed RR2	thous	94.08					3.29	97.37		97.37
Custom Apply Fert	acre	7.50					0.22	7.72		7.72
UAN + Sulfur (28%)	gal	26.64					0.80	27.44		27.44
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.56		0.04	1.21	1.41	2.62
Atrazine 4L	pt	7.92					0.24	8.16		8.16
Halex GT	pt	28.08					0.84	28.92		28.92
Corn Consultant	acre	6.00					0.15	6.15		6.15
App by Air (3 gal)	appl	1.00					0.03	1.03		1.03
Bifenthrin	oz	0.97					0.02	0.99		0.99
Fert Appl (Liquid)	12R-38		1.56	1.00	1.63		0.10	4.29	2.98	7.27
UAN (32%)	gal	36.79					0.92	37.71		37.71
App by Air (3 gal)	appl	5.00					0.10	5.10		5.10
Intrepid 2F	oz	8.12					0.16	8.28		8.28
Header - Corn	8R-38		3.58	5.16	2.73		0.06	11.53	17.98	29.51
Grain Cart Corn	700 bu		0.76	0.41	0.68		0.01	1.86	1.54	3.40
Haul Corn	bu	39.10					0.20	39.30		39.30
Stalk Shredder Flex	20'		2.48	2.61	2.23		0.04	7.36	4.81	12.17
TOTALS		383.00	21.12	15.40	19.73	0.00	15.53	454.78	54.48	509.26

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 24.E Estimated monthly income and expense flows per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	646.00
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	63.71	0.00	0.00	0.00	0.00	0.00	26.64	36.79	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.95	0.00	36.00	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	0.97	8.12	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	94.08	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	25.31	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	8.49	0.00	0.00	0.00	0.00	3.41	0.56	1.63	0.00	0.00	0.00	5.64
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	9.04	0.00	0.00	0.00	0.00	3.29	0.41	1.56	0.00	0.00	0.00	6.82
REPAIR & MAINTENANCE	3.59	0.00	0.00	0.00	0.00	2.43	0.20	1.00	0.00	0.00	0.00	8.18
INTEREST ON OP. CAP.	6.81	0.00	0.00	0.00	1.18	3.61	2.14	1.22	0.26	0.00	0.00	0.31
TOTAL DIRECT EXPENSES	120.28	0.00	0.00	0.00	30.63	106.82	73.45	50.17	13.38	0.00	0.00	60.05
NET INCOME	-120.28	0.00	0.00	0.00	-30.63	-106.82	-73.45	-50.17	-13.38	0.00	0.00	585.95
NET INCOME TO DATE	-120.28	-120.28	-120.28	-120.28	-150.91	-257.73	-331.18	-381.35	-394.73	-394.73	-394.73	191.22

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 24.F Estimated returns for various price/yield combinations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.85	3.04	3.23	3.42	3.61	3.80	3.99	4.18	4.37	4.56	4.75
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-192 -247	-176 -231	-160 -215	-144 -198	-128 -182	-112 -166	-95 -150	-79 -134	-63 -118	-47 -102	-31 -85
60	102.00	bu	-148 -202	-128 -183	-109 -164	-90 -144	-70 -125	-51 -105	-32 -86	-12 -67	6 -47	26 -28	45 -9
70	119.00	bu	-103 -158	-81 -135	-58 -113	-36 -90	-13 -67	9 -45	31 -22	54 -0	77 22	99 45	122 67
80	136.00	bu	-59 -113	-33 -87	-7 -62	18 -36	44 -10	69 15	95 41	121 67	147 92	173 118	199 144
90	153.00	bu	-14 -69	14 -40	43 -11	72 17	101 47	130 76	159 105	188 134	217 163	246 192	275 221
100	170.00	bu	29 -24	62 7	94 39	126 72	158 104	191 136	223 169	255 201	288 233	320 265	352 298
110	187.00	bu	74 19	109 55	145 90	180 126	216 161	251 197	287 232	322 268	358 304	394 339	429 375
120	204.00	bu	118 64	157 103	196 141	235 180	273 219	312 258	351 296	390 335	428 374	467 413	506 451
130	221.00	bu	163 108	205 150	247 192	289 234	331 276	373 318	415 360	457 402	499 444	541 486	583 528
140	238.00	bu	207 153	253 198	298 243	343 288	388 334	433 379	479 424	524 469	569 515	614 560	660 605
150	255.00	bu	252 197	300 246	349 294	397 343	446 391	494 440	543 488	591 536	639 585	688 633	736 682

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

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

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

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

Table 25.A Estimated costs per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	1.0000	6.50	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	1.3000	30.88	_____
Potash (60% K2O)	cwt	20.00	1.0000	20.00	_____
UAN + Sulfur (28%)	gal	1.38	38.2883	52.84	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Select Max	pt	12.71	1.0000	12.71	_____
Lexar	pt	8.01	6.0000	48.06	_____
INSECTICIDES					
Sivanto Prime	oz	2.52	8.0000	20.16	_____
Karate Z	oz	2.74	1.5000	4.11	_____
Prevathon	oz	1.32	14.0000	18.48	_____
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.96	4.5000	17.82	_____
ADJUVANTS					
Surfactant	pt	3.59	0.3000	1.08	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Sorghum Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3120	4.43	_____
Harvesters	hour	14.23	0.1021	1.45	_____
Self-Propelled	hour	14.23	0.0661	0.95	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0330	0.30	_____
UNALLOCATED LABOR					
	hour	14.27	0.4322	6.17	_____
DIESEL FUEL					
Tractors	gal	2.60	2.7303	7.10	_____
Harvesters	gal	2.60	1.3935	3.62	_____
Self-Propelled	gal	2.60	0.8505	2.20	_____
REPAIR & MAINTENANCE					
Implements	acre	5.10	1.0000	5.10	_____
Tractors	acre	1.44	1.0000	1.44	_____
Harvesters	acre	3.61	1.0000	3.61	_____
Self-Propelled	acre	0.90	1.0000	0.90	_____
INTEREST ON OP. CAP.	acre	9.65	1.0000	9.65	_____
TOTAL DIRECT EXPENSES				349.79	_____
FIXED EXPENSES					
Implements	acre	11.06	1.0000	11.06	_____
Tractors	acre	9.96	1.0000	9.96	_____
Harvesters	acre	15.52	1.0000	15.52	_____
Self-Propelled	acre	6.50	1.0000	6.50	_____
TOTAL FIXED EXPENSES				43.04	_____
TOTAL SPECIFIED EXPENSES				392.83	_____

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

Table 25.B Summary of estimated costs and returns per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	3.61	100.0000	361.00	_____

TOTAL INCOME				361.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
FERTILIZERS	acre	103.72	1.0000	103.72	_____
HERBICIDES	acre	70.05	1.0000	70.05	_____
INSECTICIDES	acre	42.75	1.0000	42.75	_____
SEED/PLANTS	acre	17.82	1.0000	17.82	_____
ADJUVANTS	acre	1.08	1.0000	1.08	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1772	1.61	_____
OPERATOR LABOR	hour	14.23	0.4803	6.83	_____
UNALLOCATED LABOR	hour	14.27	0.4322	6.17	_____
DIESEL FUEL	gal	2.60	4.9745	12.92	_____
REPAIR & MAINTENANCE	acre	11.05	1.0000	11.05	_____
INTEREST ON OP. CAP.	acre	9.65	1.0000	9.65	_____

TOTAL DIRECT EXPENSES				349.79	_____
RETURNS ABOVE DIRECT EXPENSES				11.21	_____
TOTAL FIXED EXPENSES				43.04	_____

TOTAL SPECIFIED EXPENSES				392.83	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-31.83	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 25.C Estimated resource use for field operations, per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
						-----hours-----					
Soil Test	acre			0.33	Oct	0.3330					
Lime (Spread)	ton			0.33	Oct	0.6660					
Disk Harrow	24'	MFWD 170	0.081	1.00	Nov		0.08	0.08	0.08	0.07	
App by Air (5 gal)	appl			1.00	Feb	1.0000					
Glyphosate 3lbs a.e	oz					32.0000					
2,4-D Amine 4	pt					2.0000					
Select Max	pt					1.0000					
Surfactant	pt					0.3000					
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Apr		0.04	0.04	0.08	0.03	
Phosphorus(46% P2O5)	cwt					1.3000					
Potash (60% K2O)	cwt					1.0000					
Field Cultivate Fld	32'	MFWD 170	0.046	1.00	Apr		0.04	0.04	0.04	0.04	
Plant - Folding	12R-30	MFWD 170	0.062	1.00	Apr		0.06	0.06	0.12	0.05	
Sorghum Concept+ Po	lb					4.5000					
Sprayer 800gal	80' 250hp		0.013	1.00	Apr			0.01	0.01	0.01	
Lexar	pt					6.0000					
Sorghum Consultant	acre			1.00	May	1.0000					
Fert Appl (Liquid)	12R-30	MFWD 170	0.078	1.00	May		0.07	0.07	0.11	0.07	
UAN + Sulfur (28%)	gal					38.2883					
Sprayer 800gal	80' 250hp		0.013	1.00	Jun			0.01	0.01	0.01	
Sivanto Prime	oz					4.0000					
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01	
Karate Z	oz					1.5000					
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01	
Prevathon	oz					14.0000					
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01	
Sivanto Prime	oz					4.0000					
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09	
Haul Sorghum	bu					100.0000					
TOTALS								0.48	0.41	0.65	0.43

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 25.D Estimated costs for field operations, per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Disk Harrow	24'		1.86	1.35	2.21			0.30	5.72	4.88	10.60
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Select Max	pt	12.71						0.51	13.22		13.22
Surfactant	pt	1.08						0.04	1.12		1.12
Spin Spreader	5 ton		0.96	0.48	1.52			0.09	3.05	1.99	5.04
Phosphorus(46% P2O5)	cwt	30.88						0.93	31.81		31.81
Potash (60% K2O)	cwt	20.00						0.60	20.60		20.60
Field Cultivate Fld	32'		1.06	0.73	1.26			0.09	3.14	3.85	6.99
Plant - Folding	12R-30		1.43	1.90	2.27			0.17	5.77	5.43	11.20
Sorghum Concept+ Po	lb	17.82						0.53	18.35		18.35
Sprayer 800gal	80' 250hp		0.44	0.18	0.42			0.03	1.07	1.30	2.37
Lexar	pt	48.06						1.44	49.50		49.50
Sorghum Consultant	acre	6.00						0.15	6.15		6.15
Fert Appl (Liquid)	12R-30		1.79	1.54	2.49			0.15	5.97	3.98	9.95
UAN + Sulfur (28%)	gal	52.84						1.32	54.16		54.16
Sprayer 800gal	80' 250hp		0.44	0.18	0.42			0.02	1.06	1.30	2.36
Sivanto Prime	oz	10.08						0.20	10.28		10.28
Sprayer 800gal	80' 250hp		0.44	0.18	0.42			0.02	1.06	1.30	2.36
Karate Z	oz	4.11						0.06	4.17		4.17
Sprayer 800gal	80' 250hp		0.44	0.18	0.42			0.02	1.06	1.30	2.36
Prevathon	oz	18.48						0.28	18.76		18.76
Sprayer 800gal	80' 250hp		0.44	0.18	0.42			0.02	1.06	1.30	2.36
Sivanto Prime	oz	10.08						0.15	10.23		10.23
Header Wheat/Sorghum	25' Rigid		3.62	4.15	2.76			0.05	10.58	16.41	26.99
Haul Sorghum	bu	25.00						0.13	25.13		25.13
TOTALS		301.56	12.92	11.05	14.61	0.00	9.65	349.79	43.04	392.83	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 25.E Estimated monthly income and expense flows per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	361.00
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	0.00	50.88	52.84	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.99	0.00	48.06	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	10.08	32.67	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	17.82	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.08	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	25.31	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	2.21	0.00	0.00	0.00	0.00	5.47	2.49	0.42	1.26	0.00	2.76
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	1.86	0.00	0.00	0.00	0.00	3.89	1.79	0.44	1.32	0.00	3.62
REPAIR & MAINTENANCE	0.00	1.35	0.00	0.00	0.00	0.00	3.29	1.54	0.18	0.54	0.00	4.15
INTEREST ON OP. CAP.	1.72	0.30	0.00	0.00	1.18	0.00	3.88	1.62	0.22	0.55	0.00	0.18
TOTAL DIRECT EXPENSES	30.36	5.72	0.00	0.00	30.75	0.00	133.29	66.28	11.34	36.34	0.00	35.71
NET INCOME	-30.36	-5.72	0.00	0.00	-30.75	0.00	-133.29	-66.28	-11.34	-36.34	0.00	325.29
NET INCOME TO DATE	-30.36	-36.08	-36.08	-36.08	-66.83	-66.83	-200.12	-266.40	-277.74	-314.08	-314.08	11.21

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 25.F Estimated returns for various price/yield combinations, per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Grain Sorghum	2.70	2.88	3.06	3.24	3.42	3.61	3.79	3.97	4.15	4.33	4.51		
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu	-201 -244	-192 -235	-183 -226	-174 -217	-165 -208	-156 -199	-147 -190	-138 -181	-129 -172	-120 -163	-111 -154
60	60.00	bu	-177 -220	-166 -209	-155 -198	-144 -187	-133 -177	-123 -166	-112 -155	-101 -144	-90 -133	-79 -122	-68 -112
70	70.00	bu	-152 -195	-140 -183	-127 -170	-114 -157	-102 -145	-89 -132	-76 -119	-64 -107	-51 -94	-39 -82	-26 -69
80	80.00	bu	-128 -171	-113 -156	-99 -142	-84 -127	-70 -113	-55 -99	-41 -84	-27 -70	-12 -55	1 -41	16 -26
90	90.00	bu	-103 -146	-87 -130	-71 -114	-54 -97	-38 -81	-22 -65	-6 -49	10 -32	26 -16	42 -0	58 15
100	100.00	bu	-79 -122	-60 -104	-42 -85	-24 -67	-6 -49	11 -31	29 -13	47 4	65 22	83 40	101 58
110	110.00	bu	-54 -97	-34 -77	-14 -57	5 -37	24 -18	44 1	64 21	84 41	104 61	124 81	144 101
120	120.00	bu	-29 -72	-8 -51	13 -29	35 -7	56 13	78 35	100 57	121 78	143 100	165 121	186 143
130	130.00	bu	-5 -48	18 -24	41 -1	65 22	88 45	111 68	135 92	158 115	182 139	205 162	229 186
140	140.00	bu	19 -23	44 1	69 26	95 51	120 77	145 102	170 127	196 153	221 178	246 203	271 228
150	150.00	bu	43 0	70 27	97 54	124 81	152 109	179 136	206 163	233 190	260 217	287 244	314 271

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

Table 26.A Estimated costs per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	2.0000	13.00	_____
App by Air (3 gal)	appl	5.00	1.0000	5.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	23.75	1.0000	23.75	_____
Potash (60% K2O)	cwt	20.00	0.7500	15.00	_____
Fert 41-0-0-4	cwt	14.25	3.0480	43.43	_____
FUNGICIDES					
CruiserMaxx	oz	4.28	4.5000	19.26	_____
Prosaro	oz	2.56	8.0000	20.48	_____
HERBICIDES					
Axiom	oz	1.92	10.0000	19.20	_____
Harmony Extra SG	oz	13.79	0.7500	10.34	_____
Axial XL	oz	1.18	16.4000	19.35	_____
INSECTICIDES					
Karate Z	oz	2.74	1.5000	4.11	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.22	90.0000	19.80	_____
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	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Wheat Consultant	acre	5.50	1.0000	5.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.2648	3.76	_____
Harvesters	hour	14.23	0.1021	1.45	_____
HAND LABOR					
Implements	hour	9.06	0.1363	1.23	_____
UNALLOCATED LABOR					
	hour	14.20	0.2936	4.17	_____
DIESEL FUEL					
Tractors	gal	2.60	2.3178	6.03	_____
Harvesters	gal	2.60	1.3935	3.62	_____
REPAIR & MAINTENANCE					
Implements	acre	3.68	1.0000	3.68	_____
Tractors	acre	1.23	1.0000	1.23	_____
Harvesters	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	10.27	1.0000	10.27	_____
TOTAL DIRECT EXPENSES				325.46	_____
FIXED EXPENSES					
Implements	acre	9.09	1.0000	9.09	_____
Tractors	acre	8.45	1.0000	8.45	_____
Harvesters	acre	15.52	1.0000	15.52	_____
TOTAL FIXED EXPENSES				33.06	_____
TOTAL SPECIFIED EXPENSES				358.52	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 26.B Summary of estimated costs and returns per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	5.37	70.0000	375.90	_____

TOTAL INCOME				375.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	18.00	1.0000	18.00	_____
FERTILIZERS	acre	82.19	1.0000	82.19	_____
FUNGICIDES	acre	39.74	1.0000	39.74	_____
HERBICIDES	acre	48.89	1.0000	48.89	_____
INSECTICIDES	acre	4.11	1.0000	4.11	_____
SEED/PLANTS	acre	19.80	1.0000	19.80	_____
CUSTOM FERTILIZE	acre	21.34	1.0000	21.34	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
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	14.23	0.3670	5.21	_____
UNALLOCATED LABOR	hour	14.20	0.2936	4.17	_____
DIESEL FUEL	gal	2.60	3.7114	9.65	_____
REPAIR & MAINTENANCE	acre	8.52	1.0000	8.52	_____
INTEREST ON OP. CAP.	acre	10.27	1.0000	10.27	_____

TOTAL DIRECT EXPENSES				325.46	_____
RETURNS ABOVE DIRECT EXPENSES				50.44	_____
TOTAL FIXED EXPENSES				33.06	_____

TOTAL SPECIFIED EXPENSES				358.52	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				17.38	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

Table 26.C Estimated resource use for field operations, per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
						-----hours-----				
Soil Test	acre			0.33	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	0.06	
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Sep		0.04	0.04	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	0.03	
Grain Drill	20'	MFWD 170	0.094	1.00	Oct		0.09	0.09	0.18	
Wheat Seed Private	lb					90.0000				
CruiserMaxx	oz					4.5000				
Wheat Consultant	acre			1.00	Oct	1.0000				
App by Air (5 gal)	appl			1.00	Nov	1.0000				
Axiom	oz					10.0000				
App by Air (3 gal)	appl			1.00	Feb	1.0000				
Karate Z	oz					1.5000				
Harmony Extra SG	oz					0.7500				
Axial XL	oz					16.4000				
App Fert by Air	cwt			1.00	Feb	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App Fert by Air	cwt			1.00	Mar	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Prosaro	oz					8.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Jun		0.10	0.10	0.08	
Haul Wheat	bu					70.0000				
TOTALS							0.36	0.36	0.50	0.29

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

Table 26.D Estimated costs for field operations, per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.17	3.50	3.50
Lime (Spread)	ton	25.31						1.27	26.58	26.58
Disk Harrow	24'		1.86	1.35	2.09			0.27	5.57	4.88 10.45
Spin Spreader	5 ton		0.96	0.48	1.46			0.14	3.04	1.99 5.03
Phosphorus(46% P2O5)	cwt	23.75						1.19	24.94	24.94
Potash (60% K2O)	cwt	15.00						0.75	15.75	15.75
Field Cultivate Fld	32'		1.06	0.73	1.19			0.15	3.13	3.85 6.98
Grain Drill	20'		2.15	1.81	3.26			0.32	7.54	5.93 13.47
Wheat Seed Private	lb	19.80						0.89	20.69	20.69
CruiserMaxx	oz	19.26						0.87	20.13	20.13
Wheat Consultant	acre	5.50						0.25	5.75	5.75
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Axiom	oz	19.20						0.77	19.97	19.97
App by Air (3 gal)	appl	5.00						0.13	5.13	5.13
Karate Z	oz	4.11						0.10	4.21	4.21
Harmony Extra SG	oz	10.34						0.26	10.60	10.60
Axial XL	oz	19.35						0.48	19.83	19.83
App Fert by Air	cwt	10.67						0.27	10.94	10.94
Fert 41-0-0-4	cwt	21.72						0.54	22.26	22.26
App Fert by Air	cwt	10.67						0.21	10.88	10.88
Fert 41-0-0-4	cwt	21.72						0.43	22.15	22.15
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Prosaro	oz	20.48						0.31	20.79	20.79
Header Wheat/Sorghum	25' Rigid		3.62	4.15	2.61			0.05	10.43	16.41 26.84
Haul Wheat	bu	18.20						0.09	18.29	18.29
TOTALS		286.41	9.65	8.52	10.61	0.00	10.27	325.46	33.06	358.52

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

Table 26.E Estimated monthly income and expense flows per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2019

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	375.90
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	38.75	0.00	0.00	0.00	0.00	21.72	21.72	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	19.26	0.00	0.00	0.00	0.00	0.00	20.48	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	19.20	0.00	0.00	29.69	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	19.80	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	25.31	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	4.74	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	3.88	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.62
REPAIR & MAINTENANCE	0.00	0.00	2.56	1.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.15
INTEREST ON OP. CAP.	0.00	0.00	3.94	2.33	1.03	0.00	0.00	1.78	0.64	0.41	0.00	0.14
TOTAL DIRECT EXPENSES	0.00	0.00	82.51	54.11	26.73	0.00	0.00	72.97	33.03	27.39	0.00	28.72
NET INCOME	0.00	0.00	-82.51	-54.11	-26.73	0.00	0.00	-72.97	-33.03	-27.39	0.00	347.18
NET INCOME TO DATE	0.00	0.00	-82.51	-136.62	-163.35	-163.35	-163.35	-236.32	-269.35	-296.74	-296.74	50.44

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 26.F Estimated returns for various price/yield combinations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2019

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Wheat			4.02	4.29	4.56	4.83	5.10	5.37	5.63	5.90	6.17	6.44	6.71
PERCENT	YIELD	UNIT	-----dollars-----										
50	35.00	bu	-175 -208	-165 -199	-156 -189	-147 -180	-137 -170	-128 -161	-118 -152	-109 -142	-100 -133	-90 -123	-81 -114
60	42.00	bu	-148 -182	-137 -170	-126 -159	-115 -148	-103 -136	-92 -125	-81 -114	-70 -103	-58 -91	-47 -80	-36 -69
70	49.00	bu	-122 -155	-109 -142	-96 -129	-83 -116	-70 -103	-56 -89	-43 -76	-30 -63	-17 -50	-4 -37	8 -24
80	56.00	bu	-96 -129	-81 -114	-66 -99	-51 -84	-36 -69	-21 -54	-6 -39	8 -24	24 -9	39 6	54 21
90	63.00	bu	-69 -102	-52 -86	-36 -69	-19 -52	-2 -35	14 -18	31 -1	48 15	65 32	82 49	99 66
100	70.00	bu	-43 -76	-24 -57	-5 -39	12 -20	31 -1	50 17	69 36	88 54	106 73	125 92	144 111
110	77.00	bu	-17 -50	3 -29	24 -8	44 11	65 32	86 53	106 73	127 94	148 115	168 135	189 156
120	84.00	bu	9 -23	31 -1	54 21	76 43	99 66	121 88	144 111	167 134	189 156	212 179	234 201
130	91.00	bu	35 2	59 26	84 51	108 75	133 100	157 124	182 149	206 173	231 197	255 222	279 246
140	98.00	bu	61 28	88 55	114 81	140 107	167 134	193 160	219 186	246 213	272 239	298 265	325 291
150	105.00	bu	88 55	116 83	144 111	172 139	201 167	229 196	257 224	285 252	313 280	342 308	370 337

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

Table 27.A Estimated costs per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.5000	35.75	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Regiment	oz	44.90	0.5000	22.45	_____
Facet L	pt	15.25	2.6900	41.02	_____
Permit	oz	22.46	0.7500	16.85	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.30	75.0000	22.50	_____
Rice Seed Trt/Insect	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv(Levees)	lb	0.30	13.6000	4.08	_____
ADJUVANTS					
Class Act NG	pt	2.38	0.5000	1.19	_____
MSO	pt	2.09	1.5000	3.14	_____
Dyne-A-Pak	pt	4.80	0.5000	2.40	_____
Crop Oil Conc. (Pet.)	pt	2.37	0.4000	0.95	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5475	7.79	_____
Harvesters	hour	14.23	0.2030	2.89	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	14.25	0.5633	8.03	_____
DIESEL FUEL					
Tractors	gal	2.60	5.9886	15.58	_____
Harvesters	gal	2.60	3.3975	8.83	_____
Flood Irr.	gal	2.60	26.8827	69.89	_____
REPAIR & MAINTENANCE					
Implements	acre	8.70	1.0000	8.70	_____
Tractors	acre	3.10	1.0000	3.10	_____
Harvesters	acre	7.66	1.0000	7.66	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	15.74	1.0000	15.74	_____
TOTAL DIRECT EXPENSES				747.48	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	21.41	1.0000	21.41	_____
Harvesters	acre	32.95	1.0000	32.95	_____
Flood Irr.	acre	49.18	1.0000	49.18	_____
TOTAL FIXED EXPENSES				124.26	_____
TOTAL SPECIFIED EXPENSES				871.74	_____

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

Table 27.B Summary of estimated costs and returns per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	160.0000	736.00	_____

TOTAL INCOME				736.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	146.70	1.0000	146.70	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	46.96	1.0000	46.96	_____
ADJUVANTS	acre	8.04	1.0000	8.04	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	14.23	0.7506	10.68	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	14.25	0.5633	8.03	_____
DIESEL FUEL	gal	2.60	36.2688	94.30	_____
REPAIR & MAINTENANCE	acre	33.25	1.0000	33.25	_____
INTEREST ON OP. CAP.	acre	15.74	1.0000	15.74	_____

TOTAL DIRECT EXPENSES				747.48	_____
RETURNS ABOVE DIRECT EXPENSES				-11.48	_____
TOTAL FIXED EXPENSES				124.26	_____

TOTAL SPECIFIED EXPENSES				871.74	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-135.74	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 27.C Estimated resource use for field operations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Sep	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May				0.30	
RICE MGT. LABOR	hour									
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun				0.50	
RICE MGT. LABOR	hour									
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul				0.50	
RICE MGT. LABOR	hour									
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug				0.20	
RICE MGT. LABOR	hour									
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Table 27.D Estimated costs for field operations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.02	3.35	3.35
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Seed Conv.	lb	22.50						0.68	23.18	23.18
Rice Seed Trt/Insect	lbseed	17.25						0.52	17.77	17.77
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
Class Act NG	pt	1.19						0.04	1.23	1.23
MSO	pt	1.05						0.03	1.08	1.08
Seed Levees										
Rice Seed Cv(Levees)	lb	4.08						0.12	4.20	4.20
Rice Seed Trt/Insect	lbseed	3.13						0.09	3.22	3.22
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Regiment	oz	22.45						0.56	23.01	23.01
Dyne-A-Pak	pt	2.40						0.06	2.46	2.46
App Fert by Air	cwt	17.50						0.44	17.94	17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16	37.16
NBPT	pt	6.84						0.17	7.01	7.01
Rice Management										
RICE MGT. LABOR	hour				2.72			0.07	2.79	2.79
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Facet L	pt	41.02						1.03	42.05	42.05
Permit	oz	16.85						0.42	17.27	17.27
Crop Oil Conc.(Pet.)	pt	0.95						0.02	0.97	0.97
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				4.53			0.09	4.62	4.62
App Fert by Air	cwt	10.50						0.21	10.71	10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18	22.18
Rice Management										
RICE MGT. LABOR	hour				4.53			0.07	4.60	4.60
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Stratego	pt	29.19						0.44	29.63	29.63
Surfactant	pt	0.36						0.01	0.37	0.37
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (CL)	25' Rigid		8.83	10.47	5.49			0.25	25.04	62.87
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	56.00						0.56	56.56	56.56
Dry Rice	bu	64.00						0.64	64.64	64.64
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	4.50	72.73	14.52	33.73			2.84	128.32	182.36
TOTALS		536.95	94.30	33.25	67.24	0.00	15.74	747.48	124.26	871.74

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

Table 27.E Estimated monthly income and expense flows per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	37.31	80.32	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	46.96	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	3.35	2.09	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	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	3.58	0.00	0.00	0.00	0.00	0.00	15.96	9.52	11.33	11.33	11.43	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	18.38	19.06	19.06	19.06	10.20	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.80	8.06	2.15	2.15	10.93	3.09
INTEREST ON OP. CAP.	0.57	0.00	0.00	0.00	0.72	0.00	4.11	5.71	1.75	1.27	1.53	0.08
TOTAL DIRECT EXPENSES	10.20	0.00	0.00	0.00	18.74	0.00	140.76	233.74	89.43	85.37	154.09	15.15
NET INCOME	-10.20	0.00	0.00	0.00	-18.74	0.00	-140.76	-233.74	-89.43	-85.37	581.91	-15.15
NET INCOME TO DATE	-10.20	-10.20	-10.20	-10.20	-28.94	-28.94	-169.70	-403.44	-492.87	-578.24	3.67	-11.48

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

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs

Table 27.F Estimated returns for various price/yield combinations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-410 -535	-392 -516	-374 -498	-355 -479	-337 -461	-318 -443	-300 -424	-282 -406	-263 -387	-245 -369	-226 -351
60	96.00	bu	-367 -492	-345 -469	-323 -447	-301 -425	-279 -403	-257 -381	-235 -359	-213 -337	-191 -315	-169 -293	-147 -271
70	112.00	bu	-324 -448	-298 -423	-273 -397	-247 -371	-221 -345	-195 -320	-170 -294	-144 -268	-118 -242	-92 -217	-67 -191
80	128.00	bu	-281 -405	-252 -376	-222 -347	-193 -317	-163 -288	-134 -258	-105 -229	-75 -199	-46 -170	-16 -140	12 -111
90	144.00	bu	-238 -362	-205 -329	-172 -296	-139 -263	-106 -230	-72 -197	-39 -164	-6 -130	26 -97	59 -64	92 -31
100	160.00	bu	-195 -319	-158 -282	-121 -246	-85 -209	-48 -172	-11 -135	25 -98	62 -62	98 -25	135 11	172 48
110	176.00	bu	-152 -276	-111 -236	-71 -195	-30 -155	9 -114	50 -74	90 -33	130 6	171 47	211 87	252 128
120	192.00	bu	-109 -233	-65 -189	-21 -145	23 -101	67 -56	111 -12	155 31	199 75	243 119	288 163	332 208
130	208.00	bu	-66 -190	-18 -142	29 -94	77 -46	125 0	172 48	220 96	268 144	316 192	364 240	412 287
140	224.00	bu	-23 -147	28 -95	79 -44	131 7	182 58	234 110	285 161	337 213	389 264	440 316	492 367
150	240.00	bu	19 -104	75 -49	130 6	185 61	240 116	295 171	351 226	406 282	461 337	516 392	571 447

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

Table 28.A Estimated costs per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.5000	35.75	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Regiment	oz	44.90	0.5000	22.45	_____
Facet L	pt	15.25	2.6900	41.02	_____
Permit	oz	22.46	0.7500	16.85	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.30	75.0000	22.50	_____
Rice Seed Trt/Insect	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv (Levees)	lb	0.30	13.6000	4.08	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Dyne-A-Pak	pt	4.80	0.5000	2.40	_____
Crop Oil Conc. (Pet.)	pt	2.37	0.4000	0.95	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4999	7.12	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.5719	14.50	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	21.9949	57.20	_____
REPAIR & MAINTENANCE					
Implements	acre	8.26	1.0000	8.26	_____
Tractors	acre	2.89	1.0000	2.89	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	15.13	1.0000	15.13	_____
TOTAL DIRECT EXPENSES				708.90	_____
FIXED EXPENSES					
Implements	acre	19.68	1.0000	19.68	_____
Tractors	acre	19.90	1.0000	19.90	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.81	1.0000	76.81	_____
TOTAL FIXED EXPENSES				144.95	_____
TOTAL SPECIFIED EXPENSES				853.85	_____

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

Table 28.B Summary of estimated costs and returns per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	160.0000	736.00	_____

TOTAL INCOME				736.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	146.70	1.0000	146.70	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	46.96	1.0000	46.96	_____
ADJUVANTS	acre	8.04	1.0000	8.04	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	14.23	0.6759	9.62	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	30.5114	79.36	_____
REPAIR & MAINTENANCE	acre	31.57	1.0000	31.57	_____
INTEREST ON OP. CAP.	acre	15.13	1.0000	15.13	_____

TOTAL DIRECT EXPENSES				708.90	_____
RETURNS ABOVE DIRECT EXPENSES				27.10	_____
TOTAL FIXED EXPENSES				144.95	_____

TOTAL SPECIFIED EXPENSES				853.85	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-117.85	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 28.C Estimated resource use for field operations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 28.D Estimated costs for field operations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Seed Conv.	lb	22.50						0.68	23.18	23.18
Rice Seed Trt/Insect	lbseed	17.25						0.52	17.77	17.77
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
MSO	pt	1.05						0.03	1.08	1.08
Class Act NG	pt	1.19						0.04	1.23	1.23
Seed Levees										
Rice Seed Cv(Levees)	lb	4.08						0.12	4.20	4.20
Rice Seed Trt/Insect	lbseed	3.13						0.09	3.22	3.22
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Regiment	oz	22.45						0.56	23.01	23.01
Dyne-A-Pak	pt	2.40						0.06	2.46	2.46
App Fert by Air	cwt	17.50						0.44	17.94	17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16	37.16
NBPT	pt	6.84						0.17	7.01	7.01
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Facet L	pt	41.02						1.03	42.05	42.05
Permit	oz	16.85						0.42	17.27	17.27
Crop Oil Conc.(Pet.)	pt	0.95						0.02	0.97	0.97
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	10.50						0.21	10.71	10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18	22.18
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Stratego	pt	29.19						0.44	29.63	29.63
Surfactant	pt	0.36						0.01	0.37	0.37
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	56.00						0.56	56.56	56.56
Dry Rice	bu	64.00						0.64	64.64	64.64
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	2.25	58.96	14.24	22.62			2.23	100.30	180.07
TOTALS		534.70	79.36	31.57	48.14	0.00	15.13	708.90	144.95	853.85

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

Table 28.E Estimated monthly income and expense flows per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	37.31	80.32	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	46.96	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	3.35	2.09	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	11.95	5.44	6.34	6.34	10.40	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	17.77	14.83	14.83	14.83	8.56	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.97	7.95	2.04	2.04	9.41	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	3.91	5.49	1.57	1.13	1.48	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	133.86	225.10	79.92	75.90	149.85	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-133.86	-225.10	-79.92	-75.90	586.15	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-166.33	-391.43	-471.35	-547.25	38.90	27.10

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs

Table 28.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-372 -517	-353 -498	-335 -480	-317 -462	-298 -443	-280 -425	-261 -406	-243 -388	-225 -370	-206 -351	-188 -333
60	96.00	bu	-329 -474	-307 -452	-285 -430	-262 -407	-240 -385	-218 -363	-196 -341	-174 -319	-152 -297	-130 -275	-108 -253
70	112.00	bu	-286 -431	-260 -405	-234 -379	-208 -353	-183 -328	-157 -302	-131 -276	-105 -250	-80 -225	-54 -199	-28 -173
80	128.00	bu	-243 -388	-213 -358	-184 -329	-154 -299	-125 -270	-95 -240	-66 -211	-36 -181	-7 -152	21 -123	51 -93
90	144.00	bu	-199 -344	-166 -311	-133 -278	-100 -245	-67 -212	-34 -179	-1 -146	31 -113	64 -79	98 -46	131 -13
100	160.00	bu	-156 -301	-120 -265	-83 -228	-46 -191	-9 -154	27 -117	63 -81	100 -44	137 -7	174 29	211 66
110	176.00	bu	-113 -258	-73 -218	-32 -177	7 -137	48 -96	88 -56	129 -15	169 24	210 65	250 105	290 146
120	192.00	bu	-70 -215	-26 -171	17 -127	61 -83	105 -39	150 5	194 49	238 93	282 137	326 181	370 225
130	208.00	bu	-27 -172	20 -124	68 -76	115 -29	163 18	211 66	259 114	307 162	355 210	402 257	450 305
140	224.00	bu	15 -129	66 -78	118 -26	169 25	221 76	273 128	324 179	376 231	427 282	479 334	530 385
150	240.00	bu	58 -86	113 -31	168 23	224 79	279 134	334 189	389 244	444 299	500 355	555 410	610 465

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

Table 29.A Estimated costs per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.5000	35.75	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Regiment	oz	44.90	0.5000	22.45	_____
Facet L	pt	15.25	2.6900	41.02	_____
Permit	oz	22.46	0.7500	16.85	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.30	75.0000	22.50	_____
Rice Seed Trt/Insect	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv(Levees)	lb	0.30	13.6000	4.08	_____
ADJUVANTS					
Class Act NG	pt	2.38	0.5000	1.19	_____
MSO	pt	2.09	1.5000	3.14	_____
Dyne-A-Pak	pt	4.80	0.5000	2.40	_____
Crop Oil Conc.(Pet.)	pt	2.37	0.5000	1.19	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5281	7.52	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.8180	15.13	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	18.7364	48.72	_____
REPAIR & MAINTENANCE					
Implements	acre	8.32	1.0000	8.32	_____
Tractors	acre	3.02	1.0000	3.02	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	14.98	1.0000	14.98	_____
TOTAL DIRECT EXPENSES				698.66	_____
FIXED EXPENSES					
Implements	acre	20.19	1.0000	20.19	_____
Tractors	acre	20.80	1.0000	20.80	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.48	1.0000	76.48	_____
TOTAL FIXED EXPENSES				146.03	_____
TOTAL SPECIFIED EXPENSES				844.69	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 29.B Summary of estimated costs and returns per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	160.0000	736.00	_____

TOTAL INCOME				736.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	146.70	1.0000	146.70	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	46.96	1.0000	46.96	_____
ADJUVANTS	acre	8.28	1.0000	8.28	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	14.23	0.7041	10.02	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	27.4990	71.51	_____
REPAIR & MAINTENANCE	acre	31.44	1.0000	31.44	_____
INTEREST ON OP. CAP.	acre	14.98	1.0000	14.98	_____

TOTAL DIRECT EXPENSES				698.66	_____
RETURNS ABOVE DIRECT EXPENSES				37.34	_____
TOTAL FIXED EXPENSES				146.03	_____

TOTAL SPECIFIED EXPENSES				844.69	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-108.69	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 29.C Estimated resource use for field operations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv (Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.5000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 29.D Estimated costs for field operations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Seed Conv.	lb	22.50						0.68	23.18	23.18
Rice Seed Trt/Insect	lbseed	17.25						0.52	17.77	17.77
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
Class Act NG	pt	1.19						0.04	1.23	1.23
MSO	pt	1.05						0.03	1.08	1.08
Seed Levees										
Rice Seed Cv(Levees)	lb	4.08						0.12	4.20	4.20
Rice Seed Trt/Insect	lbseed	3.13						0.09	3.22	3.22
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Regiment	oz	22.45						0.56	23.01	23.01
Dyne-A-Pak	pt	2.40						0.06	2.46	2.46
App Fert by Air	cwt	17.50						0.44	17.94	17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16	37.16
NBPT	pt	6.84						0.17	7.01	7.01
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Facet L	pt	41.02						1.03	42.05	42.05
Permit	oz	16.85						0.42	17.27	17.27
Crop Oil Conc.(Pet.)	pt	1.19						0.03	1.22	1.22
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	10.50						0.21	10.71	10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18	22.18
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Stratego	pt	29.19						0.44	29.63	29.63
Surfactant	pt	0.36						0.01	0.37	0.37
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	56.00						0.56	56.56	56.56
Dry Rice	bu	64.00						0.64	64.64	64.64
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	10.50	51.11	14.11	12.02			2.07	89.81	170.66
TOTALS		543.19	71.51	31.44	37.54	0.00	14.98	698.66	146.03	844.69

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 29.E Estimated monthly income and expense flows per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	37.31	80.32	17.55	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	8.01	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	46.96	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	3.59	2.09	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	9.77	2.72	3.62	3.62	10.14	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	16.14	12.71	12.71	12.71	8.70	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	5.01	7.88	1.97	1.97	9.45	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	4.04	5.39	1.47	1.06	1.47	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	138.47	220.33	74.91	70.92	149.76	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-138.47	-220.33	-74.91	-70.92	586.24	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-170.94	-391.27	-466.18	-537.10	49.14	37.34

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs

Table 29.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-362 -508	-343 -489	-325 -471	-306 -452	-288 -434	-270 -416	-251 -397	-233 -379	-214 -360	-196 -342	-178 -324
60	96.00	bu	-318 -465	-296 -442	-274 -420	-252 -398	-230 -376	-208 -354	-186 -332	-164 -310	-142 -288	-120 -266	-98 -244
70	112.00	bu	-275 -421	-250 -396	-224 -370	-198 -344	-172 -318	-147 -293	-121 -267	-95 -241	-69 -215	-44 -190	-18 -164
80	128.00	bu	-232 -378	-203 -349	-173 -319	-144 -290	-115 -261	-85 -231	-56 -202	-26 -172	2 -143	32 -113	61 -84
90	144.00	bu	-189 -335	-156 -302	-123 -269	-90 -236	-57 -203	-24 -170	8 -137	42 -103	75 -70	108 -37	141 -4
100	160.00	bu	-146 -292	-109 -255	-73 -219	-36 -182	0 -145	37 -108	74 -71	110 -35	147 1	184 38	221 75
110	176.00	bu	-103 -249	-63 -209	-22 -168	17 -128	58 -87	98 -47	139 -6	179 33	220 74	260 114	301 155
120	192.00	bu	-60 -206	-16 -162	27 -118	71 -74	116 -29	160 14	204 58	248 102	292 146	336 190	381 235
130	208.00	bu	-17 -163	30 -115	78 -67	126 -19	173 27	221 75	269 123	317 171	365 219	413 267	460 314
140	224.00	bu	25 -120	77 -68	128 -17	180 34	231 85	283 137	334 188	386 240	437 291	489 343	540 394
150	240.00	bu	68 -77	123 -22	179 33	234 88	289 143	344 198	399 253	455 309	510 364	565 419	620 474

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

Table 30.A Estimated costs per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.5000	35.75	
App by Air (3 gal)	appl	5.00	1.5000	7.50	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	
DAP	cwt	23.76	0.5000	11.88	
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	
NBPT	pt	9.12	0.7500	6.84	
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	
2,4-D Amine 4	pt	2.40	2.0000	4.80	
Command 3ME	pt	19.93	1.0000	19.93	
Sharpen	oz	6.45	2.0000	12.90	
Regiment	oz	44.90	0.5000	22.45	
Facet L	pt	15.25	2.6900	41.02	
Permit	oz	22.46	0.7500	16.85	
Clincher SF	oz	2.34	7.5000	17.55	
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	
SEED/PLANTS					
Rice Seed Conv.	lb	0.30	75.0000	22.50	
Rice Seed Trt/Insect	lbseed	0.23	75.0000	17.25	
ADJUVANTS					
Class Act NG	pt	2.38	0.5000	1.19	
MSO	pt	2.09	1.5000	3.14	
Dyne-A-Pak	pt	4.80	0.5000	2.40	
Crop Oil Conc. (Pet.)	pt	2.37	0.5000	1.19	
Surfactant	pt	3.59	0.1000	0.36	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.23	0.4228	6.02	
Harvesters	hour	14.23	0.1760	2.50	
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	
DIESEL FUEL					
Tractors	gal	2.60	4.8970	12.74	
Harvesters	gal	2.60	2.9444	7.66	
Flood Irr.	gal	2.60	15.4779	40.24	
REPAIR & MAINTENANCE					
Implements	acre	8.16	1.0000	8.16	
Tractors	acre	2.53	1.0000	2.53	
Harvesters	acre	6.64	1.0000	6.64	
Flood Irr.	acre	11.46	1.0000	11.46	
INTEREST ON OP. CAP.					
	acre	14.08	1.0000	14.08	
TOTAL DIRECT EXPENSES				664.04	
FIXED EXPENSES					
Implements	acre	19.19	1.0000	19.19	
Tractors	acre	17.43	1.0000	17.43	
Harvesters	acre	28.56	1.0000	28.56	
Flood Irr.	acre	76.14	1.0000	76.14	
TOTAL FIXED EXPENSES				141.32	
TOTAL SPECIFIED EXPENSES				805.36	

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

Table 30.B Summary of estimated costs and returns per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	160.0000	736.00	_____

TOTAL INCOME				736.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	146.70	1.0000	146.70	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	39.75	1.0000	39.75	_____
ADJUVANTS	acre	8.28	1.0000	8.28	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	14.23	0.5988	8.52	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	23.3194	60.64	_____
REPAIR & MAINTENANCE	acre	28.79	1.0000	28.79	_____
INTEREST ON OP. CAP.	acre	14.08	1.0000	14.08	_____

TOTAL DIRECT EXPENSES				664.04	_____
RETURNS ABOVE DIRECT EXPENSES				71.96	_____
TOTAL FIXED EXPENSES				141.32	_____

TOTAL SPECIFIED EXPENSES				805.36	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-69.36	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 30.C Estimated resource use for field operations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.5000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000				1.05
TOTALS							0.59	0.59	2.67	0.53

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

Table 30.D Estimated costs for field operations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Seed Conv.	lb	22.50						0.68	23.18		23.18
Rice Seed Trt/Insect	lbseed	17.25						0.52	17.77		17.77
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
Class Act NG	pt	1.19						0.04	1.23		1.23
MSO	pt	1.05						0.03	1.08		1.08
Rice Consultant	acre	8.00						0.20	8.20		8.20
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
App by Air (5 gal)	appl	6.50						0.16	6.66		6.66
Regiment	oz	22.45						0.56	23.01		23.01
Dyne-A-Pak	pt	2.40						0.06	2.46		2.46
App Fert by Air	cwt	17.50						0.44	17.94		17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16		37.16
NBPT	pt	6.84						0.17	7.01		7.01
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	6.50						0.16	6.66		6.66
Facet L	pt	41.02						1.03	42.05		42.05
Permit	oz	16.85						0.42	17.27		17.27
Crop Oil Conc.(Pet.)	pt	1.19						0.03	1.22		1.22
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Clincher SF	oz	17.55						0.35	17.90		17.90
MSO	pt	2.09						0.04	2.13		2.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.04	1.85		1.85
App Fert by Air	cwt	10.50						0.21	10.71		10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18		22.18
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Stratego	pt	29.19						0.44	29.63		29.63
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	32.79	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	56.00						0.56	56.56		56.56
Dry Rice	bu	64.00						0.64	64.64		64.64
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre		40.24	11.46	9.53			1.38	62.61	76.14	138.75
TOTALS			525.48	60.64	28.79	35.05	0.00	14.08	664.04	141.32	805.36

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 30.E Estimated monthly income and expense flows per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	37.31	80.32	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	39.75	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	3.59	2.09	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	6.91	3.18	4.08	4.08	9.13	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	12.34	10.59	10.59	10.59	7.99	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.09	7.37	1.46	1.46	9.25	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	3.29	5.33	1.43	1.02	1.46	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	112.43	218.10	72.70	68.71	147.83	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-112.43	-218.10	-72.70	-68.71	588.17	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-144.90	-363.00	-435.70	-504.41	83.76	71.96

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 30.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-327 -468	-309 -450	-290 -431	-272 -413	-253 -395	-235 -376	-217 -358	-198 -339	-180 -321	-161 -303	-143 -284
60	96.00	bu	-284 -425	-262 -403	-240 -381	-218 -359	-196 -337	-173 -315	-151 -293	-129 -271	-107 -249	-85 -226	-63 -204
70	112.00	bu	-241 -382	-215 -356	-189 -331	-164 -305	-138 -279	-112 -253	-86 -228	-60 -202	-35 -176	-9 -150	16 -125
80	128.00	bu	-198 -339	-168 -310	-139 -280	-109 -251	-80 -221	-51 -192	-21 -162	7 -133	37 -104	66 -74	96 -45
90	144.00	bu	-155 -296	-122 -263	-88 -230	-55 -197	-22 -163	10 -130	43 -97	76 -64	109 -31	142 1	176 34
100	160.00	bu	-112 -253	-75 -216	-38 -179	-1 -142	35 -106	71 -69	108 -32	145 4	182 41	219 77	255 114
110	176.00	bu	-68 -210	-28 -169	12 -129	52 -88	92 -48	133 -7	173 32	214 73	254 113	295 154	335 194
120	192.00	bu	-25 -167	18 -123	62 -78	106 -34	150 9	194 53	239 97	283 141	327 186	371 230	415 274
130	208.00	bu	17 -124	65 -76	112 -28	160 19	208 67	256 115	304 162	352 210	399 258	447 306	495 354
140	224.00	bu	60 -81	111 -29	163 22	214 73	266 125	317 176	369 228	420 279	472 331	523 382	575 434
150	240.00	bu	103 -37	158 17	213 72	268 127	324 182	379 238	434 293	489 348	544 403	600 458	655 514

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

Table 31.A Estimated costs per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	
App by Air (3 gal)	appl	5.00	1.5000	7.50	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	
DAP	cwt	23.76	0.5000	11.88	
Urea, Solid (46% N)	cwt	14.50	3.3220	48.17	
NBPT	pt	9.12	0.8000	7.30	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	
2,4-D Amine 4	pt	2.40	2.0000	4.80	
Command 3ME	pt	19.93	1.0000	19.93	
Sharpen	oz	6.45	2.0000	12.90	
Regiment	oz	44.90	0.5000	22.45	
Facet L	pt	15.25	2.6900	41.02	
Permit	oz	22.46	0.7500	16.85	
Clincher SF	oz	2.34	7.5000	17.55	
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.70	23.0000	131.10	
Rice Seed CvH (Levee)	lb	1.66	4.2500	7.06	
Rice Seed Trt/Insect	lbseed	0.23	4.2500	0.98	
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	
Class Act NG	pt	2.38	0.5000	1.19	
Dyne-A-Pak	pt	4.80	0.5000	2.40	
Crop Oil Conc. (Pet.)	pt	2.37	0.4000	0.95	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.3220	30.25	
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.23	0.5475	7.79	
Harvesters	hour	14.23	0.1760	2.50	
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	
DIESEL FUEL					
Tractors	gal	2.60	5.9886	15.58	
Harvesters	gal	2.60	2.9444	7.66	
Flood Irr.	gal	2.60	26.8827	69.89	
REPAIR & MAINTENANCE					
Implements	acre	8.32	1.0000	8.32	
Tractors	acre	3.10	1.0000	3.10	
Harvesters	acre	6.64	1.0000	6.64	
Flood Irr.	acre	13.79	1.0000	13.79	
INTEREST ON OP. CAP.	acre	17.84	1.0000	17.84	
TOTAL DIRECT EXPENSES				796.02	
FIXED EXPENSES					
Implements	acre	20.07	1.0000	20.07	
Tractors	acre	21.41	1.0000	21.41	
Harvesters	acre	28.56	1.0000	28.56	
Flood Irr.	acre	49.18	1.0000	49.18	
TOTAL FIXED EXPENSES				119.22	
TOTAL SPECIFIED EXPENSES				915.24	

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

Table 31.B Summary of estimated costs and returns per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	180.0000	828.00	_____

TOTAL INCOME				828.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	74.59	1.0000	74.59	_____
HERBICIDES	acre	146.70	1.0000	146.70	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	139.14	1.0000	139.14	_____
ADJUVANTS	acre	7.68	1.0000	7.68	_____
CUSTOM FERTILIZE	acre	30.25	1.0000	30.25	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	14.23	0.7235	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	35.8158	93.13	_____
REPAIR & MAINTENANCE	acre	31.85	1.0000	31.85	_____
INTEREST ON OP. CAP.	acre	17.84	1.0000	17.84	_____

TOTAL DIRECT EXPENSES				796.02	_____
RETURNS ABOVE DIRECT EXPENSES				31.98	_____
TOTAL FIXED EXPENSES				119.22	_____

TOTAL SPECIFIED EXPENSES				915.24	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-87.24	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 31.C Estimated resource use for field operations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000		0.12	0.12	3.64
TOTALS							0.72	0.72	5.27	0.53

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

Table 31.D Estimated costs for field operations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Conv Hyb Trt	lb	131.10						3.93	135.03		135.03
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
MSO	pt	1.05						0.03	1.08		1.08
Class Act NG	pt	1.19						0.04	1.23		1.23
Seed Levees											
Rice Seed CvH (Levee)	lb	7.06						0.21	7.27		7.27
Rice Seed Trt/Insect	lbseed	0.98						0.03	1.01		1.01
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
Rice Consultant	acre	8.00						0.20	8.20		8.20
App by Air (5 gal)	appl	6.50						0.16	6.66		6.66
Regiment	oz	22.45						0.56	23.01		23.01
Dyne-A-Pak	pt	2.40						0.06	2.46		2.46
App Fert by Air	cwt	18.69						0.47	19.16		19.16
Urea, Solid (46% N)	cwt	38.71						0.97	39.68		39.68
NBPT	pt	7.30						0.18	7.48		7.48
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	6.50						0.16	6.66		6.66
Facet L	pt	41.02						1.03	42.05		42.05
Permit	oz	16.85						0.42	17.27		17.27
Crop Oil Conc. (Pet.)	pt	0.95						0.02	0.97		0.97
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Clincher SF	oz	17.55						0.35	17.90		17.90
MSO	pt	2.09						0.04	2.13		2.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.04	1.85		1.85
App Fert by Air	cwt	4.56						0.09	4.65		4.65
Urea, Solid (46% N)	cwt	9.45						0.19	9.64		9.64
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	32.79	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	63.00						0.63	63.63		63.63
Dry Rice	bu	72.00						0.72	72.72		72.72
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre	4.50	72.73	14.52	33.73			2.84	128.32	54.04	182.36
TOTALS		593.95	93.13	31.85	59.25	0.00	17.84	796.02	119.22	915.24	

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

Table 31.E Estimated monthly income and expense flows per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	828.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.14	9.45	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	37.31	80.32	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	139.14	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	3.35	2.09	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	4.56	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	15.96	7.71	8.61	8.61	10.69	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	18.38	19.06	19.06	19.06	9.03	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.80	8.06	2.15	2.15	9.53	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.87	5.76	1.34	0.68	1.64	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	235.70	236.09	68.06	46.01	165.89	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-235.70	-236.09	-68.06	-46.01	662.11	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-268.17	-504.26	-572.32	-618.33	43.78	31.98

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs

Table 31.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-417 -536	-396 -515	-375 -495	-355 -474	-334 -453	-313 -433	-293 -412	-272 -391	-251 -370	-231 -350	-210 -329
60	108.00	bu	-368 -488	-344 -463	-319 -438	-294 -413	-269 -388	-244 -363	-219 -339	-195 -314	-170 -289	-145 -264	-120 -239
70	126.00	bu	-320 -439	-291 -410	-262 -381	-233 -352	-204 -323	-175 -294	-146 -265	-117 -236	-88 -207	-59 -178	-30 -149
80	144.00	bu	-271 -391	-238 -358	-205 -324	-172 -291	-139 -258	-106 -225	-73 -192	-40 -159	-6 -126	26 -93	59 -59
90	162.00	bu	-223 -342	-186 -305	-148 -268	-111 -230	-74 -193	-37 -156	0 -119	37 -81	74 -44	111 -7	149 29
100	180.00	bu	-175 -294	-133 -252	-92 -211	-50 -170	-9 -128	31 -87	73 -45	114 -4	156 36	197 78	238 119
110	198.00	bu	-126 -245	-81 -200	-35 -154	10 -109	55 -63	101 -18	146 27	192 73	237 118	283 164	328 209
120	216.00	bu	-78 -197	-28 -147	21 -97	70 -48	120 1	170 51	219 100	269 150	319 200	369 249	418 299
130	234.00	bu	-29 -148	24 -95	78 -41	131 12	185 66	239 120	293 174	347 227	400 281	454 335	508 389
140	252.00	bu	18 -100	76 -42	134 15	192 73	250 131	308 189	366 247	424 305	482 363	540 421	598 479
150	270.00	bu	67 -51	129 10	191 72	253 134	315 196	377 258	439 320	502 382	564 444	626 506	688 569

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 2018 input prices.

Table 32.A Estimated costs per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	3.3220	48.17	_____
NBPT	pt	9.12	0.8000	7.30	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Regiment	oz	44.90	0.5000	22.45	_____
Facet L	pt	15.25	2.6900	41.02	_____
Permit	oz	22.46	0.7500	16.85	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.70	23.0000	131.10	_____
Rice Seed CvH (Levee)	lb	1.66	4.2500	7.06	_____
Rice Seed Trt/Insect	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Dyne-A-Pak	pt	4.80	0.5000	2.40	_____
Crop Oil Conc. (Pet.)	pt	2.37	0.4000	0.95	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.3220	30.25	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4999	7.12	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.5719	14.50	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	21.9949	57.20	_____
REPAIR & MAINTENANCE					
Implements	acre	8.26	1.0000	8.26	_____
Tractors	acre	2.89	1.0000	2.89	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	17.23	1.0000	17.23	_____
TOTAL DIRECT EXPENSES				768.00	_____
FIXED EXPENSES					
Implements	acre	19.68	1.0000	19.68	_____
Tractors	acre	19.90	1.0000	19.90	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.81	1.0000	76.81	_____
TOTAL FIXED EXPENSES				144.95	_____
TOTAL SPECIFIED EXPENSES				912.95	_____

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

Table 32.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	180.0000	828.00	_____

TOTAL INCOME				828.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	74.59	1.0000	74.59	_____
HERBICIDES	acre	146.70	1.0000	146.70	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	139.14	1.0000	139.14	_____
ADJUVANTS	acre	7.68	1.0000	7.68	_____
CUSTOM FERTILIZE	acre	30.25	1.0000	30.25	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	14.23	0.6759	9.62	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	30.5114	79.36	_____
REPAIR & MAINTENANCE	acre	31.57	1.0000	31.57	_____
INTEREST ON OP. CAP.	acre	17.23	1.0000	17.23	_____

TOTAL DIRECT EXPENSES				768.00	_____
RETURNS ABOVE DIRECT EXPENSES				60.00	_____
TOTAL FIXED EXPENSES				144.95	_____

TOTAL SPECIFIED EXPENSES				912.95	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-84.95	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 32.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 32.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Conv Hyb Trt	lb	131.10						3.93	135.03		135.03
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
MSO	pt	1.05						0.03	1.08		1.08
Class Act NG	pt	1.19						0.04	1.23		1.23
Seed Levees											
Rice Seed CvH (Levee)	lb	7.06						0.21	7.27		7.27
Rice Seed Trt/Insect	lbseed	0.98						0.03	1.01		1.01
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
Rice Consultant	acre	8.00						0.20	8.20		8.20
App by Air (5 gal)	appl	6.50						0.16	6.66		6.66
Regiment	oz	22.45						0.56	23.01		23.01
Dyne-A-Pak	pt	2.40						0.06	2.46		2.46
App Fert by Air	cwt	18.69						0.47	19.16		19.16
Urea, Solid (46% N)	cwt	38.71						0.97	39.68		39.68
NBPT	pt	7.30						0.18	7.48		7.48
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	6.50						0.16	6.66		6.66
Facet L	pt	41.02						1.03	42.05		42.05
Permit	oz	16.85						0.42	17.27		17.27
Crop Oil Conc. (Pet.)	pt	0.95						0.02	0.97		0.97
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Clincher SF	oz	17.55						0.35	17.90		17.90
MSO	pt	2.09						0.04	2.13		2.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.04	1.85		1.85
App Fert by Air	cwt	4.56						0.09	4.65		4.65
Urea, Solid (46% N)	cwt	9.45						0.19	9.64		9.64
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	32.79	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	63.00						0.63	63.63		63.63
Dry Rice	bu	72.00						0.72	72.72		72.72
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre	2.25	58.96	14.24	22.62			2.23	100.30	79.77	180.07
TOTALS		591.70	79.36	31.57	48.14	0.00	17.23	768.00	144.95	912.95	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 32.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	828.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.14	9.45	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	37.31	80.32	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	139.14	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	3.35	2.09	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	4.56	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	11.95	5.44	6.34	6.34	10.40	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	17.77	14.83	14.83	14.83	8.56	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.97	7.95	2.04	2.04	9.41	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.67	5.59	1.21	0.58	1.63	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	228.80	229.31	61.32	39.30	165.00	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-228.80	-229.31	-61.32	-39.30	663.00	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-261.27	-490.58	-551.90	-591.20	71.80	60.00

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 32.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-389 -534	-368 -513	-347 -492	-327 -472	-306 -451	-285 -430	-265 -410	-244 -389	-223 -368	-203 -347	-182 -327
60	108.00	bu	-340 -485	-316 -460	-291 -436	-266 -411	-241 -386	-216 -361	-191 -336	-166 -311	-142 -287	-117 -262	-92 -237
70	126.00	bu	-292 -437	-263 -408	-234 -379	-205 -350	-176 -321	-147 -292	-118 -263	-89 -234	-60 -205	-31 -176	-2 -147
80	144.00	bu	-243 -388	-210 -355	-177 -322	-144 -289	-111 -256	-78 -223	-45 -190	-12 -157	21 -123	54 -90	87 -57
90	162.00	bu	-195 -340	-158 -303	-120 -265	-83 -228	-46 -191	-9 -154	28 -116	65 -79	102 -42	139 -5	177 32
100	180.00	bu	-147 -291	-105 -250	-64 -209	-22 -167	18 -126	60 -84	101 -43	142 -2	184 39	225 80	267 122
110	198.00	bu	-98 -243	-52 -197	-7 -152	38 -106	83 -61	129 -15	174 29	220 75	265 120	311 166	356 211
120	216.00	bu	-50 -195	-0 -145	49 -95	98 -45	148 3	198 53	248 103	297 152	347 202	397 252	446 301
130	234.00	bu	-1 -146	52 -92	106 -38	159 14	213 68	267 122	321 176	375 230	428 284	482 337	536 391
140	252.00	bu	46 -98	104 -40	162 17	220 75	278 133	336 191	394 249	452 307	510 365	568 423	626 481
150	270.00	bu	95 -49	157 12	219 74	281 136	343 198	405 260	467 322	530 385	592 447	654 509	716 571

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

Table 33.A Estimated costs per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	3.3220	48.17	_____
NBPT	pt	9.12	0.8000	7.30	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Regiment	oz	44.90	0.5000	22.45	_____
Facet L	pt	15.25	2.6900	41.02	_____
Permit	oz	22.46	0.7500	16.85	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrrior II	oz	2.67	3.0000	8.01	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.70	23.0000	131.10	_____
Rice Seed CvH(Levee)	lb	1.66	4.2500	7.06	_____
Rice Seed Trt/Insect	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Dyne-A-Pak	pt	4.80	0.5000	2.40	_____
Crop Oil Conc. (Pet.)	pt	2.37	0.4000	0.95	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.3220	30.25	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5281	7.52	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.8180	15.13	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	18.7364	48.72	_____
REPAIR & MAINTENANCE					
Implements	acre	8.32	1.0000	8.32	_____
Tractors	acre	3.02	1.0000	3.02	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	17.07	1.0000	17.07	_____
TOTAL DIRECT EXPENSES				757.51	_____
FIXED EXPENSES					
Implements	acre	20.19	1.0000	20.19	_____
Tractors	acre	20.80	1.0000	20.80	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.48	1.0000	76.48	_____
TOTAL FIXED EXPENSES				146.03	_____
TOTAL SPECIFIED EXPENSES				903.54	_____

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

Table 33.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	180.0000	828.00	_____
TOTAL INCOME				828.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	74.59	1.0000	74.59	_____
HERBICIDES	acre	146.70	1.0000	146.70	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	139.14	1.0000	139.14	_____
ADJUVANTS	acre	7.68	1.0000	7.68	_____
CUSTOM FERTILIZE	acre	30.25	1.0000	30.25	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	14.23	0.7041	10.02	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	27.4990	71.51	_____
REPAIR & MAINTENANCE	acre	31.44	1.0000	31.44	_____
INTEREST ON OP. CAP.	acre	17.07	1.0000	17.07	_____
TOTAL DIRECT EXPENSES				757.51	_____
RETURNS ABOVE DIRECT EXPENSES				70.49	_____
TOTAL FIXED EXPENSES				146.03	_____
TOTAL SPECIFIED EXPENSES				903.54	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-75.54	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 33.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 33.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Conv Hyb Trt	lb	131.10						3.93	135.03	135.03
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
MSO	pt	1.05						0.03	1.08	1.08
Class Act NG	pt	1.19						0.04	1.23	1.23
Seed Levees										
Rice Seed CvH (Levee)	lb	7.06						0.21	7.27	7.27
Rice Seed Trt/Insect	lbseed	0.98						0.03	1.01	1.01
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
Rice Consultant	acre	8.00						0.20	8.20	8.20
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Regiment	oz	22.45						0.56	23.01	23.01
Dyne-A-Pak	pt	2.40						0.06	2.46	2.46
App Fert by Air	cwt	18.69						0.47	19.16	19.16
Urea, Solid (46% N)	cwt	38.71						0.97	39.68	39.68
NBPT	pt	7.30						0.18	7.48	7.48
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Facet L	pt	41.02						1.03	42.05	42.05
Permit	oz	16.85						0.42	17.27	17.27
Crop Oil Conc. (Pet.)	pt	0.95						0.02	0.97	0.97
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	4.56						0.09	4.65	4.65
Urea, Solid (46% N)	cwt	9.45						0.19	9.64	9.64
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	63.00						0.63	63.63	63.63
Dry Rice	bu	72.00						0.72	72.72	72.72
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	10.50	51.11	14.11	12.02			2.07	89.81	170.66
TOTALS		599.95	71.51	31.44	37.54	0.00	17.07	757.51	146.03	903.54

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 33.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	828.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.14	9.45	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	37.31	80.32	17.55	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	8.01	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	139.14	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	3.35	2.09	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	4.56	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	9.77	2.72	3.62	3.62	10.14	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	16.14	12.71	12.71	12.71	8.70	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	5.01	7.88	1.97	1.97	9.45	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.80	5.48	1.11	0.51	1.62	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	233.41	224.29	56.31	34.32	164.91	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-233.41	-224.29	-56.31	-34.32	663.09	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-265.88	-490.17	-546.48	-580.80	82.29	70.49

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 33.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Rice	3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75		
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-378 -524	-358 -504	-337 -483	-316 -462	-296 -442	-275 -421	-254 -400	-233 -379	-213 -359	-192 -338	-171 -317
60	108.00	bu	-330 -476	-305 -451	-280 -426	-255 -401	-231 -377	-206 -352	-181 -327	-156 -302	-131 -277	-106 -252	-81 -228
70	126.00	bu	-281 -427	-252 -398	-223 -369	-194 -340	-165 -312	-137 -283	-108 -254	-79 -225	-50 -196	-21 -167	7 -138
80	144.00	bu	-233 -379	-200 -346	-167 -313	-134 -280	-100 -246	-67 -213	-34 -180	-1 -147	31 -114	64 -81	97 -48
90	162.00	bu	-184 -331	-147 -293	-110 -256	-73 -219	-35 -181	1 -144	38 -107	75 -70	113 -32	150 4	187 41
100	180.00	bu	-136 -282	-95 -241	-53 -199	-12 -158	29 -116	70 -75	111 -34	153 7	194 48	236 90	277 131
110	198.00	bu	-88 -234	-42 -188	3 -142	48 -97	94 -51	139 -6	185 39	230 84	276 130	321 175	367 221
120	216.00	bu	-39 -185	10 -135	59 -86	109 -36	159 13	208 62	258 112	308 162	357 211	407 261	457 311
130	234.00	bu	8 -137	62 -83	116 -29	170 24	224 78	277 131	331 185	385 239	439 293	493 347	547 401
140	252.00	bu	57 -88	115 -30	173 27	231 85	289 143	347 201	405 259	463 317	521 375	578 432	636 490
150	270.00	bu	105 -40	167 21	230 83	292 146	354 208	416 270	478 332	540 394	602 456	664 518	726 580

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

Table 34.A Estimated costs per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	3.3220	48.17	_____
NBPT	pt	9.12	0.8000	7.30	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Regiment	oz	44.90	0.5000	22.45	_____
Facet L	pt	15.25	2.6900	41.02	_____
Permit	oz	22.46	0.7500	16.85	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.70	23.0000	131.10	_____
Rice Seed CvH (Levee)	lb	1.66	4.2500	7.06	_____
Rice Seed Trt/Insect	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Dyne-A-Pak	pt	4.80	0.5000	2.40	_____
Crop Oil Conc. (Pet.)	pt	2.37	0.4000	0.95	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.3220	30.25	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4228	6.02	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	4.8970	12.74	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	15.4779	40.24	_____
REPAIR & MAINTENANCE					
Implements	acre	8.16	1.0000	8.16	_____
Tractors	acre	2.53	1.0000	2.53	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	16.38	1.0000	16.38	_____
TOTAL DIRECT EXPENSES				730.31	_____
FIXED EXPENSES					
Implements	acre	19.19	1.0000	19.19	_____
Tractors	acre	17.43	1.0000	17.43	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.14	1.0000	76.14	_____
TOTAL FIXED EXPENSES				141.32	_____
TOTAL SPECIFIED EXPENSES				871.63	_____

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

Table 34.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	180.0000	828.00	_____

TOTAL INCOME				828.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	74.59	1.0000	74.59	_____
HERBICIDES	acre	146.70	1.0000	146.70	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	139.14	1.0000	139.14	_____
ADJUVANTS	acre	7.68	1.0000	7.68	_____
CUSTOM FERTILIZE	acre	30.25	1.0000	30.25	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	14.23	0.5988	8.52	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	23.3194	60.64	_____
REPAIR & MAINTENANCE	acre	28.79	1.0000	28.79	_____
INTEREST ON OP. CAP.	acre	16.38	1.0000	16.38	_____

TOTAL DIRECT EXPENSES				730.31	_____
RETURNS ABOVE DIRECT EXPENSES				97.69	_____
TOTAL FIXED EXPENSES				141.32	_____

TOTAL SPECIFIED EXPENSES				871.63	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-43.63	_____

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

Table 34.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH (Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

Table 34.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Conv Hyb Trt	lb	131.10						3.93	135.03	135.03
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
MSO	pt	1.05						0.03	1.08	1.08
Class Act NG	pt	1.19						0.04	1.23	1.23
Seed Levees										
Rice Seed CvH (Levee)	lb	7.06						0.21	7.27	7.27
Rice Seed Trt/Insect	lbseed	0.98						0.03	1.01	1.01
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
Rice Consultant	acre	8.00						0.20	8.20	8.20
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Regiment	oz	22.45						0.56	23.01	23.01
Dyne-A-Pak	pt	2.40						0.06	2.46	2.46
App Fert by Air	cwt	18.69						0.47	19.16	19.16
Urea, Solid (46% N)	cwt	38.71						0.97	39.68	39.68
NBPT	pt	7.30						0.18	7.48	7.48
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Facet L	pt	41.02						1.03	42.05	42.05
Permit	oz	16.85						0.42	17.27	17.27
Crop Oil Conc. (Pet.)	pt	0.95						0.02	0.97	0.97
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	4.56						0.09	4.65	4.65
Urea, Solid (46% N)	cwt	9.45						0.19	9.64	9.64
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	63.00						0.63	63.63	63.63
Dry Rice	bu	72.00						0.72	72.72	72.72
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre		40.24	11.46	9.53			1.38	62.61	138.75
TOTALS		589.45	60.64	28.79	35.05	0.00	16.38	730.31	141.32	871.63

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

Fertilization decisions should be based on soil tests
Soil test cost is prorated for a test every 3rd year.

Table 34.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	828.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.14	9.45	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	37.31	80.32	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	139.14	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.24	3.35	2.09	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	4.56	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	6.91	3.18	4.08	4.08	9.13	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	12.34	10.59	10.59	10.59	7.99	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.09	7.37	1.46	1.46	9.25	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.26	5.42	1.07	0.47	1.61	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	214.79	222.06	54.10	32.11	162.98	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-214.79	-222.06	-54.10	-32.11	665.02	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-247.26	-469.32	-523.42	-555.53	109.49	97.69

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 34.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-351 -492	-330 -472	-310 -451	-289 -430	-268 -410	-248 -389	-227 -368	-206 -348	-186 -327	-165 -306	-144 -285
60	108.00	bu	-303 -444	-278 -419	-253 -394	-228 -369	-203 -345	-178 -320	-154 -295	-129 -270	-104 -245	-79 -220	-54 -196
70	126.00	bu	-254 -396	-225 -367	-196 -338	-167 -309	-138 -280	-109 -251	-80 -222	-51 -193	-22 -164	6 -135	35 -106
80	144.00	bu	-206 -347	-173 -314	-140 -281	-106 -248	-73 -215	-40 -181	-7 -148	25 -115	58 -82	91 -49	124 -16
90	162.00	bu	-157 -299	-120 -261	-83 -224	-45 -187	-8 -150	28 -112	65 -75	103 -38	140 -1	177 36	214 73
100	180.00	bu	-109 -250	-67 -209	-26 -167	14 -126	56 -85	97 -43	139 -2	180 39	221 80	263 121	304 163
110	198.00	bu	-60 -202	-15 -156	30 -111	75 -65	121 -20	166 25	212 71	257 116	303 162	349 207	394 253
120	216.00	bu	-12 -153	37 -104	86 -54	136 -4	186 45	236 94	285 144	335 194	385 243	434 293	484 343
130	234.00	bu	36 -105	89 -51	143 2	197 56	251 110	305 163	359 217	412 271	466 325	520 379	574 432
140	252.00	bu	84 -56	142 1	200 59	258 117	316 175	374 233	432 290	490 348	548 406	606 464	664 522
150	270.00	bu	133 -8	195 53	257 115	319 177	381 240	443 302	505 364	567 426	629 488	691 550	754 612

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

Table 35.A Estimated costs per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Clearpath	lb	61.27	0.5000	30.64	_____
Newpath	oz	3.83	6.0000	22.98	_____
Aim	oz	5.65	1.5000	8.48	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Clearfield	lb	1.06	65.0000	68.90	_____
Rice Seed Trt/Insect	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF(Levees)	lb	0.90	12.0000	10.80	_____
ADJUVANTS					
Class Act NG	pt	2.38	0.5000	1.19	_____
MSO	pt	2.09	1.5000	3.14	_____
Crop Oil Conc.(Pet.)	pt	2.37	4.0000	9.48	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5475	7.79	_____
Harvesters	hour	14.23	0.2030	2.89	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	14.25	0.5633	8.03	_____
DIESEL FUEL					
Tractors	gal	2.60	5.9886	15.58	_____
Harvesters	gal	2.60	3.3975	8.83	_____
Flood Irr.	gal	2.60	26.8827	69.89	_____
REPAIR & MAINTENANCE					
Implements	acre	8.70	1.0000	8.70	_____
Tractors	acre	3.10	1.0000	3.10	_____
Harvesters	acre	7.66	1.0000	7.66	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	17.41	1.0000	17.41	_____
TOTAL DIRECT EXPENSES				790.01	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	21.41	1.0000	21.41	_____
Harvesters	acre	32.95	1.0000	32.95	_____
Flood Irr.	acre	49.18	1.0000	49.18	_____
TOTAL FIXED EXPENSES				124.26	_____
TOTAL SPECIFIED EXPENSES				914.27	_____

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

Table 35.B Summary of estimated costs and returns per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	160.0000	736.00	_____

TOTAL INCOME				736.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.75	1.0000	45.75	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	128.48	1.0000	128.48	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	97.41	1.0000	97.41	_____
ADJUVANTS	acre	14.17	1.0000	14.17	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	14.23	0.7506	10.68	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	14.25	0.5633	8.03	_____
DIESEL FUEL	gal	2.60	36.2688	94.30	_____
REPAIR & MAINTENANCE	acre	33.25	1.0000	33.25	_____
INTEREST ON OP. CAP.	acre	17.41	1.0000	17.41	_____

TOTAL DIRECT EXPENSES				790.01	_____
RETURNS ABOVE DIRECT EXPENSES				-54.01	_____
TOTAL FIXED EXPENSES				124.26	_____

TOTAL SPECIFIED EXPENSES				914.27	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-178.27	_____

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 35.C Estimated resource use for field operations, per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Table 35.D Estimated costs for field operations, per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Clearfield	lb	68.90						2.07	70.97		70.97
Rice Seed Trt/Insect	lbseed	14.95						0.45	15.40		15.40
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
Class Act NG	pt	1.19						0.04	1.23		1.23
MSO	pt	1.05						0.03	1.08		1.08
Seed Levees											
Rice Seed CF(Levees)	lb	10.80						0.32	11.12		11.12
Rice Seed Trt/Insect	lbseed	2.76						0.08	2.84		2.84
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Clearpath	lb	30.64						0.92	31.56		31.56
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88		4.88
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
Rice Consultant	acre	8.00						0.20	8.20		8.20
App Fert by Air	cwt	17.50						0.44	17.94		17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16		37.16
NBPT	pt	6.84						0.17	7.01		7.01
App by Air (10 gal)	appl	9.00						0.23	9.23		9.23
Newpath	oz	22.98						0.57	23.55		23.55
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86		4.86
Aim	oz	8.48						0.21	8.69		8.69
Rice Management											
RICE MGT. LABOR	hour				2.72			0.07	2.79		2.79
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Clincher SF	oz	17.55						0.35	17.90		17.90
MSO	pt	2.09						0.04	2.13		2.13
Rice Management											
RICE MGT. LABOR	hour				4.53			0.09	4.62		4.62
App Fert by Air	cwt	10.50						0.21	10.71		10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18		22.18
Rice Management											
RICE MGT. LABOR	hour				4.53			0.07	4.60		4.60
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Stratego	pt	29.19						0.44	29.63		29.63
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (CL)	25' Rigid		8.83	10.47	5.49			0.25	25.04	37.83	62.87
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	56.00						0.56	56.56		56.56
Dry Rice	bu	64.00						0.64	64.64		64.64
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre	4.50	72.73	14.52	33.73			2.84	128.32	54.04	182.36
TOTALS		577.81	94.30	33.25	67.24	0.00	17.41	790.01	124.26	914.27	

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

Table 35.E Estimated monthly income and expense flows per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	67.95	31.46	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	97.41	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	2.09	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	15.96	9.52	11.33	11.33	11.43	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	18.38	19.06	19.06	19.06	10.20	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.80	8.06	2.15	2.15	10.93	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.88	4.43	1.75	1.27	1.53	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	235.86	180.99	89.43	85.37	154.09	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-235.86	-180.99	-89.43	-85.37	581.91	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-268.33	-449.32	-538.75	-624.12	-42.21	-54.01

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 35.F Estimated returns for various price/yield combinations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-453 -577	-435 -559	-416 -540	-398 -522	-379 -504	-361 -485	-343 -467	-324 -448	-306 -430	-287 -412	-269 -393
60	96.00	bu	-410 -534	-388 -512	-366 -490	-344 -468	-322 -446	-299 -424	-277 -402	-255 -380	-233 -357	-211 -335	-189 -313
70	112.00	bu	-367 -491	-341 -465	-315 -439	-289 -414	-264 -388	-238 -362	-212 -336	-186 -311	-161 -285	-135 -259	-109 -233
80	128.00	bu	-324 -448	-294 -418	-265 -389	-235 -360	-206 -330	-176 -301	-147 -271	-118 -242	-88 -212	-59 -183	-29 -154
90	144.00	bu	-281 -405	-247 -372	-214 -339	-181 -305	-148 -272	-115 -239	-82 -206	-49 -173	-16 -140	16 -107	50 -74
100	160.00	bu	-238 -362	-201 -325	-164 -288	-127 -251	-90 -215	-54 -178	-17 -141	19 -104	56 -67	93 -31	129 5
110	176.00	bu	-194 -319	-154 -278	-113 -238	-73 -197	-33 -157	7 -116	47 -76	88 -35	128 4	169 45	209 85
120	192.00	bu	-151 -276	-107 -231	-63 -187	-19 -143	24 -99	68 -55	113 -11	157 33	201 77	245 121	289 165
130	208.00	bu	-108 -233	-60 -185	-13 -137	34 -89	82 -41	130 6	178 54	226 101	273 149	321 197	369 245
140	224.00	bu	-65 -189	-14 -138	37 -86	88 -35	140 16	191 67	243 119	294 170	346 222	397 273	449 325
150	240.00	bu	-22 -146	32 -91	87 -36	142 18	198 73	253 129	308 184	363 239	418 294	474 349	529 405

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

Table 36.A Estimated costs per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Clearpath	lb	61.27	0.5000	30.64	_____
Newpath	oz	3.83	6.0000	22.98	_____
Aim	oz	5.65	1.5000	8.48	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Clearfield	lb	1.06	65.0000	68.90	_____
Rice Seed Trt/Insect	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF(Levees)	lb	0.90	12.0000	10.80	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc.(Pet.)	pt	2.37	4.0000	9.48	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4999	7.12	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.5719	14.50	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	21.9949	57.20	_____
REPAIR & MAINTENANCE					
Implements	acre	8.26	1.0000	8.26	_____
Tractors	acre	2.89	1.0000	2.89	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	16.62	1.0000	16.62	_____
TOTAL DIRECT EXPENSES				751.25	_____
FIXED EXPENSES					
Implements	acre	19.68	1.0000	19.68	_____
Tractors	acre	19.90	1.0000	19.90	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.81	1.0000	76.81	_____
TOTAL FIXED EXPENSES				144.95	_____
TOTAL SPECIFIED EXPENSES				896.20	_____

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

Table 36.B Summary of estimated costs and returns per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	160.0000	736.00	_____

TOTAL INCOME				736.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.75	1.0000	45.75	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	128.48	1.0000	128.48	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	97.41	1.0000	97.41	_____
ADJUVANTS	acre	14.17	1.0000	14.17	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	14.23	0.6759	9.62	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	30.5114	79.36	_____
REPAIR & MAINTENANCE	acre	31.57	1.0000	31.57	_____
INTEREST ON OP. CAP.	acre	16.62	1.0000	16.62	_____

TOTAL DIRECT EXPENSES				751.25	_____
RETURNS ABOVE DIRECT EXPENSES				-15.25	_____
TOTAL FIXED EXPENSES				144.95	_____

TOTAL SPECIFIED EXPENSES				896.20	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-160.20	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 36.C Estimated resource use for field operations, per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 36.D Estimated costs for field operations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Clearfield	lb	68.90						2.07	70.97	70.97
Rice Seed Trt/Insect	lbseed	14.95						0.45	15.40	15.40
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
MSO	pt	1.05						0.03	1.08	1.08
Class Act NG	pt	1.19						0.04	1.23	1.23
Seed Levees										
Rice Seed CF (Levees)	lb	10.80						0.32	11.12	11.12
Rice Seed Trt/Insect	lbseed	2.76						0.08	2.84	2.84
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Clearpath	lb	30.64						0.92	31.56	31.56
Crop Oil Conc. (Pet.)	pt	4.74						0.14	4.88	4.88
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	17.50						0.44	17.94	17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16	37.16
NBPT	pt	6.84						0.17	7.01	7.01
App by Air (10 gal)	appl	9.00						0.23	9.23	9.23
Newpath	oz	22.98						0.57	23.55	23.55
Crop Oil Conc. (Pet.)	pt	4.74						0.12	4.86	4.86
Aim	oz	8.48						0.21	8.69	8.69
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	10.50						0.21	10.71	10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18	22.18
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Stratego	pt	29.19						0.44	29.63	29.63
Surfactant	pt	0.36						0.01	0.37	0.37
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	56.00						0.56	56.56	56.56
Dry Rice	bu	64.00						0.64	64.64	64.64
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	2.25	58.96	14.24	22.62			2.23	100.30	180.07
TOTALS		575.56	79.36	31.57	48.14	0.00	16.62	751.25	144.95	896.20

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 36.E Estimated monthly income and expense flows per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	67.95	31.46	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	97.41	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	2.09	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	11.95	5.44	6.34	6.34	10.40	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	17.77	14.83	14.83	14.83	8.56	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.97	7.95	2.04	2.04	9.41	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.68	4.21	1.57	1.13	1.48	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	228.96	172.35	79.92	75.90	149.85	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-228.96	-172.35	-79.92	-75.90	586.15	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-261.43	-433.78	-513.70	-589.60	-3.45	-15.25

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs

Table 36.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-414 -559	-396 -541	-377 -522	-359 -504	-341 -486	-322 -467	-304 -449	-285 -430	-267 -412	-249 -394	-230 -375
60	96.00	bu	-371 -516	-349 -494	-327 -472	-305 -450	-283 -428	-261 -406	-239 -384	-217 -361	-194 -339	-172 -317	-150 -295
70	112.00	bu	-328 -473	-302 -447	-276 -421	-251 -396	-225 -370	-199 -344	-173 -318	-148 -293	-122 -267	-96 -241	-70 -215
80	128.00	bu	-285 -430	-255 -400	-226 -371	-197 -342	-167 -312	-138 -283	-108 -253	-79 -224	-49 -194	-20 -165	8 -135
90	144.00	bu	-242 -387	-209 -354	-176 -321	-142 -287	-109 -254	-76 -221	-43 -188	-10 -155	22 -122	55 -89	88 -56
100	160.00	bu	-199 -344	-162 -307	-125 -270	-88 -233	-52 -197	-15 -160	21 -123	58 -86	95 -49	131 -13	168 23
110	176.00	bu	-156 -301	-115 -260	-75 -220	-34 -179	5 -139	46 -98	86 -58	127 -17	167 22	208 63	248 103
120	192.00	bu	-113 -258	-68 -213	-24 -169	19 -125	63 -81	107 -37	151 6	196 51	240 95	284 139	328 183
130	208.00	bu	-70 -214	-22 -167	25 -119	73 -71	121 -23	169 24	217 72	264 119	312 167	360 215	408 263
140	224.00	bu	-26 -171	24 -120	76 -68	127 -17	179 34	230 85	282 137	333 188	385 240	436 291	488 343
150	240.00	bu	16 -128	71 -73	126 -18	181 36	236 92	292 147	347 202	402 257	457 312	512 368	568 423

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

Table 37.A Estimated costs per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Clearpath	lb	61.27	0.5000	30.64	_____
Newpath	oz	3.83	6.0000	22.98	_____
Aim	oz	5.65	1.5000	8.48	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Clearfield	lb	1.06	65.0000	68.90	_____
Rice Seed Trt./Insect	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF(Levees)	lb	0.90	12.0000	10.80	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc. (Pet.)	pt	2.37	4.0000	9.48	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5281	7.52	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.8180	15.13	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	18.7364	48.72	_____
REPAIR & MAINTENANCE					
Implements	acre	8.32	1.0000	8.32	_____
Tractors	acre	3.02	1.0000	3.02	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	16.46	1.0000	16.46	_____
TOTAL DIRECT EXPENSES				740.76	_____
FIXED EXPENSES					
Implements	acre	20.19	1.0000	20.19	_____
Tractors	acre	20.80	1.0000	20.80	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.48	1.0000	76.48	_____
TOTAL FIXED EXPENSES				146.03	_____
TOTAL SPECIFIED EXPENSES				886.79	_____

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 37.B Summary of estimated costs and returns per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	160.0000	736.00	_____

TOTAL INCOME				736.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.75	1.0000	45.75	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	128.48	1.0000	128.48	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	97.41	1.0000	97.41	_____
ADJUVANTS	acre	14.17	1.0000	14.17	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	14.23	0.7041	10.02	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	27.4990	71.51	_____
REPAIR & MAINTENANCE	acre	31.44	1.0000	31.44	_____
INTEREST ON OP. CAP.	acre	16.46	1.0000	16.46	_____

TOTAL DIRECT EXPENSES				740.76	_____
RETURNS ABOVE DIRECT EXPENSES				-4.76	_____
TOTAL FIXED EXPENSES				146.03	_____

TOTAL SPECIFIED EXPENSES				886.79	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-150.79	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 37.C Estimated resource use for field operations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 37.D Estimated costs for field operations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Clearfield	lb	68.90						2.07	70.97	70.97
Rice Seed Trt/Insect	lbseed	14.95						0.45	15.40	15.40
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
MSO	pt	1.05						0.03	1.08	1.08
Class Act NG	pt	1.19						0.04	1.23	1.23
Seed Levees										
Rice Seed CF(Levees)	lb	10.80						0.32	11.12	11.12
Rice Seed Trt/Insect	lbseed	2.76						0.08	2.84	2.84
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Clearpath	lb	30.64						0.92	31.56	31.56
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88	4.88
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	17.50						0.44	17.94	17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16	37.16
NBPT	pt	6.84						0.17	7.01	7.01
App by Air (10 gal)	appl	9.00						0.23	9.23	9.23
Newpath	oz	22.98						0.57	23.55	23.55
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86	4.86
Aim	oz	8.48						0.21	8.69	8.69
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	10.50						0.21	10.71	10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18	22.18
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Stratego	pt	29.19						0.44	29.63	29.63
Surfactant	pt	0.36						0.01	0.37	0.37
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	56.00						0.56	56.56	56.56
Dry Rice	bu	64.00						0.64	64.64	64.64
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	10.50	51.11	14.11	12.02			2.07	89.81	170.66
TOTALS		583.81	71.51	31.44	37.54	0.00	16.46	740.76	146.03	886.79

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 37.E Estimated monthly income and expense flows per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	67.95	31.46	17.55	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	8.01	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	97.41	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	2.09	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	9.77	2.72	3.62	3.62	10.14	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	16.14	12.71	12.71	12.71	8.70	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	5.01	7.88	1.97	1.97	9.45	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.81	4.10	1.47	1.06	1.47	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	233.57	167.33	74.91	70.92	149.76	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-233.57	-167.33	-74.91	-70.92	586.24	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-266.04	-433.37	-508.28	-579.20	7.04	-4.76

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 37.F Estimated returns for various price/yield combinations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-404 -550	-385 -531	-367 -513	-348 -494	-330 -476	-312 -458	-293 -439	-275 -421	-256 -402	-238 -384	-220 -366
60	96.00	bu	-361 -507	-339 -485	-316 -462	-294 -440	-272 -418	-250 -396	-228 -374	-206 -352	-184 -330	-162 -308	-140 -286
70	112.00	bu	-318 -464	-292 -438	-266 -412	-240 -386	-214 -360	-189 -335	-163 -309	-137 -283	-111 -257	-86 -232	-60 -206
80	128.00	bu	-274 -420	-245 -391	-216 -362	-186 -332	-157 -303	-127 -273	-98 -244	-68 -214	-39 -185	-9 -155	19 -126
90	144.00	bu	-231 -377	-198 -344	-165 -311	-132 -278	-99 -245	-66 -212	-33 -179	0 -146	33 -112	66 -79	99 -46
100	160.00	bu	-188 -334	-151 -297	-115 -261	-78 -224	-41 -187	-4 -150	32 -113	68 -77	105 -40	142 -3	179 33
110	176.00	bu	-145 -291	-105 -251	-64 -210	-24 -170	16 -129	56 -89	97 -48	137 -8	178 32	218 72	259 113
120	192.00	bu	-102 -248	-58 -204	-14 -160	29 -116	74 -71	118 -27	162 16	206 60	250 104	294 148	339 192
130	208.00	bu	-59 -205	-11 -157	36 -109	84 -62	131 -14	179 33	227 81	275 129	323 177	371 225	418 272
140	224.00	bu	-16 -162	35 -110	86 -59	138 -7	189 43	241 95	292 146	344 198	395 249	447 301	498 352
150	240.00	bu	26 -119	81 -64	137 -8	192 46	247 101	302 156	357 211	413 267	468 322	523 377	578 432

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

Table 38.A Estimated costs per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Clearpath	lb	61.27	0.5000	30.64	_____
Newpath	oz	3.83	6.0000	22.98	_____
Aim	oz	5.65	1.5000	8.48	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Clearfield	lb	1.06	65.0000	68.90	_____
Rice Seed Trt/Insect	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	0.90	12.0000	10.80	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc. (Pet.)	pt	2.37	4.0000	9.48	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4228	6.02	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	4.8970	12.74	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	15.4779	40.24	_____
REPAIR & MAINTENANCE					
Implements	acre	8.16	1.0000	8.16	_____
Tractors	acre	2.53	1.0000	2.53	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	15.77	1.0000	15.77	_____
TOTAL DIRECT EXPENSES				713.56	_____
FIXED EXPENSES					
Implements	acre	19.19	1.0000	19.19	_____
Tractors	acre	17.43	1.0000	17.43	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.14	1.0000	76.14	_____
TOTAL FIXED EXPENSES				141.32	_____
TOTAL SPECIFIED EXPENSES				854.88	_____

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 38.B Summary of estimated costs and returns per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	160.0000	736.00	_____

TOTAL INCOME				736.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.75	1.0000	45.75	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	128.48	1.0000	128.48	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	97.41	1.0000	97.41	_____
ADJUVANTS	acre	14.17	1.0000	14.17	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	14.23	0.5988	8.52	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	23.3194	60.64	_____
REPAIR & MAINTENANCE	acre	28.79	1.0000	28.79	_____
INTEREST ON OP. CAP.	acre	15.77	1.0000	15.77	_____

TOTAL DIRECT EXPENSES				713.56	_____
RETURNS ABOVE DIRECT EXPENSES				22.44	_____
TOTAL FIXED EXPENSES				141.32	_____

TOTAL SPECIFIED EXPENSES				854.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-118.88	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 38.C Estimated resource use for field operations, per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

Table 38.D Estimated costs for field operations, per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Clearfield	lb	68.90						2.07	70.97		70.97
Rice Seed Trt/Insect	lbseed	14.95						0.45	15.40		15.40
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
MSO	pt	1.05						0.03	1.08		1.08
Class Act NG	pt	1.19						0.04	1.23		1.23
Seed Levees											
Rice Seed CF (Levees)	lb	10.80						0.32	11.12		11.12
Rice Seed Trt/Insect	lbseed	2.76						0.08	2.84		2.84
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Clearpath	lb	30.64						0.92	31.56		31.56
Crop Oil Conc. (Pet.)	pt	4.74						0.14	4.88		4.88
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
Rice Consultant	acre	8.00						0.20	8.20		8.20
App Fert by Air	cwt	17.50						0.44	17.94		17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16		37.16
NBPT	pt	6.84						0.17	7.01		7.01
App by Air (10 gal)	appl	9.00						0.23	9.23		9.23
Newpath	oz	22.98						0.57	23.55		23.55
Crop Oil Conc. (Pet.)	pt	4.74						0.12	4.86		4.86
Aim	oz	8.48						0.21	8.69		8.69
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Clincher SF	oz	17.55						0.35	17.90		17.90
MSO	pt	2.09						0.04	2.13		2.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.04	1.85		1.85
App Fert by Air	cwt	10.50						0.21	10.71		10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18		22.18
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Stratego	pt	29.19						0.44	29.63		29.63
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	32.79	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	56.00						0.56	56.56		56.56
Dry Rice	bu	64.00						0.64	64.64		64.64
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre		40.24	11.46	9.53			1.38	62.61	76.14	138.75
TOTALS		573.31	60.64	28.79	35.05	0.00	15.77	713.56	141.32	854.88	

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

Table 38.E Estimated monthly income and expense flows per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	67.95	31.46	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	97.41	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	2.09	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	6.91	3.18	4.08	4.08	9.13	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	12.34	10.59	10.59	10.59	7.99	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.09	7.37	1.46	1.46	9.25	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.27	4.04	1.43	1.02	1.46	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	214.95	165.10	72.70	68.71	147.83	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-214.95	-165.10	-72.70	-68.71	588.17	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-247.42	-412.52	-485.22	-553.93	34.24	22.44

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs

Table 38.F Estimated returns for various price/yield combinations, per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-376 -518	-358 -499	-340 -481	-321 -463	-303 -444	-284 -426	-266 -407	-248 -389	-229 -371	-211 -352	-192 -334
60	96.00	bu	-333 -475	-311 -453	-289 -431	-267 -408	-245 -386	-223 -364	-201 -342	-179 -320	-157 -298	-135 -276	-113 -254
70	112.00	bu	-290 -432	-265 -406	-239 -380	-213 -354	-187 -329	-162 -303	-136 -277	-110 -251	-84 -226	-58 -200	-33 -174
80	128.00	bu	-247 -389	-218 -359	-188 -330	-159 -300	-129 -271	-100 -241	-71 -212	-41 -182	-12 -153	17 -124	46 -94
90	144.00	bu	-204 -345	-171 -312	-138 -279	-105 -246	-72 -213	-39 -180	-5 -147	27 -114	60 -81	93 -47	126 -14
100	160.00	bu	-161 -302	-124 -266	-87 -229	-51 -192	-14 -155	22 -118	59 -82	96 -45	132 -8	169 28	206 65
110	176.00	bu	-118 -259	-78 -219	-37 -178	2 -138	43 -97	83 -57	124 -16	164 23	205 64	245 104	286 145
120	192.00	bu	-75 -216	-31 -172	12 -128	57 -84	101 -40	145 4	189 48	233 92	277 136	322 180	366 224
130	208.00	bu	-32 -173	15 -125	63 -77	111 -30	159 17	206 65	254 113	302 161	350 209	398 256	446 304
140	224.00	bu	10 -130	62 -79	113 -27	165 24	216 75	268 127	319 178	371 230	422 281	474 333	525 384
150	240.00	bu	53 -87	109 -32	164 22	219 78	274 133	329 188	385 243	440 298	495 354	550 409	605 464

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

Table 39.A Estimated costs per acre
Clearfield hybrid countour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	3.3220	48.17	_____
NBPT	pt	9.12	0.8000	7.30	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Clearpath	lb	61.27	0.5000	30.64	_____
Newpath	oz	3.83	6.0000	22.98	_____
Aim	oz	5.65	1.5000	8.48	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Clrfld Hyb Trt	lb	5.70	23.0000	131.10	_____
Rice Seed CFH(Levee)	lb	1.78	4.2500	7.57	_____
Rice Seed Trt/Insect	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc.(Pet.)	pt	2.37	4.0000	9.48	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.3220	30.25	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5475	7.79	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.9886	15.58	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	26.8827	69.89	_____
REPAIR & MAINTENANCE					
Implements	acre	8.32	1.0000	8.32	_____
Tractors	acre	3.10	1.0000	3.10	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	17.84	1.0000	17.84	_____
TOTAL DIRECT EXPENSES				786.94	_____
FIXED EXPENSES					
Implements	acre	20.07	1.0000	20.07	_____
Tractors	acre	21.41	1.0000	21.41	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	49.18	1.0000	49.18	_____
TOTAL FIXED EXPENSES				119.22	_____
TOTAL SPECIFIED EXPENSES				906.16	_____

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 39.B Summary of estimated costs and returns per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	180.0000	828.00	_____

TOTAL INCOME				828.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.25	1.0000	39.25	_____
FERTILIZERS	acre	74.59	1.0000	74.59	_____
HERBICIDES	acre	128.48	1.0000	128.48	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	139.65	1.0000	139.65	_____
ADJUVANTS	acre	13.81	1.0000	13.81	_____
CUSTOM FERTILIZE	acre	30.25	1.0000	30.25	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	14.23	0.7235	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	35.8158	93.13	_____
REPAIR & MAINTENANCE	acre	31.85	1.0000	31.85	_____
INTEREST ON OP. CAP.	acre	17.84	1.0000	17.84	_____

TOTAL DIRECT EXPENSES				786.94	_____
RETURNS ABOVE DIRECT EXPENSES				41.06	_____
TOTAL FIXED EXPENSES				119.22	_____

TOTAL SPECIFIED EXPENSES				906.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-78.16	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 39.C Estimated resource use for field operations, per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clrflld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.72	0.72	5.27	0.53

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

Table 39.D Estimated costs for field operations, per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Clrflld Hyb Trt	lb	131.10						3.93	135.03	135.03
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
MSO	pt	1.05						0.03	1.08	1.08
Class Act NG	pt	1.19						0.04	1.23	1.23
Seed Levees										
Rice Seed CFH(Levee)	lb	7.57						0.23	7.80	7.80
Rice Seed Trt/Insect	lbseed	0.98						0.03	1.01	1.01
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Clearpath	lb	30.64						0.92	31.56	31.56
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88	4.88
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	18.69						0.47	19.16	19.16
Urea, Solid (46% N)	cwt	38.71						0.97	39.68	39.68
NBPT	pt	7.30						0.18	7.48	7.48
App by Air (10 gal)	appl	9.00						0.23	9.23	9.23
Newpath	oz	22.98						0.57	23.55	23.55
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86	4.86
Aim	oz	8.48						0.21	8.69	8.69
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	4.56						0.09	4.65	4.65
Urea, Solid (46% N)	cwt	9.45						0.19	9.64	9.64
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	63.00						0.63	63.63	63.63
Dry Rice	bu	72.00						0.72	72.72	72.72
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	4.50	72.73	14.52	33.73			2.84	128.32	182.36
TOTALS		584.87	93.13	31.85	59.25	0.00	17.84	786.94	119.22	906.16

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

Table 39.E Estimated monthly income and expense flows per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	828.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.14	9.45	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	67.95	31.46	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	139.65	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	2.09	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	4.56	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	15.96	7.71	8.61	8.61	10.69	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	18.38	19.06	19.06	19.06	9.03	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.80	8.06	2.15	2.15	9.53	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	8.15	4.48	1.34	0.68	1.64	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	279.37	183.34	68.06	46.01	165.89	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-279.37	-183.34	-68.06	-46.01	662.11	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-311.84	-495.18	-563.24	-609.25	52.86	41.06

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 39.F Estimated returns for various price/yield combinations, per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Rice	3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75		
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-408 -527	-387 -506	-366 -486	-346 -465	-325 -444	-304 -423	-284 -403	-263 -382	-242 -361	-221 -341	-201 -320
60	108.00	bu	-359 -479	-334 -454	-310 -429	-285 -404	-260 -379	-235 -354	-210 -329	-185 -305	-161 -280	-136 -255	-111 -230
70	126.00	bu	-311 -430	-282 -401	-253 -372	-224 -343	-195 -314	-166 -285	-137 -256	-108 -227	-79 -198	-50 -169	-21 -140
80	144.00	bu	-262 -382	-229 -348	-196 -315	-163 -282	-130 -249	-97 -216	-64 -183	-31 -150	2 -117	35 -84	68 -50
90	162.00	bu	-214 -333	-177 -296	-139 -259	-102 -221	-65 -184	-28 -147	9 -110	46 -72	83 -35	120 1	158 38
100	180.00	bu	-165 -285	-124 -243	-83 -202	-41 -160	-0 -119	41 -78	82 -36	123 4	165 46	206 87	248 128
110	198.00	bu	-117 -236	-71 -191	-26 -145	19 -100	64 -54	110 -8	155 36	201 82	246 127	292 173	337 218
120	216.00	bu	-69 -188	-19 -138	30 -88	80 -39	129 10	179 60	229 109	278 159	328 209	378 258	427 308
130	234.00	bu	-20 -139	33 -85	87 -32	140 21	194 75	248 129	302 183	356 236	410 290	463 344	517 398
140	252.00	bu	27 -91	85 -33	143 24	201 82	259 140	317 198	375 256	433 314	491 372	549 430	607 488
150	270.00	bu	76 -42	138 19	200 81	262 143	324 205	386 267	448 329	511 391	573 453	635 516	697 578

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

Table 40.A Estimated costs per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	3.3220	48.17	_____
NBPT	pt	9.12	0.8000	7.30	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Clearpath	lb	61.27	0.5000	30.64	_____
Newpath	oz	3.83	6.0000	22.98	_____
Aim	oz	5.65	1.5000	8.48	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	5.70	23.0000	131.10	_____
Rice Seed CFH(Levee)	lb	1.78	4.2500	7.57	_____
Rice Seed Trt/Insect	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc. (Pet.)	pt	2.37	4.0000	9.48	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.3220	30.25	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4999	7.12	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.5719	14.50	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	21.9949	57.20	_____
REPAIR & MAINTENANCE					
Implements	acre	8.26	1.0000	8.26	_____
Tractors	acre	2.89	1.0000	2.89	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	17.23	1.0000	17.23	_____
TOTAL DIRECT EXPENSES				758.92	_____
FIXED EXPENSES					
Implements	acre	19.68	1.0000	19.68	_____
Tractors	acre	19.90	1.0000	19.90	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.81	1.0000	76.81	_____
TOTAL FIXED EXPENSES				144.95	_____
TOTAL SPECIFIED EXPENSES				903.87	_____

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

Table 40.B Summary of estimated costs and returns per acre
 Clearfield hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	180.0000	828.00	_____

TOTAL INCOME				828.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.25	1.0000	39.25	_____
FERTILIZERS	acre	74.59	1.0000	74.59	_____
HERBICIDES	acre	128.48	1.0000	128.48	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	139.65	1.0000	139.65	_____
ADJUVANTS	acre	13.81	1.0000	13.81	_____
CUSTOM FERTILIZE	acre	30.25	1.0000	30.25	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	14.23	0.6759	9.62	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	30.5114	79.36	_____
REPAIR & MAINTENANCE	acre	31.57	1.0000	31.57	_____
INTEREST ON OP. CAP.	acre	17.23	1.0000	17.23	_____

TOTAL DIRECT EXPENSES				758.92	_____
RETURNS ABOVE DIRECT EXPENSES				69.08	_____
TOTAL FIXED EXPENSES				144.95	_____

TOTAL SPECIFIED EXPENSES				903.87	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-75.87	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 40.C Estimated resource use for field operations, per acre
 Clearfield hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clrflld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH (Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 40.D Estimated costs for field operations, per acre
 Clearfield hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Clrfld Hyb Trt	lb	131.10						3.93	135.03		135.03
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
MSO	pt	1.05						0.03	1.08		1.08
Class Act NG	pt	1.19						0.04	1.23		1.23
Seed Levees											
Rice Seed CFH (Levee)	lb	7.57						0.23	7.80		7.80
Rice Seed Trt/Insect	lbseed	0.98						0.03	1.01		1.01
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Clearpath	lb	30.64						0.92	31.56		31.56
Crop Oil Conc. (Pet.)	pt	4.74						0.14	4.88		4.88
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
Rice Consultant	acre	8.00						0.20	8.20		8.20
App Fert by Air	cwt	18.69						0.47	19.16		19.16
Urea, Solid (46% N)	cwt	38.71						0.97	39.68		39.68
NBPT	pt	7.30						0.18	7.48		7.48
App by Air (10 gal)	appl	9.00						0.23	9.23		9.23
Newpath	oz	22.98						0.57	23.55		23.55
Crop Oil Conc. (Pet.)	pt	4.74						0.12	4.86		4.86
Aim	oz	8.48						0.21	8.69		8.69
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Clincher SF	oz	17.55						0.35	17.90		17.90
MSO	pt	2.09						0.04	2.13		2.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.04	1.85		1.85
App Fert by Air	cwt	4.56						0.09	4.65		4.65
Urea, Solid (46% N)	cwt	9.45						0.19	9.64		9.64
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	32.79	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	63.00						0.63	63.63		63.63
Dry Rice	bu	72.00						0.72	72.72		72.72
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre	2.25	58.96	14.24	22.62			2.23	100.30	79.77	180.07
TOTALS		582.62	79.36	31.57	48.14	0.00	17.23	758.92	144.95	903.87	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 40.E Estimated monthly income and expense flows per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	828.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.14	9.45	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	67.95	31.46	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	139.65	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	2.09	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	4.56	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	11.95	5.44	6.34	6.34	10.40	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	17.77	14.83	14.83	14.83	8.56	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.97	7.95	2.04	2.04	9.41	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	7.95	4.31	1.21	0.58	1.63	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	272.47	176.56	61.32	39.30	165.00	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-272.47	-176.56	-61.32	-39.30	663.00	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-304.94	-481.50	-542.82	-582.12	80.88	69.08

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 40.F Estimated returns for various price/yield combinations, per acre
 Clearfield hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-380 -525	-359 -504	-338 -483	-318 -463	-297 -442	-276 -421	-256 -400	-235 -380	-214 -359	-193 -338	-173 -318
60	108.00	bu	-331 -476	-306 -451	-282 -427	-257 -402	-232 -377	-207 -352	-182 -327	-157 -302	-133 -278	-108 -253	-83 -228
70	126.00	bu	-283 -428	-254 -399	-225 -370	-196 -341	-167 -312	-138 -283	-109 -254	-80 -225	-51 -196	-22 -167	6 -138
80	144.00	bu	-234 -379	-201 -346	-168 -313	-135 -280	-102 -247	-69 -214	-36 -181	-3 -147	30 -114	63 -81	96 -48
90	162.00	bu	-186 -331	-149 -294	-111 -256	-74 -219	-37 -182	-0 -145	37 -107	74 -70	111 -33	148 4	186 41
100	180.00	bu	-137 -282	-96 -241	-55 -200	-13 -158	27 -117	69 -75	110 -34	151 6	193 48	234 89	276 131
110	198.00	bu	-89 -234	-43 -188	1 -143	47 -97	92 -52	138 -6	183 38	229 84	274 129	320 175	365 220
120	216.00	bu	-40 -185	8 -136	58 -86	108 -36	157 12	207 62	257 112	306 161	356 211	406 261	455 310
130	234.00	bu	7 -137	61 -83	115 -29	168 23	222 77	276 131	330 185	384 239	438 293	491 346	545 400
140	252.00	bu	55 -89	113 -31	171 26	229 84	287 142	345 200	403 258	461 316	519 374	577 432	635 490
150	270.00	bu	104 -40	166 21	228 83	290 145	352 207	414 269	477 332	539 394	601 456	663 518	725 580

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

Table 41.A Estimated costs per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	3.3220	48.17	_____
NBPT	pt	9.12	0.8000	7.30	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Clearpath	lb	61.27	0.5000	30.64	_____
Newpath	oz	3.83	6.0000	22.98	_____
Aim	oz	5.65	1.5000	8.48	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	5.70	23.0000	131.10	_____
Rice Seed CFH(Levee)	lb	1.78	4.2500	7.57	_____
Rice Seed Trt/Insect	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc. (Pet.)	pt	2.37	4.0000	9.48	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.3220	30.25	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5281	7.52	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.8180	15.13	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	18.7364	48.72	_____
REPAIR & MAINTENANCE					
Implements	acre	8.32	1.0000	8.32	_____
Tractors	acre	3.02	1.0000	3.02	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	17.07	1.0000	17.07	_____
TOTAL DIRECT EXPENSES				748.43	_____
FIXED EXPENSES					
Implements	acre	20.19	1.0000	20.19	_____
Tractors	acre	20.80	1.0000	20.80	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.48	1.0000	76.48	_____
TOTAL FIXED EXPENSES				146.03	_____
TOTAL SPECIFIED EXPENSES				894.46	_____

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 41.B Summary of estimated costs and returns per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	180.0000	828.00	_____

TOTAL INCOME				828.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.25	1.0000	39.25	_____
FERTILIZERS	acre	74.59	1.0000	74.59	_____
HERBICIDES	acre	128.48	1.0000	128.48	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	139.65	1.0000	139.65	_____
ADJUVANTS	acre	13.81	1.0000	13.81	_____
CUSTOM FERTILIZE	acre	30.25	1.0000	30.25	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	14.23	0.7041	10.02	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	27.4990	71.51	_____
REPAIR & MAINTENANCE	acre	31.44	1.0000	31.44	_____
INTEREST ON OP. CAP.	acre	17.07	1.0000	17.07	_____

TOTAL DIRECT EXPENSES				748.43	_____
RETURNS ABOVE DIRECT EXPENSES				79.57	_____
TOTAL FIXED EXPENSES				146.03	_____

TOTAL SPECIFIED EXPENSES				894.46	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-66.46	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 41.C Estimated resource use for field operations, per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clrflld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 41.D Estimated costs for field operations, per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Clrfld Hyb Trt	lb	131.10						3.93	135.03	135.03
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
MSO	pt	1.05						0.03	1.08	1.08
Class Act NG	pt	1.19						0.04	1.23	1.23
Seed Levees										
Rice Seed CFH(Levee)	lb	7.57						0.23	7.80	7.80
Rice Seed Trt/Insect	lbseed	0.98						0.03	1.01	1.01
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Clearpath	lb	30.64						0.92	31.56	31.56
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88	4.88
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	18.69						0.47	19.16	19.16
Urea, Solid (46% N)	cwt	38.71						0.97	39.68	39.68
NBPT	pt	7.30						0.18	7.48	7.48
App by Air (10 gal)	appl	9.00						0.23	9.23	9.23
Newpath	oz	22.98						0.57	23.55	23.55
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86	4.86
Aim	oz	8.48						0.21	8.69	8.69
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	4.56						0.09	4.65	4.65
Urea, Solid (46% N)	cwt	9.45						0.19	9.64	9.64
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	63.00						0.63	63.63	63.63
Dry Rice	bu	72.00						0.72	72.72	72.72
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	10.50	51.11	14.11	12.02			2.07	89.81	170.66
TOTALS		590.87	71.51	31.44	37.54	0.00	17.07	748.43	146.03	894.46

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

Table 41.E Estimated monthly income and expense flows per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	828.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.14	9.45	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	67.95	31.46	17.55	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	8.01	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	139.65	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	2.09	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	4.56	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	9.77	2.72	3.62	3.62	10.14	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	16.14	12.71	12.71	12.71	8.70	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	5.01	7.88	1.97	1.97	9.45	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	8.08	4.20	1.11	0.51	1.62	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	277.08	171.54	56.31	34.32	164.91	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-277.08	-171.54	-56.31	-34.32	663.09	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-309.55	-481.09	-537.40	-571.72	91.37	79.57

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 41.F Estimated returns for various price/yield combinations, per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-369 -515	-349 -495	-328 -474	-307 -453	-286 -432	-266 -412	-245 -391	-224 -370	-204 -350	-183 -329	-162 -308
60	108.00	bu	-321 -467	-296 -442	-271 -417	-246 -392	-221 -367	-197 -343	-172 -318	-147 -293	-122 -268	-97 -243	-72 -218
70	126.00	bu	-272 -418	-243 -389	-214 -360	-185 -331	-156 -302	-127 -273	-98 -244	-69 -215	-40 -187	-12 -158	16 -129
80	144.00	bu	-224 -370	-191 -337	-158 -304	-125 -271	-91 -237	-58 -204	-25 -171	7 -138	40 -105	73 -72	106 -39
90	162.00	bu	-175 -321	-138 -284	-101 -247	-64 -210	-26 -172	10 -135	47 -98	84 -61	122 -23	159 13	196 50
100	180.00	bu	-127 -273	-86 -232	-44 -190	-3 -149	38 -107	79 -66	120 -25	162 16	203 57	245 99	286 140
110	198.00	bu	-78 -224	-33 -179	12 -133	57 -88	103 -42	148 2	194 48	239 93	285 139	330 184	376 230
120	216.00	bu	-30 -176	19 -126	68 -77	118 -27	168 22	217 71	267 121	317 171	366 220	416 270	466 320
130	234.00	bu	17 -128	71 -74	125 -20	179 33	233 87	287 141	340 194	394 248	448 302	502 356	556 410
140	252.00	bu	66 -79	124 -21	182 36	240 94	298 152	356 210	414 268	472 326	530 384	588 442	646 500
150	270.00	bu	114 -31	176 30	239 93	301 155	363 217	425 279	487 341	549 403	611 465	673 527	735 589

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

Table 42.A Estimated costs per acre
Clearfield hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	3.3220	48.17	_____
NBPT	pt	9.12	0.8000	7.30	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Clearpath	lb	61.27	0.5000	30.64	_____
Newpath	oz	3.83	6.0000	22.98	_____
Aim	oz	5.65	1.5000	8.48	_____
Clincher SF	oz	2.34	7.5000	17.55	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Clrfld Hyb Trt	lb	5.70	23.0000	131.10	_____
Rice Seed CFH(Levee)	lb	1.78	4.2500	7.57	_____
Rice Seed Trt/Insect	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	2.09	1.5000	3.14	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc.(Pet.)	pt	2.37	4.0000	9.48	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.3220	30.25	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4228	6.02	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	4.8970	12.74	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	15.4779	40.24	_____
REPAIR & MAINTENANCE					
Implements	acre	8.16	1.0000	8.16	_____
Tractors	acre	2.53	1.0000	2.53	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	16.38	1.0000	16.38	_____
TOTAL DIRECT EXPENSES				721.23	_____
FIXED EXPENSES					
Implements	acre	19.19	1.0000	19.19	_____
Tractors	acre	17.43	1.0000	17.43	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.14	1.0000	76.14	_____
TOTAL FIXED EXPENSES				141.32	_____
TOTAL SPECIFIED EXPENSES				862.55	_____

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

Table 42.B Summary of estimated costs and returns per acre
Clearfield hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	180.0000	828.00	_____

TOTAL INCOME				828.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.25	1.0000	39.25	_____
FERTILIZERS	acre	74.59	1.0000	74.59	_____
HERBICIDES	acre	128.48	1.0000	128.48	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	139.65	1.0000	139.65	_____
ADJUVANTS	acre	13.81	1.0000	13.81	_____
CUSTOM FERTILIZE	acre	30.25	1.0000	30.25	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	14.23	0.5988	8.52	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	23.3194	60.64	_____
REPAIR & MAINTENANCE	acre	28.79	1.0000	28.79	_____
INTEREST ON OP. CAP.	acre	16.38	1.0000	16.38	_____

TOTAL DIRECT EXPENSES				721.23	_____
RETURNS ABOVE DIRECT EXPENSES				106.77	_____
TOTAL FIXED EXPENSES				141.32	_____

TOTAL SPECIFIED EXPENSES				862.55	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-34.55	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 42.C Estimated resource use for field operations, per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clrflld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH (Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

Table 42.D Estimated costs for field operations, per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Clrflld Hyb Trt	lb	131.10						3.93	135.03	135.03
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
MSO	pt	1.05						0.03	1.08	1.08
Class Act NG	pt	1.19						0.04	1.23	1.23
Seed Levees										
Rice Seed CFH(Levee)	lb	7.57						0.23	7.80	7.80
Rice Seed Trt/Insect	lbseed	0.98						0.03	1.01	1.01
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Clearpath	lb	30.64						0.92	31.56	31.56
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88	4.88
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	18.69						0.47	19.16	19.16
Urea, Solid (46% N)	cwt	38.71						0.97	39.68	39.68
NBPT	pt	7.30						0.18	7.48	7.48
App by Air (10 gal)	appl	9.00						0.23	9.23	9.23
Newpath	oz	22.98						0.57	23.55	23.55
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86	4.86
Aim	oz	8.48						0.21	8.69	8.69
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Clincher SF	oz	17.55						0.35	17.90	17.90
MSO	pt	2.09						0.04	2.13	2.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.04	1.85	1.85
App Fert by Air	cwt	4.56						0.09	4.65	4.65
Urea, Solid (46% N)	cwt	9.45						0.19	9.64	9.64
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	63.00						0.63	63.63	63.63
Dry Rice	bu	72.00						0.72	72.72	72.72
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre		40.24	11.46	9.53			1.38	62.61	138.75
TOTALS		580.37	60.64	28.79	35.05	0.00	16.38	721.23	141.32	862.55

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

Table 42.E Estimated monthly income and expense flows per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	828.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.14	9.45	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	67.95	31.46	17.55	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	139.65	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	2.09	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	4.56	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	6.91	3.18	4.08	4.08	9.13	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	12.34	10.59	10.59	10.59	7.99	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.09	7.37	1.46	1.46	9.25	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	7.54	4.14	1.07	0.47	1.61	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	258.46	169.31	54.10	32.11	162.98	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-258.46	-169.31	-54.10	-32.11	665.02	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-290.93	-460.24	-514.34	-546.45	118.57	106.77

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 42.F Estimated returns for various price/yield combinations, per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-342 -483	-321 -463	-301 -442	-280 -421	-259 -401	-239 -380	-218 -359	-197 -338	-176 -318	-156 -297	-135 -276
60	108.00	bu	-294 -435	-269 -410	-244 -385	-219 -360	-194 -336	-169 -311	-145 -286	-120 -261	-95 -236	-70 -211	-45 -187
70	126.00	bu	-245 -386	-216 -357	-187 -328	-158 -300	-129 -271	-100 -242	-71 -213	-42 -184	-13 -155	15 -126	44 -97
80	144.00	bu	-197 -338	-164 -305	-130 -272	-97 -239	-64 -206	-31 -172	1 -139	34 -106	67 -73	100 -40	134 -7
90	162.00	bu	-148 -290	-111 -252	-74 -215	-36 -178	0 -140	37 -103	74 -66	112 -29	149 8	186 45	223 82
100	180.00	bu	-100 -241	-58 -200	-17 -158	23 -117	65 -75	106 -34	148 6	189 48	230 89	272 131	313 172
110	198.00	bu	-51 -193	-6 -147	39 -102	84 -56	130 -10	175 34	221 80	267 125	312 171	358 216	403 262
120	216.00	bu	-3 -144	46 -94	96 -45	145 4	195 54	245 103	294 153	344 203	394 252	443 302	493 352
130	234.00	bu	45 -96	98 -42	152 11	206 65	260 119	314 172	368 226	421 280	475 334	529 388	583 442
140	252.00	bu	93 -47	151 10	209 68	267 126	325 184	383 242	441 300	499 358	557 415	615 473	673 531
150	270.00	bu	142 0	204 62	266 124	328 187	390 249	452 311	514 373	576 435	638 497	700 559	763 621

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

Table 43.A Estimated costs per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Provisia	oz	0.78	31.0000	24.18	_____
Aim	oz	5.65	1.0000	5.65	_____
Permit	oz	22.46	0.7500	16.85	_____
Regiment	oz	44.90	0.2500	11.23	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.15	77.0000	88.55	_____
Rice Seed Trt/Insect	lbseed	0.23	77.0000	17.71	_____
ADJUVANTS					
Class Act NG	pt	2.38	0.5000	1.19	_____
MSO	pt	2.09	0.5000	1.05	_____
Crop Oil Conc. (Pet.)	pt	2.37	4.0000	9.48	_____
Dyne-A-Pak	pt	4.80	0.2500	1.20	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5475	7.79	_____
Harvesters	hour	14.23	0.2030	2.89	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	14.25	0.5633	8.03	_____
DIESEL FUEL					
Tractors	gal	2.60	5.9886	15.58	_____
Harvesters	gal	2.60	3.3975	8.83	_____
Flood Irr.	gal	2.60	26.8827	69.89	_____
REPAIR & MAINTENANCE					
Implements	acre	8.70	1.0000	8.70	_____
Tractors	acre	3.10	1.0000	3.10	_____
Harvesters	acre	7.66	1.0000	7.66	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	17.13	1.0000	17.13	_____
TOTAL DIRECT EXPENSES				772.95	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	21.41	1.0000	21.41	_____
Harvesters	acre	32.95	1.0000	32.95	_____
Flood Irr.	acre	49.18	1.0000	49.18	_____
TOTAL FIXED EXPENSES				124.26	_____
TOTAL SPECIFIED EXPENSES				897.21	_____

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

Table 43.B Summary of estimated costs and returns per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	156.0000	717.60	_____

TOTAL INCOME				717.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.75	1.0000	45.75	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	106.74	1.0000	106.74	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	106.26	1.0000	106.26	_____
ADJUVANTS	acre	13.28	1.0000	13.28	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	14.23	0.7506	10.68	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	14.25	0.5633	8.03	_____
DIESEL FUEL	gal	2.60	36.2688	94.30	_____
REPAIR & MAINTENANCE	acre	33.25	1.0000	33.25	_____
INTEREST ON OP. CAP.	acre	17.13	1.0000	17.13	_____

TOTAL DIRECT EXPENSES				772.95	_____
RETURNS ABOVE DIRECT EXPENSES				-55.35	_____
TOTAL FIXED EXPENSES				124.26	_____

TOTAL SPECIFIED EXPENSES				897.21	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-179.61	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 43.C Estimated resource use for field operations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Table 43.D Estimated costs for field operations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99	6.99
2,4-D Amine 4	pt	4.80						0.19	4.99	4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	15.19
Rice Seed Provisia	lb	74.75						2.24	76.99	76.99
Rice Seed Trt/Insect	lbseed	14.95						0.45	15.40	15.40
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Command 3ME	pt	19.93						0.60	20.53	20.53
Sharpen	oz	12.90						0.39	13.29	13.29
Class Act NG	pt	1.19						0.04	1.23	1.23
MSO	pt	1.05						0.03	1.08	1.08
Seed Levees										
Rice Seed Provisia	lb	13.80						0.41	14.21	14.21
Rice Seed Trt/Insect	lbseed	2.76						0.08	2.84	2.84
App by Air (5 gal)	appl	6.50						0.20	6.70	6.70
Provisia	oz	12.09						0.36	12.45	12.45
Aim	oz	5.65						0.17	5.82	5.82
Permit	oz	16.85						0.51	17.36	17.36
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88	4.88
App Fert by Air	cwt	7.00						0.18	7.18	7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43	7.43
DAP	cwt	11.88						0.30	12.18	12.18
Rice Consultant	acre	8.00						0.20	8.20	8.20
App Fert by Air	cwt	17.50						0.44	17.94	17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16	37.16
NBPT	pt	6.84						0.17	7.01	7.01
App by Air (10 gal)	appl	9.00						0.23	9.23	9.23
Provisia	oz	12.09						0.30	12.39	12.39
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86	4.86
Rice Management										
RICE MGT. LABOR	hour				2.72			0.07	2.79	2.79
App by Air (5 gal)	appl	3.25						0.07	3.32	3.32
Regiment	oz	11.23						0.22	11.45	11.45
Dyne-A-Pak	pt	1.20						0.02	1.22	1.22
Rice Management										
RICE MGT. LABOR	hour				4.53			0.09	4.62	4.62
App Fert by Air	cwt	10.50						0.21	10.71	10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18	22.18
Rice Management										
RICE MGT. LABOR	hour				4.53			0.07	4.60	4.60
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Stratego	pt	29.19						0.44	29.63	29.63
Surfactant	pt	0.36						0.01	0.37	0.37
App by Air (3 gal)	appl	7.50						0.11	7.61	7.61
Warrior II	oz	8.01						0.12	8.13	8.13
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (CL)	25' Rigid		8.83	10.47	5.49			0.25	25.04	62.87
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	1.49
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.55	55.15	55.15
Dry Rice	bu	62.40						0.62	63.02	63.02
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	23.15
Flood Irr.	acre	4.50	72.73	14.52	33.73			2.84	128.32	182.36
TOTALS		561.03	94.30	33.25	67.24	0.00	17.13	772.95	124.26	897.21

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 43.E Estimated monthly income and expense flows per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	717.60	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	71.90	12.09	11.23	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	106.26	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	1.20	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	15.96	9.52	11.33	11.33	11.43	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	18.38	19.06	19.06	19.06	10.20	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.80	8.06	2.15	2.15	10.93	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	7.26	3.95	1.60	1.27	1.50	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	249.04	161.14	82.07	85.37	151.06	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-249.04	-161.14	-82.07	-85.37	566.54	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-281.51	-442.65	-524.72	-610.09	-43.55	-55.35

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 43.F Estimated returns for various price/yield combinations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2019

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	-----dollars-----										
50	78.00	bu	-444 -569	-426 -551	-408 -533	-390 -515	-373 -497	-355 -479	-337 -461	-319 -443	-301 -425	-283 -407	-265 -389
60	93.60	bu	-402 -527	-381 -505	-359 -483	-338 -462	-316 -440	-295 -419	-273 -397	-252 -376	-230 -354	-209 -333	-187 -311
70	109.20	bu	-360 -485	-335 -459	-310 -434	-285 -409	-260 -384	-235 -359	-210 -334	-184 -309	-159 -284	-134 -258	-109 -233
80	124.80	bu	-318 -443	-290 -414	-261 -385	-232 -356	-203 -328	-175 -299	-146 -270	-117 -242	-89 -213	-60 -184	-31 -155
90	140.40	bu	-276 -401	-244 -368	-212 -336	-179 -304	-147 -271	-115 -239	-83 -207	-50 -174	-18 -142	13 -110	46 -78
100	156.00	bu	-234 -359	-198 -323	-162 -287	-127 -251	-91 -215	-55 -179	-19 -143	16 -107	52 -71	88 -36	124 -0
110	171.60	bu	-192 -317	-153 -277	-113 -238	-74 -198	-34 -159	4 -119	44 -80	83 -40	122 -1	162 38	201 77
120	187.20	bu	-150 -275	-107 -231	-64 -188	-21 -145	21 -102	64 -59	107 -16	150 26	193 69	236 112	279 155
130	202.80	bu	-108 -233	-62 -186	-15 -139	31 -93	77 -46	124 0	171 46	217 93	264 140	311 186	357 233
140	218.40	bu	-66 -190	-16 -140	33 -90	83 -40	134 9	184 60	234 110	284 160	335 210	385 261	435 311
150	234.00	bu	-24 -148	29 -95	82 -41	136 12	190 66	244 120	298 173	352 227	405 281	459 335	513 389

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

Table 44.A Estimated costs per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Provisia	oz	0.78	31.0000	24.18	_____
Aim	oz	5.65	1.0000	5.65	_____
Permit	oz	22.46	0.7500	16.85	_____
Regiment	oz	44.90	0.2500	11.23	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.15	77.0000	88.55	_____
Rice Seed Trt/Insect	lbseed	0.23	77.0000	17.71	_____
ADJUVANTS					
MSO	pt	2.09	0.5000	1.05	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc.(Pet.)	pt	2.37	4.0000	9.48	_____
Dyne-A-Pak	pt	4.80	0.2500	1.20	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4999	7.12	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.5719	14.50	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	21.9949	57.20	_____
REPAIR & MAINTENANCE					
Implements	acre	8.26	1.0000	8.26	_____
Tractors	acre	2.89	1.0000	2.89	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	16.34	1.0000	16.34	_____
TOTAL DIRECT EXPENSES				734.19	_____
FIXED EXPENSES					
Implements	acre	19.68	1.0000	19.68	_____
Tractors	acre	19.90	1.0000	19.90	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.81	1.0000	76.81	_____
TOTAL FIXED EXPENSES				144.95	_____
TOTAL SPECIFIED EXPENSES				879.14	_____

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 44.B Summary of estimated costs and returns per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	156.0000	717.60	_____

TOTAL INCOME				717.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.75	1.0000	45.75	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	106.74	1.0000	106.74	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	106.26	1.0000	106.26	_____
ADJUVANTS	acre	13.28	1.0000	13.28	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	14.23	0.6759	9.62	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	30.5114	79.36	_____
REPAIR & MAINTENANCE	acre	31.57	1.0000	31.57	_____
INTEREST ON OP. CAP.	acre	16.34	1.0000	16.34	_____

TOTAL DIRECT EXPENSES				734.19	_____
RETURNS ABOVE DIRECT EXPENSES				-16.59	_____
TOTAL FIXED EXPENSES				144.95	_____

TOTAL SPECIFIED EXPENSES				879.14	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-161.54	_____

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

Table 44.C Estimated resource use for field operations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 44.D Estimated costs for field operations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Seed Provisia	lb	74.75						2.24	76.99		76.99
Rice Seed Trt/Insect	lbseed	14.95						0.45	15.40		15.40
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
MSO	pt	1.05						0.03	1.08		1.08
Class Act NG	pt	1.19						0.04	1.23		1.23
Seed Levees											
Rice Seed Provisia	lb	13.80						0.41	14.21		14.21
Rice Seed Trt/Insect	lbseed	2.76						0.08	2.84		2.84
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Provisia	oz	12.09						0.36	12.45		12.45
Aim	oz	5.65						0.17	5.82		5.82
Permit	oz	16.85						0.51	17.36		17.36
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88		4.88
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
Rice Consultant	acre	8.00						0.20	8.20		8.20
App Fert by Air	cwt	17.50						0.44	17.94		17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16		37.16
NBPT	pt	6.84						0.17	7.01		7.01
App by Air (10 gal)	appl	9.00						0.23	9.23		9.23
Provisia	oz	12.09						0.30	12.39		12.39
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86		4.86
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Regiment	oz	11.23						0.22	11.45		11.45
Dyne-A-Pak	pt	1.20						0.02	1.22		1.22
Rice Management											
RICE MGT. LABOR	hour				1.81			0.04	1.85		1.85
App Fert by Air	cwt	10.50						0.21	10.71		10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18		22.18
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Stratego	pt	29.19						0.44	29.63		29.63
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	32.79	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.55	55.15		55.15
Dry Rice	bu	62.40						0.62	63.02		63.02
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre	2.25	58.96	14.24	22.62			2.23	100.30	79.77	180.07
TOTALS		558.78	79.36	31.57	48.14	0.00	16.34	734.19	144.95	879.14	

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

Table 44.E Estimated monthly income and expense flows per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	717.60	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	71.90	12.09	11.23	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	106.26	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	1.20	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	11.95	5.44	6.34	6.34	10.40	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	17.77	14.83	14.83	14.83	8.56	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.97	7.95	2.04	2.04	9.41	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	7.06	3.73	1.42	1.13	1.45	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	242.14	152.50	72.56	75.90	146.82	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-242.14	-152.50	-72.56	-75.90	570.78	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-274.61	-427.11	-499.67	-575.57	-4.79	-16.59

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 44.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-406 -550	-388 -533	-370 -515	-352 -497	-334 -479	-316 -461	-298 -443	-280 -425	-262 -407	-244 -389	-226 -371
60	93.60	bu	-364 -508	-342 -487	-320 -465	-299 -444	-277 -422	-256 -401	-234 -379	-213 -358	-191 -336	-170 -315	-148 -293
70	109.20	bu	-321 -466	-296 -441	-271 -416	-246 -391	-221 -366	-196 -341	-171 -316	-146 -291	-121 -266	-95 -240	-70 -215
80	124.80	bu	-279 -424	-251 -396	-222 -367	-193 -338	-165 -310	-136 -281	-107 -252	-79 -224	-50 -195	-21 -166	7 -137
90	140.40	bu	-237 -382	-205 -350	-173 -318	-141 -286	-108 -253	-76 -221	-44 -189	-11 -156	20 -124	52 -92	84 -60
100	156.00	bu	-195 -340	-160 -305	-124 -269	-88 -233	-52 -197	-16 -161	19 -125	55 -89	91 -53	126 -18	162 17
110	171.60	bu	-153 -298	-114 -259	-75 -220	-35 -180	3 -141	43 -101	82 -62	122 -22	161 16	201 56	240 95
120	187.20	bu	-111 -256	-68 -213	-25 -170	17 -127	60 -84	103 -41	146 1	189 44	232 87	275 130	318 173
130	202.80	bu	-69 -214	-23 -168	23 -121	69 -74	116 -28	163 18	209 64	256 111	303 158	349 204	396 251
140	218.40	bu	-27 -172	22 -122	72 -72	122 -22	172 28	223 78	273 128	323 178	373 228	424 279	474 329
150	234.00	bu	14 -130	67 -77	121 -23	175 30	229 84	283 138	336 191	390 245	444 299	498 353	552 407

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

Table 45.A Estimated costs per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Provisia	oz	0.78	31.0000	24.18	_____
Aim	oz	5.65	1.0000	5.65	_____
Permit	oz	22.46	0.7500	16.85	_____
Regiment	oz	44.90	0.2500	11.23	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.15	77.0000	88.55	_____
Rice Seed Trt/Insect	lbseed	0.23	77.0000	17.71	_____
ADJUVANTS					
MSO	pt	2.09	0.5000	1.05	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc. (Pet.)	pt	2.37	4.0000	9.48	_____
Dyne-A-Pak	pt	4.80	0.2500	1.20	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.5281	7.52	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	5.8180	15.13	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	18.7364	48.72	_____
REPAIR & MAINTENANCE					
Implements	acre	8.32	1.0000	8.32	_____
Tractors	acre	3.02	1.0000	3.02	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	16.18	1.0000	16.18	_____
TOTAL DIRECT EXPENSES				723.70	_____
FIXED EXPENSES					
Implements	acre	20.19	1.0000	20.19	_____
Tractors	acre	20.80	1.0000	20.80	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.48	1.0000	76.48	_____
TOTAL FIXED EXPENSES				146.03	_____
TOTAL SPECIFIED EXPENSES				869.73	_____

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 45.B Summary of estimated costs and returns per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	156.0000	717.60	_____

TOTAL INCOME				717.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.75	1.0000	45.75	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	106.74	1.0000	106.74	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	106.26	1.0000	106.26	_____
ADJUVANTS	acre	13.28	1.0000	13.28	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	14.23	0.7041	10.02	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	27.4990	71.51	_____
REPAIR & MAINTENANCE	acre	31.44	1.0000	31.44	_____
INTEREST ON OP. CAP.	acre	16.18	1.0000	16.18	_____

TOTAL DIRECT EXPENSES				723.70	_____
RETURNS ABOVE DIRECT EXPENSES				-6.10	_____
TOTAL FIXED EXPENSES				146.03	_____

TOTAL SPECIFIED EXPENSES				869.73	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-152.13	_____

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

Table 45.C Estimated resource use for field operations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 45.D Estimated costs for field operations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Seed Provisia	lb	74.75						2.24	76.99		76.99
Rice Seed Trt/Insect	lbseed	14.95						0.45	15.40		15.40
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
MSO	pt	1.05						0.03	1.08		1.08
Class Act NG	pt	1.19						0.04	1.23		1.23
Seed Levees											
Rice Seed Provisia	lb	13.80						0.41	14.21		14.21
Rice Seed Trt/Insect	lbseed	2.76						0.08	2.84		2.84
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Provisia	oz	12.09						0.36	12.45		12.45
Aim	oz	5.65						0.17	5.82		5.82
Permit	oz	16.85						0.51	17.36		17.36
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88		4.88
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
Rice Consultant	acre	8.00						0.20	8.20		8.20
App Fert by Air	cwt	17.50						0.44	17.94		17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16		37.16
NBPT	pt	6.84						0.17	7.01		7.01
App by Air (10 gal)	appl	9.00						0.23	9.23		9.23
Provisia	oz	12.09						0.30	12.39		12.39
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86		4.86
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Regiment	oz	11.23						0.22	11.45		11.45
Dyne-A-Pak	pt	1.20						0.02	1.22		1.22
Rice Management											
RICE MGT. LABOR	hour				1.81			0.04	1.85		1.85
App Fert by Air	cwt	10.50						0.21	10.71		10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18		22.18
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Stratego	pt	29.19						0.44	29.63		29.63
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	32.79	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.55	55.15		55.15
Dry Rice	bu	62.40						0.62	63.02		63.02
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre	10.50	51.11	14.11	12.02			2.07	89.81	80.85	170.66
TOTALS		567.03	71.51	31.44	37.54	0.00	16.18	723.70	146.03	869.73	

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

Table 45.E Estimated monthly income and expense flows per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	717.60	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	71.90	12.09	11.23	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	8.01	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	106.26	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	1.20	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	9.77	2.72	3.62	3.62	10.14	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	16.14	12.71	12.71	12.71	8.70	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	5.01	7.88	1.97	1.97	9.45	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	7.19	3.62	1.32	1.06	1.44	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	246.75	147.48	67.55	70.92	146.73	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-246.75	-147.48	-67.55	-70.92	570.87	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-279.22	-426.70	-494.25	-565.17	5.70	-6.10

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 45.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-395 -541	-377 -523	-359 -505	-341 -487	-323 -469	-305 -451	-287 -433	-269 -415	-251 -398	-234 -380	-216 -362
60	93.60	bu	-353 -499	-331 -478	-310 -456	-288 -434	-267 -413	-245 -391	-224 -370	-202 -348	-181 -327	-159 -305	-138 -284
70	109.20	bu	-311 -457	-286 -432	-261 -407	-236 -382	-211 -357	-185 -331	-160 -306	-135 -281	-110 -256	-85 -231	-60 -206
80	124.80	bu	-269 -415	-240 -386	-212 -358	-183 -329	-154 -300	-125 -272	-97 -243	-68 -214	-39 -185	-11 -157	17 -128
90	140.40	bu	-227 -373	-195 -341	-162 -308	-130 -276	-98 -244	-66 -212	-33 -179	-1 -147	30 -115	63 -82	95 -50
100	156.00	bu	-185 -331	-149 -295	-113 -259	-77 -223	-41 -188	-6 -152	29 -116	65 -80	101 -44	137 -8	173 27
110	171.60	bu	-143 -289	-104 -250	-64 -210	-25 -171	14 -131	53 -92	93 -52	132 -13	172 26	211 65	251 105
120	187.20	bu	-101 -247	-58 -204	-15 -161	27 -118	70 -75	113 -32	156 10	199 53	242 96	286 139	329 183
130	202.80	bu	-59 -205	-12 -158	33 -112	80 -65	127 -18	173 27	220 74	267 120	313 167	360 214	406 260
140	218.40	bu	-17 -163	32 -113	82 -63	133 -12	183 37	233 87	283 137	334 188	384 238	434 288	484 338
150	234.00	bu	24 -121	78 -67	132 -13	185 39	239 93	293 147	347 201	401 255	455 309	508 362	562 416

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

Table 46.A Estimated costs per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	14.50	0.5000	7.25	_____
DAP	cwt	23.76	0.5000	11.88	_____
Urea, Solid (46% N)	cwt	14.50	4.0000	58.00	_____
NBPT	pt	9.12	0.7500	6.84	_____
FUNGICIDES					
Stratego	pt	24.58	1.1875	29.19	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.40	2.0000	4.80	_____
Command 3ME	pt	19.93	1.0000	19.93	_____
Sharpen	oz	6.45	2.0000	12.90	_____
Provisia	oz	0.78	31.0000	24.18	_____
Aim	oz	5.65	1.0000	5.65	_____
Permit	oz	22.46	0.7500	16.85	_____
Regiment	oz	44.90	0.2500	11.23	_____
INSECTICIDES					
Warrior II	oz	2.67	3.0000	8.01	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.15	77.0000	88.55	_____
Rice Seed Trt/Insect	lbseed	0.23	77.0000	17.71	_____
ADJUVANTS					
MSO	pt	2.09	0.5000	1.05	_____
Class Act NG	pt	2.38	0.5000	1.19	_____
Crop Oil Conc. (Pet.)	pt	2.37	4.0000	9.48	_____
Dyne-A-Pak	pt	4.80	0.2500	1.20	_____
Surfactant	pt	3.59	0.1000	0.36	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4228	6.02	_____
Harvesters	hour	14.23	0.1760	2.50	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL					
Tractors	gal	2.60	4.8970	12.74	_____
Harvesters	gal	2.60	2.9444	7.66	_____
Flood Irr.	gal	2.60	15.4779	40.24	_____
REPAIR & MAINTENANCE					
Implements	acre	8.16	1.0000	8.16	_____
Tractors	acre	2.53	1.0000	2.53	_____
Harvesters	acre	6.64	1.0000	6.64	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	15.49	1.0000	15.49	_____
TOTAL DIRECT EXPENSES				696.50	_____
FIXED EXPENSES					
Implements	acre	19.19	1.0000	19.19	_____
Tractors	acre	17.43	1.0000	17.43	_____
Harvesters	acre	28.56	1.0000	28.56	_____
Flood Irr.	acre	76.14	1.0000	76.14	_____
TOTAL FIXED EXPENSES				141.32	_____
TOTAL SPECIFIED EXPENSES				837.82	_____

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

Table 46.B Summary of estimated costs and returns per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.60	156.0000	717.60	_____

TOTAL INCOME				717.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.75	1.0000	45.75	_____
FERTILIZERS	acre	83.97	1.0000	83.97	_____
FUNGICIDES	acre	29.19	1.0000	29.19	_____
HERBICIDES	acre	106.74	1.0000	106.74	_____
INSECTICIDES	acre	8.01	1.0000	8.01	_____
SEED/PLANTS	acre	106.26	1.0000	106.26	_____
ADJUVANTS	acre	13.28	1.0000	13.28	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	14.23	0.5988	8.52	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.24	0.5389	7.68	_____
DIESEL FUEL	gal	2.60	23.3194	60.64	_____
REPAIR & MAINTENANCE	acre	28.79	1.0000	28.79	_____
INTEREST ON OP. CAP.	acre	15.49	1.0000	15.49	_____

TOTAL DIRECT EXPENSES				696.50	_____
RETURNS ABOVE DIRECT EXPENSES				21.10	_____
TOTAL FIXED EXPENSES				141.32	_____

TOTAL SPECIFIED EXPENSES				837.82	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-120.22	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 46.C Estimated resource use for field operations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior II	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

Table 46.D Estimated costs for field operations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Field Cultivate Fld	32'		2.81	1.57	2.53			0.41	7.32	8.57	15.89
Harrow - Folding	40'		1.17	0.50	1.05			0.16	2.88	2.06	4.94
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Glyphosate 3lbs a.e	oz	6.72						0.27	6.99		6.99
2,4-D Amine 4	pt	4.80						0.19	4.99		4.99
Grain Drill	24'		2.37	2.40	2.84			0.23	7.84	7.35	15.19
Rice Seed Provisia	lb	74.75						2.24	76.99		76.99
Rice Seed Trt/Insect	lbseed	14.95						0.45	15.40		15.40
Roller/Cultipacker	30'		1.50	0.52	1.35			0.10	3.47	2.39	5.86
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Command 3ME	pt	19.93						0.60	20.53		20.53
Sharpen	oz	12.90						0.39	13.29		13.29
MSO	pt	1.05						0.03	1.08		1.08
Class Act NG	pt	1.19						0.04	1.23		1.23
Seed Levees											
Rice Seed Provisia	lb	13.80						0.41	14.21		14.21
Rice Seed Trt/Insect	lbseed	2.76						0.08	2.84		2.84
App by Air (5 gal)	appl	6.50						0.20	6.70		6.70
Provisia	oz	12.09						0.36	12.45		12.45
Aim	oz	5.65						0.17	5.82		5.82
Permit	oz	16.85						0.51	17.36		17.36
Crop Oil Conc.(Pet.)	pt	4.74						0.14	4.88		4.88
App Fert by Air	cwt	7.00						0.18	7.18		7.18
Amm Sulfate (21% N)	cwt	7.25						0.18	7.43		7.43
DAP	cwt	11.88						0.30	12.18		12.18
Rice Consultant	acre	8.00						0.20	8.20		8.20
App Fert by Air	cwt	17.50						0.44	17.94		17.94
Urea, Solid (46% N)	cwt	36.25						0.91	37.16		37.16
NBPT	pt	6.84						0.17	7.01		7.01
App by Air (10 gal)	appl	9.00						0.23	9.23		9.23
Provisia	oz	12.09						0.30	12.39		12.39
Crop Oil Conc.(Pet.)	pt	4.74						0.12	4.86		4.86
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.25						0.07	3.32		3.32
Regiment	oz	11.23						0.22	11.45		11.45
Dyne-A-Pak	pt	1.20						0.02	1.22		1.22
Rice Management											
RICE MGT. LABOR	hour				1.81			0.04	1.85		1.85
App Fert by Air	cwt	10.50						0.21	10.71		10.71
Urea, Solid (46% N)	cwt	21.75						0.43	22.18		22.18
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App by Air (5 gal)	appl	6.50						0.10	6.60		6.60
Stratego	pt	29.19						0.44	29.63		29.63
Surfactant	pt	0.36						0.01	0.37		0.37
App by Air (3 gal)	appl	7.50						0.11	7.61		7.61
Warrior II	oz	8.01						0.12	8.13		8.13
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		7.66	9.07	4.75			0.21	21.69	32.79	54.48
Grain Cart Rice	700 bu		0.33	0.18	0.30			0.01	0.82	0.67	1.49
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.55	55.15		55.15
Dry Rice	bu	62.40						0.62	63.02		63.02
Disk Heavy	28'		4.56	3.09	4.09			0.06	11.80	11.35	23.15
Flood Irr.	acre		40.24	11.46	9.53			1.38	62.61	76.14	138.75
TOTALS			556.53	60.64	28.79	35.05	0.00	15.49	696.50	141.32	837.82

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

Table 46.E Estimated monthly income and expense flows per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	717.60	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	9.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.22	21.75	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.19	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	11.52	0.00	71.90	12.09	11.23	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	8.01	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	106.26	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	6.98	4.74	1.20	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	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	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	0.00	0.00	0.00	0.00	6.91	3.18	4.08	4.08	9.13	4.09
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	3.98	0.00	0.00	0.00	0.00	0.00	12.34	10.59	10.59	10.59	7.99	4.56
REPAIR & MAINTENANCE	2.07	0.00	0.00	0.00	0.00	0.00	4.09	7.37	1.46	1.46	9.25	3.09
INTEREST ON OP. CAP.	0.77	0.00	0.00	0.00	0.72	0.00	6.65	3.56	1.28	1.02	1.43	0.06
TOTAL DIRECT EXPENSES	13.73	0.00	0.00	0.00	18.74	0.00	228.13	145.25	65.34	68.71	144.80	11.80
NET INCOME	-13.73	0.00	0.00	0.00	-18.74	0.00	-228.13	-145.25	-65.34	-68.71	572.80	-11.80
NET INCOME TO DATE	-13.73	-13.73	-13.73	-13.73	-32.47	-32.47	-260.60	-405.85	-471.19	-539.90	32.90	21.10

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3rd year.

* Lease costs are based on hourly usage costs.

Table 46.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2019

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.45	3.68	3.91	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-368 -509	-350 -491	-332 -473	-314 -455	-296 -437	-278 -419	-260 -401	-242 -384	-224 -366	-206 -348	-188 -330
60	93.60	bu	-326 -467	-304 -446	-283 -424	-261 -403	-240 -381	-218 -359	-197 -338	-175 -316	-154 -295	-132 -273	-111 -252
70	109.20	bu	-284 -425	-259 -400	-234 -375	-208 -350	-183 -325	-158 -300	-133 -274	-108 -249	-83 -224	-58 -199	-33 -174
80	124.80	bu	-242 -383	-213 -354	-184 -326	-156 -297	-127 -268	-98 -240	-70 -211	-41 -182	-12 -153	16 -125	44 -96
90	140.40	bu	-200 -341	-168 -309	-135 -277	-103 -244	-71 -212	-38 -180	-6 -147	25 -115	58 -83	90 -50	122 -18
100	156.00	bu	-158 -299	-122 -263	-86 -227	-50 -191	-14 -156	21 -120	56 -84	92 -48	128 -12	164 23	200 59
110	171.60	bu	-116 -257	-76 -218	-37 -178	2 -139	41 -99	81 -60	120 -20	159 18	199 58	238 97	278 137
120	187.20	bu	-74 -215	-31 -172	11 -129	54 -86	97 -43	140 -0	184 42	227 85	270 128	313 171	356 214
130	202.80	bu	-32 -173	14 -126	60 -80	107 -33	154 12	200 59	247 106	294 152	340 199	387 246	434 292
140	218.40	bu	9 -131	59 -81	110 -31	160 19	210 69	260 119	311 169	361 220	411 270	461 320	512 370
150	234.00	bu	51 -89	105 -35	159 18	213 71	266 125	320 179	374 233	428 287	482 340	536 394	589 448

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

Table 47.A Estimated costs per acre
Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.88	5.5000	37.84	_____
Aframe	oz	1.91	36.0000	68.76	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_____
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	12.71	1.0000	12.71	_____
INSECTICIDES					
Admire Pro	oz	1.80	9.0000	16.20	_____
Acephate 90%	lb	8.70	0.1375	1.20	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	125.0000	105.00	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.58	6.0000	15.48	_____
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	38.00	0.3330	12.65	_____
INOCULANT					
Optimize LIFT	oz	0.55	14.8000	8.14	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	1.6246	23.12	_____
Self-Propelled	hour	14.23	0.1983	2.81	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	14.22	1.4583	20.74	_____
DIESEL FUEL					
Tractors	gal	2.60	17.5722	45.69	_____
Self-Propelled	gal	2.60	1.7850	4.61	_____
REPAIR & MAINTENANCE					
Implements	acre	11.62	1.0000	11.62	_____
Tractors	acre	9.36	1.0000	9.36	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	8.67	1.0000	8.67	_____
TOTAL DIRECT EXPENSES				547.88	_____
FIXED EXPENSES					
Implements	acre	45.28	1.0000	45.28	_____
Tractors	acre	64.59	1.0000	64.59	_____
Self-Propelled	acre	15.86	1.0000	15.86	_____
TOTAL FIXED EXPENSES				125.73	_____
TOTAL SPECIFIED EXPENSES				673.61	_____

Note: Cost of production estimates are based on 2018 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 47.B Summary of estimated costs and returns per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2019

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	111.71	1.0000	111.71	_____
HERBICIDES	acre	89.85	1.0000	89.85	_____
INSECTICIDES	acre	17.40	1.0000	17.40	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
ADJUVANTS	acre	15.48	1.0000	15.48	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
INOCULANT	acre	8.14	1.0000	8.14	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	14.23	1.8229	25.93	_____
UNALLOCATED LABOR	hour	14.22	1.4583	20.74	_____
DIESEL FUEL	gal	2.60	19.3573	50.30	_____
REPAIR & MAINTENANCE	acre	23.23	1.0000	23.23	_____
INTEREST ON OP. CAP.	acre	8.67	1.0000	8.67	_____

TOTAL DIRECT EXPENSES				547.88	_____
RETURNS ABOVE DIRECT EXPENSES				145.12	_____
TOTAL FIXED EXPENSES				125.73	_____

TOTAL SPECIFIED EXPENSES				673.61	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				19.39	_____

Note: Cost of production estimates are based on 2018 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 47.C Estimated resource use for field operations, per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
						-----hours-----					
Soil Test	acre			0.33	Apr	0.3330					
Sprayer 600-750gal Glyphosate 3lbs a.e	60' 175hp pt		0.017	1.00	Apr	4.0000		0.01	0.02	0.01	
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 Dual II Magnum	60' 175hp pt		0.017	1.00	May	1.0000		0.01	0.02	0.01	
Valor SX	oz					3.0000					
Sprayer 600-750gal Acephate 90%	60' 175hp lb		0.017	0.25	May	0.1375		0.00	0.00	0.00	
Sprayer 600-750gal Storm	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01	
Cadre	oz					4.0000					
Butyrac 200 (2,4-DB)	pt					1.0000					
Crop Oil Conc. (Veg.)	pt					2.0000					
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01	
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Jul	18.0000		0.01	0.02	0.01	
Sprayer 600-750gal Butyrac 200 (2,4-DB)	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01	
Crop Oil Conc. (Veg.)	pt					2.0000					
Sprayer 600-750gal Select Max	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01	
Crop Oil Conc. (Veg.)	pt					2.0000					
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01	
Tebuconazole 3.6	oz					7.2000					
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Aug	18.0000		0.01	0.02	0.01	
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Aug	1.5000		0.01	0.02	0.01	
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Sep	1.5000		0.01	0.02	0.01	
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 2018 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 47.D Estimated costs for field operations, per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.10	3.43	3.43
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	2.58
Glyphosate 3lbs a.e	pt	8.64						0.26	8.90	8.90
Lime (Spread)	ton	12.65						0.38	13.03	13.03
Bed-Rip/Disk Fold.	8R-38		1.86	0.53	1.87			0.11	4.37	7.88
Peanut Plt&Pre Rigid	8R-38		3.07	2.63	4.18			0.25	10.13	18.87
Peanut Seed	lb	105.00						2.63	107.63	107.63
Optimize LIFT	oz	8.14						0.20	8.34	8.34
Admire Pro	oz	16.20						0.41	16.61	16.61
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	2.58
Dual II Magnum	pt	14.83						0.37	15.20	15.20
Valor SX	oz	13.71						0.34	14.05	14.05
Sprayer 600-750gal	60' 175hp		0.10	0.05	0.13			0.01	0.29	0.64
Acephate 90%	lb	1.20						0.03	1.23	1.23
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	2.57
Storm	pt	17.12						0.34	17.46	17.46
Cadre	oz	14.16						0.28	14.44	14.44
Butyrac 200 (2,4-DB)	pt	4.34						0.09	4.43	4.43
Crop Oil Conc.(Veg.)	pt	5.16						0.10	5.26	5.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	2.57
Bravo Weather Stick	pt	10.32						0.21	10.53	10.53
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	2.57
Aframe	oz	34.38						0.52	34.90	34.90
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	2.57
Butyrac 200 (2,4-DB)	pt	4.34						0.07	4.41	4.41
Crop Oil Conc.(Veg.)	pt	5.16						0.08	5.24	5.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	2.57
Select Max	pt	12.71						0.19	12.90	12.90
Crop Oil Conc.(Veg.)	pt	5.16						0.08	5.24	5.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	2.57
Bravo Weather Stick	pt	6.88						0.10	6.98	6.98
Tebuconazole 3.6	oz	5.11						0.08	5.19	5.19
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	2.56
Aframe	oz	34.38						0.34	34.72	34.72
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	2.56
Bravo Weather Stick	pt	10.32						0.10	10.42	10.42
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	2.56
Bravo Weather Stick	pt	10.32						0.05	10.37	10.37
Peanut Dig/Invertor	4R-38		4.74	2.40	4.77			0.06	11.97	20.85
Peanut Harvester	4R-38		28.14	12.84	23.94			0.32	65.24	138.11
Dry Peanuts	ton	25.92						0.13	26.05	26.05
Cleaning Peanuts	ton	27.54						0.14	27.68	27.68
Peanut Dump Cart	6-Row		7.88	2.58	7.94			0.09	18.49	34.36
TOTALS		417.02	50.30	23.23	48.66	0.00	8.67	547.88	125.73	673.61

Note: Cost of production estimates are based on 2018 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 47.E Estimated monthly income and expense flows per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	693.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.32	46.37	44.70	10.32
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	28.54	35.62	17.05	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.40	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	105.00	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	5.16	10.32	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	12.65	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	8.14	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	0.53	6.71	1.06	2.12	1.06	37.18
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	0.41	5.44	0.82	1.64	0.82	41.17
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.41	0.40	0.80	0.40	18.02
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.77	4.38	1.06	1.20	0.46	0.80
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	26.53	179.02	54.44	79.50	47.44	160.95
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-26.53	-179.02	-54.44	-79.50	-47.44	532.05
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-26.53	-205.55	-259.99	-339.49	-386.93	145.12

Note: Cost of production estimates are based on 2018 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 47.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, 2019

			PERCENT										
PRODUCT			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	-261	-243	-226	-209	-191	-174	-157	-139	-122	-105	-87
			-386	-369	-352	-334	-317	-300	-282	-265	-248	-230	-213
60	1.08	ton	-214	-193	-172	-152	-131	-110	-89	-69	-48	-27	-6
			-340	-319	-298	-277	-257	-236	-215	-194	-173	-153	-132
70	1.26	ton	-167	-143	-119	-95	-70	-46	-22	1	26	50	74
			-293	-269	-245	-220	-196	-172	-148	-123	-99	-75	-51
80	1.44	ton	-121	-93	-65	-38	-10	17	44	72	100	128	155
			-247	-219	-191	-163	-136	-108	-80	-53	-25	2	30
90	1.62	ton	-74	-43	-12	18	50	81	112	143	174	205	237
			-200	-169	-138	-106	-75	-44	-13	17	49	80	111
100	1.80	ton	-28	6	41	75	110	145	179	214	249	283	318
			-153	-119	-84	-49	-15	19	54	88	123	157	192
110	1.98	ton	18	56	94	132	170	209	247	285	323	361	399
			-107	-69	-31	7	45	83	121	159	197	235	273
120	2.16	ton	65	106	148	189	231	272	314	356	397	439	480
			-60	-19	22	64	105	147	188	230	271	313	355
130	2.34	ton	111	156	201	246	291	336	381	426	472	517	562
			-14	30	76	121	166	211	256	301	346	391	436
140	2.52	ton	158	206	255	303	352	400	449	497	546	594	643
			32	81	129	178	226	275	323	372	420	469	517
150	2.70	ton	204	256	308	360	412	464	516	568	620	672	724
			79	131	183	235	287	339	391	442	494	546	598

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

Table 48.A Estimated costs per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.88	5.5000	37.84	_____
Aframe	oz	1.91	36.0000	68.76	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_____
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	12.71	1.0000	12.71	_____
INSECTICIDES					
Admire Pro	oz	1.80	9.0000	16.20	_____
Acephate 90%	lb	8.70	0.1375	1.20	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	125.0000	105.00	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.58	6.0000	15.48	_____
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	38.00	0.3330	12.65	_____
INOCULANT					
Optimize LIFT	oz	0.55	14.8000	8.14	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	1.6876	24.02	_____
Self-Propelled	hour	14.23	0.1983	2.81	_____
HAND LABOR					
Implements	hour	9.06	0.1527	1.38	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	14.22	1.5087	21.46	_____
DIESEL FUEL					
Tractors	gal	2.60	18.0359	46.88	_____
Self-Propelled	gal	2.60	1.7850	4.61	_____
REPAIR & MAINTENANCE					
Implements	acre	12.09	1.0000	12.09	_____
Tractors	acre	9.66	1.0000	9.66	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	8.83	1.0000	8.83	_____
TOTAL DIRECT EXPENSES				551.91	_____
FIXED EXPENSES					
Implements	acre	43.54	1.0000	43.54	_____
Tractors	acre	66.68	1.0000	66.68	_____
Self-Propelled	acre	15.86	1.0000	15.86	_____
TOTAL FIXED EXPENSES				126.08	_____
TOTAL SPECIFIED EXPENSES				677.99	_____

Note: Cost of production estimates are based on 2018 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 48.B Summary of estimated costs and returns per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2019

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	111.71	1.0000	111.71	_____
HERBICIDES	acre	89.85	1.0000	89.85	_____
INSECTICIDES	acre	17.40	1.0000	17.40	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
ADJUVANTS	acre	15.48	1.0000	15.48	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
INOCULANT	acre	8.14	1.0000	8.14	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2519	2.28	_____
OPERATOR LABOR	hour	14.23	1.8859	26.83	_____
UNALLOCATED LABOR	hour	14.22	1.5087	21.46	_____
DIESEL FUEL	gal	2.60	19.8209	51.49	_____
REPAIR & MAINTENANCE	acre	24.00	1.0000	24.00	_____
INTEREST ON OP. CAP.	acre	8.83	1.0000	8.83	_____

TOTAL DIRECT EXPENSES				551.91	_____
RETURNS ABOVE DIRECT EXPENSES				141.09	_____
TOTAL FIXED EXPENSES				126.08	_____

TOTAL SPECIFIED EXPENSES				677.99	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				15.01	_____

Note: Cost of production estimates are based on 2018 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 48.C Estimated resource use for field operations, per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal Glyphosate 3lbs a.e	60' 175hp pt		0.017	1.00	Apr	4.0000		0.01	0.02	0.01
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 Dual II Magnum	60' 175hp pt		0.017	1.00	May	1.0000		0.01	0.02	0.01
Valor SX	oz					3.0000				
Sprayer 600-750gal Acephate 90%	60' 175hp lb		0.017	0.25	May	0.1375		0.00	0.00	0.00
Sprayer 600-750gal Storm	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Jul	18.0000		0.01	0.02	0.01
Sprayer 600-750gal Butyrac 200 (2,4-DB)	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Select Max	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Aug	18.0000		0.01	0.02	0.01
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Aug	1.5000		0.01	0.02	0.01
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Sep	1.5000		0.01	0.02	0.01
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 2018 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 48.D Estimated costs for field operations, per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.10	3.43		3.43
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Glyphosate 3lbs a.e	pt	8.64						0.26	8.90		8.90
Lime (Spread)	ton	12.65						0.38	13.03		13.03
Bed-Rip/Disk Rigid	8R-30		3.53	0.98	3.56			0.20	8.27	6.45	14.72
Peanut Plt&Pre Rigid	8R-30		3.88	3.48	5.29			0.32	12.97	11.37	24.34
Peanut Seed	lb	105.00						2.63	107.63		107.63
Optimize LIFT	oz	8.14						0.20	8.34		8.34
Admire Pro	oz	16.20						0.41	16.61		16.61
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Dual II Magnum	pt	14.83						0.37	15.20		15.20
Valor SX	oz	13.71						0.34	14.05		14.05
Sprayer 600-750gal	60' 175hp		0.10	0.05	0.13			0.01	0.29	0.35	0.64
Acephate 90%	lb	1.20						0.03	1.23		1.23
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Storm	pt	17.12						0.34	17.46		17.46
Cadre	oz	14.16						0.28	14.44		14.44
Butyrac 200 (2,4-DB)	pt	4.34						0.09	4.43		4.43
Crop Oil Conc.(Veg.)	pt	5.16						0.10	5.26		5.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Bravo Weather Stick	pt	10.32						0.21	10.53		10.53
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Aframe	oz	34.38						0.52	34.90		34.90
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Butyrac 200 (2,4-DB)	pt	4.34						0.07	4.41		4.41
Crop Oil Conc.(Veg.)	pt	5.16						0.08	5.24		5.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Select Max	pt	12.71						0.19	12.90		12.90
Crop Oil Conc.(Veg.)	pt	5.16						0.08	5.24		5.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Bravo Weather Stick	pt	6.88						0.10	6.98		6.98
Tebuconazole 3.6	oz	5.11						0.08	5.19		5.19
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Aframe	oz	34.38						0.34	34.72		34.72
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Bravo Weather Stick	pt	10.32						0.10	10.42		10.42
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Bravo Weather Stick	pt	10.32						0.05	10.37		10.37
Peanut Dig/Invertor	4R-30		6.00	3.04	6.04			0.08	15.16	11.26	26.42
Peanut Harvester	4R-30		25.59	11.67	21.78			0.30	59.34	65.27	124.61
Dry Peanuts	ton	25.92						0.13	26.05		26.05
Cleaning Peanuts	ton	27.54						0.14	27.68		27.68
Peanut Dump Cart	6-Row		7.88	2.58	7.94			0.09	18.49	15.87	34.36
TOTALS		417.02	51.49	24.00	50.57	0.00	8.83	551.91	126.08	677.99	

Note: Cost of production estimates are based on 2018 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 48.E Estimated monthly income and expense flows per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch
 All Areas, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	693.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.32	46.37	44.70	10.32
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	28.54	35.62	17.05	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.40	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	105.00	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	5.16	10.32	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	12.65	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	8.14	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	0.53	9.51	1.06	2.12	1.06	36.29
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.41	7.92	0.82	1.64	0.82	39.88
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	4.71	0.40	0.80	0.40	17.49
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.77	4.54	1.06	1.20	0.46	0.80
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	26.53	185.76	54.44	79.50	47.44	158.24
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-26.53	-185.76	-54.44	-79.50	-47.44	534.76
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-26.53	-212.29	-266.73	-346.23	-393.67	141.09

Note: Cost of production estimates are based on 2018 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 48.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, 2019

			PERCENT										
PRODUCT			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	-265 -391	-247 -373	-230 -356	-213 -339	-195 -321	-178 -304	-161 -287	-143 -269	-126 -252	-109 -235	-91 -218
60	1.08	ton	-218 -344	-197 -323	-176 -303	-156 -282	-135 -261	-114 -240	-93 -219	-73 -199	-52 -178	-31 -157	-10 -136
70	1.26	ton	-171 -298	-147 -273	-123 -249	-99 -225	-74 -201	-50 -176	-26 -152	-2 -128	22 -104	46 -79	70 -55
80	1.44	ton	-125 -251	-97 -223	-69 -196	-42 -168	-14 -140	13 -112	40 -85	68 -57	96 -29	124 -1	151 25
90	1.62	ton	-78 -204	-47 -173	-16 -142	14 -111	45 -80	77 -48	108 -17	139 13	170 44	201 75	233 107
100	1.80	ton	-32 -158	2 -123	37 -88	71 -54	106 -19	141 15	175 49	210 84	245 118	279 153	314 188
110	1.98	ton	14 -111	52 -73	90 -35	128 2	166 40	205 78	243 117	281 155	319 193	357 231	395 269
120	2.16	ton	61 -65	102 -23	144 18	185 59	227 101	268 142	310 184	352 226	393 267	435 309	476 350
130	2.34	ton	107 -18	152 26	197 71	242 116	287 161	332 206	377 251	422 296	468 341	513 386	558 432
140	2.52	ton	154 28	202 76	251 125	299 173	348 222	396 270	445 319	493 367	542 416	590 464	639 513
150	2.70	ton	200 74	252 126	304 178	356 230	408 282	460 334	512 386	564 438	616 490	668 542	720 594

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 2018 input prices.

Table 49.A Estimated costs per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.88	5.5000	37.84	_____
Aframe	oz	1.91	36.0000	68.76	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_____
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	12.71	1.0000	12.71	_____
INSECTICIDES					
Admire Pro	oz	1.80	9.0000	16.20	_____
Acephate 90%	lb	8.70	0.1375	1.20	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	125.0000	105.00	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.58	6.0000	15.48	_____
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	38.00	0.3330	12.65	_____
INOCULANT					
Optimize LIFT	oz	0.55	14.8000	8.14	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	1.1856	16.87	_____
Self-Propelled	hour	14.23	0.1983	2.81	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	14.23	1.1072	15.76	_____
DIESEL FUEL					
Tractors	gal	2.60	12.8051	33.28	_____
Self-Propelled	gal	2.60	1.7850	4.61	_____
REPAIR & MAINTENANCE					
Implements	acre	9.26	1.0000	9.26	_____
Tractors	acre	6.83	1.0000	6.83	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	8.46	1.0000	8.46	_____
TOTAL DIRECT EXPENSES				518.78	_____
FIXED EXPENSES					
Implements	acre	37.82	1.0000	37.82	_____
Tractors	acre	47.12	1.0000	47.12	_____
Self-Propelled	acre	15.86	1.0000	15.86	_____
TOTAL FIXED EXPENSES				100.80	_____
TOTAL SPECIFIED EXPENSES				619.58	_____

Note: Cost of production estimates are based on 2018 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 49.B Summary of estimated costs and returns per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2019

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	111.71	1.0000	111.71	_____
HERBICIDES	acre	89.85	1.0000	89.85	_____
INSECTICIDES	acre	17.40	1.0000	17.40	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
ADJUVANTS	acre	15.48	1.0000	15.48	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
INOCULANT	acre	8.14	1.0000	8.14	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	14.23	1.3840	19.68	_____
UNALLOCATED LABOR	hour	14.23	1.1072	15.76	_____
DIESEL FUEL	gal	2.60	14.5901	37.89	_____
REPAIR & MAINTENANCE	acre	18.34	1.0000	18.34	_____
INTEREST ON OP. CAP.	acre	8.46	1.0000	8.46	_____

TOTAL DIRECT EXPENSES				518.78	_____
RETURNS ABOVE DIRECT EXPENSES				174.22	_____
TOTAL FIXED EXPENSES				100.80	_____

TOTAL SPECIFIED EXPENSES				619.58	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				73.42	_____

Note: Cost of production estimates are based on 2018 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 49.C Estimated resource use for field operations, per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	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 2018 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 49.D Estimated costs for field operations, per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.10	3.43		3.43
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Glyphosate 3lbs a.e	pt	8.64						0.26	8.90		8.90
Lime (Spread)	ton	12.65						0.38	13.03		13.03
Bed-Rip/Disk Fold.	12R-38		1.39	0.41	1.19			0.07	3.06	2.63	5.69
Peanut Plt&Pre Fold.	12R-38		2.04	3.18	2.79			0.20	8.21	8.87	17.08
Peanut Seed	lb	105.00						2.63	107.63		107.63
Optimize LIFT	oz	8.14						0.20	8.34		8.34
Admire Pro	oz	16.20						0.41	16.61		16.61
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Dual II Magnum	pt	14.83						0.37	15.20		15.20
Valor SX	oz	13.71						0.34	14.05		14.05
Sprayer 600-750gal	60' 175hp		0.10	0.05	0.13			0.01	0.29	0.35	0.64
Acephate 90%	lb	1.20						0.03	1.23		1.23
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Storm	pt	17.12						0.34	17.46		17.46
Cadre	oz	14.16						0.28	14.44		14.44
Butyrac 200 (2,4-DB)	pt	4.34						0.09	4.43		4.43
Crop Oil Conc.(Veg.)	pt	5.16						0.10	5.26		5.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Bravo Weather Stick	pt	10.32						0.21	10.53		10.53
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Aframe	oz	34.38						0.52	34.90		34.90
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Butyrac 200 (2,4-DB)	pt	4.34						0.07	4.41		4.41
Crop Oil Conc.(Veg.)	pt	5.16						0.08	5.24		5.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Select Max	pt	12.71						0.19	12.90		12.90
Crop Oil Conc.(Veg.)	pt	5.16						0.08	5.24		5.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Bravo Weather Stick	pt	6.88						0.10	6.98		6.98
Tebuconazole 3.6	oz	5.11						0.08	5.19		5.19
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Aframe	oz	34.38						0.34	34.72		34.72
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Bravo Weather Stick	pt	10.32						0.10	10.42		10.42
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Bravo Weather Stick	pt	10.32						0.05	10.37		10.37
Peanut Dig/Invertor	6R-38		3.15	1.63	3.18			0.04	8.00	6.49	14.49
Peanut Harvester	6R-38		18.82	8.29	16.01			0.22	43.34	51.08	94.42
Dry Peanuts	ton	25.92						0.13	26.05		26.05
Cleaning Peanuts	ton	27.54						0.14	27.68		27.68
Peanut Dump Cart	6-Row		7.88	2.58	7.94			0.09	18.49	15.87	34.36
TOTALS		417.02	37.89	18.34	37.07	0.00	8.46	518.78	100.80	619.58	

Note: Cost of production estimates are based on 2018 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 49.E Estimated monthly income and expense flows per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	693.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.32	46.37	44.70	10.32
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	28.54	35.62	17.05	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.40	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	105.00	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	5.16	10.32	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	12.65	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	8.14	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	0.53	4.64	1.06	2.12	1.06	27.66
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	0.41	3.94	0.82	1.64	0.82	30.26
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.84	0.40	0.80	0.40	12.70
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.77	4.29	1.06	1.20	0.46	0.68
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	26.53	175.79	54.44	79.50	47.44	135.08
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-26.53	-175.79	-54.44	-79.50	-47.44	557.92
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-26.53	-202.32	-256.76	-336.26	-383.70	174.22

Note: Cost of production estimates are based on 2018 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 49.F Estimated returns for various price/yield combinations, per acre
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2019

			PERCENT										
PRODUCT			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	-232 -332	-214 -315	-197 -298	-180 -280	-162 -263	-145 -246	-128 -228	-110 -211	-93 -194	-76 -176	-58 -159
60	1.08	ton	-185 -286	-164 -265	-143 -244	-123 -223	-102 -203	-81 -182	-60 -161	-39 -140	-19 -119	1 -99	22 -78
70	1.26	ton	-138 -239	-114 -215	-90 -191	-66 -166	-41 -142	-17 -118	6 -94	30 -69	55 -45	79 -21	103 2
80	1.44	ton	-92 -193	-64 -165	-36 -137	-9 -109	18 -82	46 -54	74 -26	101 1	129 28	157 56	184 84
90	1.62	ton	-45 -146	-14 -115	16 -84	47 -52	79 -21	110 9	141 40	172 71	203 103	235 134	266 165
100	1.80	ton	0 -99	35 -65	70 -30	104 4	139 38	174 73	208 108	243 142	278 177	312 212	347 246
110	1.98	ton	47 -53	85 -15	123 23	161 61	200 99	238 137	276 175	314 213	352 251	390 289	428 327
120	2.16	ton	94 -6	135 34	177 76	218 118	260 159	302 201	343 242	385 284	426 326	468 367	509 409
130	2.34	ton	140 39	185 85	230 130	275 175	320 220	366 265	411 310	456 355	501 400	546 445	591 490
140	2.52	ton	187 86	235 135	284 183	332 232	381 280	429 329	478 377	526 426	575 474	623 523	672 571
150	2.70	ton	233 133	285 185	337 237	389 289	441 341	493 393	545 445	597 497	649 548	701 600	753 652

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

Table 50.A Estimated costs per acre
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.88	5.5000	37.84	_____
Aframe	oz	1.91	36.0000	68.76	_____
Tebuconazole 3.6	oz	0.71	7.2000	5.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_____
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	12.71	1.0000	12.71	_____
INSECTICIDES					
Admire Pro	oz	1.80	9.0000	16.20	_____
Acephate 90%	lb	8.70	0.1375	1.20	_____
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	2.58	6.0000	15.48	_____
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	38.00	0.3330	12.65	_____
INOCULANT					
Optimize LIFT	oz	0.55	14.8000	8.14	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	1.2642	17.99	_____
Self-Propelled	hour	14.23	0.1983	2.81	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	14.23	1.1072	15.76	_____
DIESEL FUEL					
Tractors	gal	2.60	13.5313	35.16	_____
Self-Propelled	gal	2.60	1.7850	4.61	_____
Irrigate Peanuts	gal	2.60	9.7755	25.40	_____
REPAIR & MAINTENANCE					
Implements	acre	9.46	1.0000	9.46	_____
Tractors	acre	7.23	1.0000	7.23	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
Irrigate Peanuts	acre	6.88	1.0000	6.88	_____
INTEREST ON OP. CAP.	acre	9.45	1.0000	9.45	_____
TOTAL DIRECT EXPENSES				579.31	_____
FIXED EXPENSES					
Implements	acre	38.96	1.0000	38.96	_____
Tractors	acre	49.85	1.0000	49.85	_____
Self-Propelled	acre	15.86	1.0000	15.86	_____
Irrigate Peanuts	acre	61.50	1.0000	61.50	_____
TOTAL FIXED EXPENSES				166.17	_____
TOTAL SPECIFIED EXPENSES				745.48	_____

Note: Cost of production estimates are based on 2018 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 50.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, 2019

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	111.71	1.0000	111.71	_____
HERBICIDES	acre	89.85	1.0000	89.85	_____
INSECTICIDES	acre	17.40	1.0000	17.40	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
ADJUVANTS	acre	15.48	1.0000	15.48	_____
CLEANING	acre	33.66	1.0000	33.66	_____
DRYING	acre	31.68	1.0000	31.68	_____
CUSTOM LIME	acre	12.65	1.0000	12.65	_____
INOCULANT	acre	8.14	1.0000	8.14	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	14.23	1.4625	20.80	_____
UNALLOCATED LABOR	hour	14.23	1.1072	15.76	_____
DIESEL FUEL	gal	2.60	25.0919	65.17	_____
REPAIR & MAINTENANCE	acre	25.82	1.0000	25.82	_____
INTEREST ON OP. CAP.	acre	9.45	1.0000	9.45	_____

TOTAL DIRECT EXPENSES				579.31	_____
RETURNS ABOVE DIRECT EXPENSES				267.69	_____
TOTAL FIXED EXPENSES				166.17	_____

TOTAL SPECIFIED EXPENSES				745.48	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				101.52	_____

Note: Cost of production estimates are based on 2018 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 50.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, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	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				Jan	1.0000	0.07	0.07	0.46	
TOTALS							1.46	1.26	2.02	1.10

Note: Cost of production estimates are based on 2018 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 50.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, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.10	3.43		3.43
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Glyphosate 3lbs a.e	pt	8.64						0.26	8.90		8.90
Lime (Spread)	ton	12.65						0.38	13.03		13.03
Bed-Rip/Disk Fold.	12R-38		1.39	0.41	1.19			0.07	3.06	2.63	5.69
Peanut Plt&Pre Fold.	12R-38		2.04	3.18	2.79			0.20	8.21	8.87	17.08
Peanut Seed	lb	105.00						2.63	107.63		107.63
Optimize LIFT	oz	8.14						0.20	8.34		8.34
Admire Pro	oz	16.20						0.41	16.61		16.61
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Dual II Magnum	pt	14.83						0.37	15.20		15.20
Valor SX	oz	13.71						0.34	14.05		14.05
Sprayer 600-750gal	60' 175hp		0.10	0.05	0.13			0.01	0.29	0.35	0.64
Acephate 90%	lb	1.20						0.03	1.23		1.23
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Storm	pt	17.12						0.34	17.46		17.46
Cadre	oz	14.16						0.28	14.44		14.44
Butyrac 200 (2,4-DB)	pt	4.34						0.09	4.43		4.43
Crop Oil Conc.(Veg.)	pt	5.16						0.10	5.26		5.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Bravo Weather Stick	pt	10.32						0.21	10.53		10.53
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Aframe	oz	34.38						0.52	34.90		34.90
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Butyrac 200 (2,4-DB)	pt	4.34						0.07	4.41		4.41
Crop Oil Conc.(Veg.)	pt	5.16						0.08	5.24		5.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Select Max	pt	12.71						0.19	12.90		12.90
Crop Oil Conc.(Veg.)	pt	5.16						0.08	5.24		5.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Bravo Weather Stick	pt	6.88						0.10	6.98		6.98
Tebuconazole 3.6	oz	5.11						0.08	5.19		5.19
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Aframe	oz	34.38						0.34	34.72		34.72
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Bravo Weather Stick	pt	10.32						0.10	10.42		10.42
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Bravo Weather Stick	pt	10.32						0.05	10.37		10.37
Peanut Dig/Invertor	6R-38		3.15	1.63	3.18			0.04	8.00	6.49	14.49
Peanut Harvester	6R-38		18.82	8.29	16.01			0.22	43.34	51.08	94.42
Dry Peanuts	ton	31.68						0.16	31.84		31.84
Cleaning Peanuts	ton	33.66						0.17	33.83		33.83
Peanut Dump Cart	6-Row		7.88	2.58	7.94			0.09	18.49	15.87	34.36
Irrigate Peanuts	acre	8.25	27.28	7.48	4.65			0.93	48.59	65.37	113.96
TOTALS		437.15	65.17	25.82	41.72	0.00	9.45	579.31	166.17	745.48	

Note: Cost of production estimates are based on 2018 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 50.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, 2019

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	847.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.32	46.37	44.70	10.32
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	28.54	35.62	17.05	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.40	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	105.00	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	5.16	10.32	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	12.65	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	8.14	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	0.54	0.00	0.00	0.00	0.00	0.00	0.76	6.99	1.29	2.58	1.90	27.66
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	0.96	0.00	0.00	0.00	0.00	0.00	0.41	4.43	7.17	14.34	7.60	30.26
REPAIR & MAINTENANCE	0.32	0.00	0.00	0.00	0.00	0.00	0.20	6.95	1.38	2.76	1.51	12.70
INTEREST ON OP. CAP.	0.11	0.00	0.00	0.00	0.00	0.00	0.78	4.65	1.21	1.42	0.54	0.74
TOTAL DIRECT EXPENSES	1.93	0.00	0.00	0.00	0.00	0.00	26.77	190.35	62.15	94.84	56.25	147.02
NET INCOME	-1.93	0.00	0.00	0.00	0.00	0.00	-26.77	-190.35	-62.15	-94.84	-56.25	699.98
NET INCOME TO DATE	-1.93	-1.93	-1.93	-1.93	-1.93	-1.93	-28.70	-219.05	-281.20	-376.04	-432.29	267.69

Note: Cost of production estimates are based on 2018 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 50.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, 2019

			PERCENT										
PRODUCT			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	1.10	ton	-228 -395	-207 -373	-186 -352	-165 -331	-144 -310	-122 -289	-101 -267	-80 -246	-59 -225	-38 -204	-17 -183
60	1.32	ton	-171 -338	-146 -312	-121 -287	-95 -261	-70 -236	-44 -211	-19 -185	5 -160	31 -134	56 -109	82 -83
70	1.54	ton	-114 -281	-85 -251	-55 -221	-25 -192	3 -162	33 -132	62 -103	92 -73	122 -43	151 -14	181 15
80	1.76	ton	-57 -224	-24 -190	9 -156	43 -122	77 -88	111 -54	145 -20	179 13	213 46	246 80	280 114
90	1.98	ton	-1 -167	37 -129	75 -90	113 -52	151 -14	189 23	227 61	265 99	303 137	342 175	380 213
100	2.20	ton	55 -110	98 -67	140 -25	182 16	225 59	267 101	310 143	352 186	394 228	437 270	479 313
110	2.42	ton	112 -53	159 -6	206 39	252 86	299 133	345 179	392 226	438 272	485 319	532 365	578 412
120	2.64	ton	169 3	220 54	271 105	322 156	373 206	423 257	474 308	525 359	576 410	627 461	678 511
130	2.86	ton	226 60	281 115	336 170	391 225	447 280	502 335	557 390	612 446	667 501	722 556	777 611
140	3.08	ton	283 117	343 176	402 236	461 295	520 354	580 414	639 473	698 532	758 591	817 651	876 710
150	3.30	ton	340 174	404 238	467 301	531 365	594 428	658 492	721 555	785 619	848 682	912 746	975 809

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

APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2019

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (250-299 hp)	265 hp	339,000	300	8	13.64	13.51	35.46	35.31	84.28	151.94	236.23
Combine (300-349 hp)	325 hp	362,000	300	8	16.73	13.51	43.49	37.70	94.71	162.25	256.97
Combine (350-399 hp)	355 hp	391,000	300	8	18.27	13.51	47.50	40.72	101.74	175.25	276.99
Combine (400-449 hp)	425 hp	412,000	300	8	21.87	13.51	56.87	42.91	113.30	184.66	297.97
Combine (450-499hp)	475 hp	434,000	300	8	24.44	13.51	63.56	45.20	122.28	194.52	316.81
Tractor (20-39hp)CB	MFWD 30	25,500	600	8	1.54	13.51	4.01	0.79	18.32	5.29	23.61
Tractor (20-39hp)RB	MFWD 30	20,400	600	8	1.54	13.51	4.01	0.63	18.16	4.23	22.39
Tractor (40-59hp)CB	2WD 50	29,400	600	8	2.57	13.51	6.69	0.91	21.12	6.10	27.22
Tractor (40-59hp)CB	MFWD 50	39,500	600	8	2.57	13.51	6.69	1.23	21.43	8.19	29.63
Tractor (40-59hp)RB	2WD 50	22,900	600	8	2.57	13.51	6.69	0.71	20.91	4.75	25.67
Tractor (40-59hp)RB	MFWD 50	27,800	600	8	2.57	13.51	6.69	0.86	21.07	5.77	26.84
Tractor (60-89hp)CB	2WD 75	52,800	600	8	3.86	13.51	10.03	1.65	25.19	10.95	36.15
Tractor (60-89hp)CB	MFWD 75	62,500	600	8	3.86	13.51	10.03	1.95	25.50	12.97	38.47
Tractor (60-89hp)RB	2WD 75	38,600	600	8	3.86	13.51	10.03	1.20	24.75	8.01	32.76
Tractor (60-89hp)RB	MFWD 75	40,100	600	8	3.86	13.51	10.03	1.25	24.80	8.32	33.12
Tractor (90-119hp)CB	2WD 105	69,200	600	8	5.40	13.51	14.05	2.16	29.72	14.36	44.08
Tractor (90-119hp)CB	MFWD 105	83,000	600	8	5.40	13.51	14.05	2.59	30.15	17.22	47.38
Tractor (90-119hp)RB	2WD 105	61,200	600	8	5.40	13.51	14.05	1.91	29.47	12.70	42.17
Tractor (90-119hp)RB	MFWD 105	67,500	600	8	5.40	13.51	14.05	2.10	29.67	14.01	43.68
Tractor (120-139hp)CB	2WD 130	103,000	600	8	6.69	13.51	17.39	3.21	34.12	21.37	55.50
Tractor (120-139hp)CB	MFWD 130	114,000	600	8	6.69	13.51	17.39	3.56	34.47	23.66	58.13
Tractor (140-159hp)	2WD 150	109,000	600	8	7.72	13.51	20.07	3.40	36.99	22.62	59.61
Tractor (140-159hp)CB	MFWD 150	130,000	600	8	7.72	13.51	20.07	4.06	37.64	26.98	64.63
Tractor (160-179hp)CB	MFWD 170	148,000	600	8	8.75	13.51	22.75	4.62	40.88	31.94	72.83
Tractor (180-199hp)CB	MFWD 190	175,000	600	8	9.77	13.51	25.42	5.46	44.40	37.77	82.17
Tractor (200-249hp)CB	MFWD 225	191,000	600	8	11.58	13.51	30.11	5.96	49.59	41.22	90.81
Tractor (250-349hp)CB	4WD 300	286,000	600	8	15.44	13.51	40.14	8.93	62.59	61.73	124.32
Tractor (250-349hp)CB	MFWD 300	278,000	600	8	15.44	13.51	40.14	8.68	62.34	60.00	122.34
Tractor (250-349hp)CB	Track 300	317,000	600	8	15.44	13.51	40.14	9.90	63.56	68.42	131.98
Tractor (350-449hp)	Track 400	420,000	600	8	20.58	13.51	53.53	13.12	80.16	90.65	170.81
Tractor (350-449hp)CB	4WD 400	328,000	600	8	20.58	13.51	53.53	10.25	77.29	70.79	148.08
Tractor (450-550hp)CB	4WD 500	394,000	600	8	25.73	13.51	66.91	12.31	92.73	85.04	177.77
Tractor (450-550hp)CB	Track 500	444,000	600	8	25.73	13.51	66.91	13.87	94.29	95.83	190.13
Utility Vehicle	800 CC	12,200	200	8	0.70	13.51	1.75	1.90	17.16	8.20	25.36
Utility Vehicle	900 CC	15,800	200	8	1.00	13.51	2.50	2.46	18.47	10.62	29.10

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2019

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	5.81	8.62	10.79	25.23	46.44	71.68
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.81	12.07	14.13	32.02	60.83	92.86
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.88	8.07	9.61	21.57	41.35	62.92
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.92	10.36	15.85	31.15	68.23	99.38
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.88	8.18	12.51	24.59	53.86	78.46
Cotton Picker/Module	4R-38 (365)	536,000	200	8	20.58	0.257	5.81	13.79	21.58	41.20	92.89	134.10
Cotton Picker/Module	6R-30 (500)	776,000	200	8	25.73	0.218	4.92	14.60	26.46	45.99	113.86	159.85
Cotton Picker/Module	6R-38 (500)	777,000	200	8	25.73	0.172	3.88	11.52	20.91	36.33	90.01	126.35
Dry Applicator SP	70'300cuft	347,000	350	8	16.98	0.015	0.27	0.66	0.28	1.22	2.01	3.23
Sprayer 600-750gal	60' 175hp	208,000	350	8	9.00	0.017	0.31	0.41	0.19	0.92	1.40	2.33
Sprayer 600-825gal	80' 175hp	210,000	350	8	11.81	0.013	0.23	0.40	0.14	0.79	1.06	1.85
Sprayer 600-825gal	90' 250hp	288,000	350	8	12.73	0.011	0.21	0.38	0.18	0.78	1.30	2.08
Sprayer 800gal	100' 250hp	303,000	350	8	14.15	0.010	0.19	0.38	0.17	0.75	1.23	1.98
Sprayer 800gal	80' 250hp	255,000	350	8	12.86	0.013	0.23	0.44	0.18	0.86	1.29	2.15
Sprayer 1000-1400gal	90' 275hp	289,000	350	8	14.15	0.010	0.19	0.38	0.16	0.74	1.17	1.91
Sprayer 1000gal	100' 300hp	328,000	350	8	15.44	0.010	0.19	0.42	0.18	0.80	1.33	2.13
Sprayer 1200+gal	120' 300hp	332,000	350	8	15.44	0.008	0.15	0.35	0.15	0.66	1.12	1.79

Notes:

Labor: includes allocated labor plus any additional labor from self-propelled machine.

Direct: Does not include interest on operating capital.

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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost	
									Imp.	P.U.		Imp.	P.U.		
			dollars	hours	years	hr/ac	-----\$/acre-----								
Bed-Paratill	Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.09	2.43	1.58	0.48	5.59	3.08	3.32	12.00
Bed-Paratill	Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.72	1.61	1.34	0.32	4.00	2.60	2.21	8.83
Bed-Paratill	Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.72	1.61	1.34	0.32	4.00	2.60	2.21	8.83
Bed-Paratill	Rigid	4R-30	MFWD 225	12,300	150	12	0.204	2.76	6.15	0.90	1.21	11.04	1.76	8.42	21.22
Bed-Paratill	Rigid	4R-38	MFWD 225	12,300	150	12	0.160	2.17	4.84	0.71	0.96	8.69	1.38	6.63	16.71
Bed-Paratill	Rigid	6R-30	MFWD 225	17,300	150	12	0.136	1.84	4.10	0.85	0.81	7.60	1.65	5.61	14.87
Bed-Paratill	Rigid	6R-38	MFWD 225	17,200	150	12	0.107	1.45	3.23	0.66	0.64	6.00	1.29	4.43	11.73
Bed-Paratill	Rigid	8R-30	MFWD 225	22,600	150	12	0.102	1.38	3.07	0.83	0.60	5.90	1.62	4.21	11.73
Bed-Paratill	Rigid	8R-38	MFWD 225	22,600	150	12	0.080	1.09	2.43	0.65	0.48	4.66	1.28	3.32	9.27
Bed-Rip/Disk	Fold.	8R-38	MFWD 190	36,900	300	20	0.073	0.98	1.85	0.13	0.39	3.37	0.74	2.76	6.88
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	56,600	300	20	0.061	0.83	1.85	0.17	0.36	3.23	0.96	2.54	6.73
Bed-Rip/Disk	Fold.	12R-38	MFWD 225	56,600	300	20	0.046	0.62	1.39	0.13	0.27	2.42	0.72	1.90	5.05
Bed-Rip/Disk	Rigid	4R-30	MFWD 190	17,300	300	20	0.184	2.49	4.70	0.15	1.01	8.36	0.88	6.98	16.23
Bed-Rip/Disk	Rigid	4R-38	MFWD 190	17,300	300	20	0.146	1.98	3.73	0.12	0.80	6.64	0.70	5.54	12.88
Bed-Rip/Disk	Rigid	6R-38	MFWD 190	23,900	300	20	0.097	1.31	2.47	0.11	0.53	4.43	0.64	3.67	8.75
Bed-Rip/Disk	Rigid	8R-30	MFWD 190	31,300	300	20	0.139	1.87	3.53	0.21	0.76	6.39	1.20	5.25	12.84
Bed-Rip/Disk	Rigid	8R-38	MFWD 190	31,300	300	20	0.073	0.98	1.85	0.11	0.39	3.35	0.63	2.76	6.75
Bed-Rip/Disk	Rigid	6R-30	MFWD 190	23,900	300	20	0.123	1.66	3.13	0.14	0.67	5.62	0.81	4.65	11.09
Bed-Rip/Disk/Cond.		6-Row	MFWD 225	24,600	150	12	0.107	1.45	3.23	0.95	0.64	6.28	1.85	4.43	12.57
Bed-Rip/Disk/Cond.		8-Row	MFWD 225	32,700	150	12	0.080	1.09	2.43	0.95	0.48	4.95	1.85	3.32	10.14
Bed/Disk (Hipper)		4R-38	MFWD 150	9,200	160	10	0.147	1.99	2.96	0.33	0.59	5.89	0.99	3.98	10.87
Bed/Disk (Hipper)		6R-38	MFWD 170	13,000	160	10	0.098	1.33	2.24	0.32	0.45	4.35	0.93	3.15	8.44
Bed/Disk (Hipper)		8R-30	MFWD 190	17,800	160	10	0.093	1.26	2.38	0.41	0.51	4.58	1.21	3.54	9.34
Bed/Disk (Hipper)		8R-38 2x1	MFWD 190	29,200	160	10	0.049	0.66	1.25	0.36	0.26	2.55	1.05	1.86	5.46
Bed/Disk (Hipper)		12R-30	MFWD 225	31,000	160	10	0.062	0.84	1.88	0.48	0.37	3.58	1.41	2.57	7.57
Bed/Disk (Hipper)		12R-38	MFWD 225	29,200	160	10	0.049	0.66	1.48	0.36	0.29	2.80	1.05	2.03	5.89
Bed/Disk (Hipper)Fl		8R-38	MFWD 190	2,000	160	10	0.074	1.00	1.88	0.03	0.40	3.32	0.10	2.79	6.23
Bed/Disk (Hipper)Rd		8R-38	MFWD 190	18,400	160	10	0.074	1.00	1.88	0.34	0.40	3.63	0.99	2.79	7.42
Bed/Disk w/roller		8R-30	MFWD 190	26,600	160	10	0.093	1.26	2.38	0.62	0.51	4.78	1.82	3.54	10.14
Bed/Disk w/roller		8R-38	MFWD 190	26,600	160	10	0.074	1.00	1.88	0.49	0.40	3.78	1.43	2.79	8.02
Bed/Disk w/roller		12R-30/40	MFWD 225	47,000	160	10	0.062	0.84	1.88	0.73	0.37	3.83	2.14	2.57	8.55
Bed/Lister		4R-38	MFWD 150	18,200	160	8	0.228	3.08	4.58	0.97	0.92	9.57	3.36	6.16	19.09
Bed/Lister		6R-38	MFWD 150	19,100	160	8	0.120	1.62	2.41	0.53	0.48	5.06	1.85	3.24	10.16
Bed/Lister		8R-30	MFWD 190	23,100	160	8	0.114	1.54	2.90	0.61	0.62	5.68	2.13	4.31	12.13
Bed/Lister		8R-38	MFWD 190	23,400	160	8	0.090	1.21	2.29	0.49	0.49	4.50	1.70	3.40	9.62
Bed/Lister		8R-38 2x1	MFWD 190	46,700	160	8	0.060	0.81	1.52	0.65	0.32	3.32	2.27	2.27	7.86
Bed/Lister		12R-38	MFWD 225	46,700	160	8	0.060	0.81	1.80	0.65	0.35	3.63	2.27	2.47	8.38
Bed/Lister		16R-30	MFWD 225	58,100	160	8	0.035	0.47	1.05	0.47	0.20	2.22	1.65	1.44	5.32
Bed/Lister		16R40	MFWD 300	60,900	160	8	0.043	0.58	1.73	0.61	0.37	3.30	2.12	2.58	8.01
Bed/Lister-Roll-Fold		8R-38	MFWD 190	24,300	160	10	0.074	1.00	1.88	0.45	0.40	3.74	1.31	2.79	7.85
Bed/Lister-Roll-Fold		12R-30	MFWD 225	29,200	160	10	0.062	0.84	1.88	0.45	0.37	3.55	1.33	2.57	7.46
Bed/Lister-Roll-Fold		12R-38	MFWD 225	33,700	160	10	0.049	0.66	1.48	0.41	0.29	2.86	1.21	2.03	6.11
Bed/Lister-Roll-Fold		16R-30	MFWD 225	34,800	160	10	0.046	0.63	1.41	0.40	0.27	2.73	1.19	1.93	5.85
Bed/Lister-Roll-Rig.		8R-38	MFWD 190	20,300	160	10	0.074	1.00	1.88	0.37	0.40	3.66	1.09	2.79	7.56
Blade-Box		6'-7'	MFWD 105	1,221	200	20	0.020	0.27	0.28	0.01	0.04	0.60	0.01	0.28	0.89
Blade-Box		8'-10'	MFWD 105	3,700	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		6'-7'	MFWD 105	1,213	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		8'-10'	MFWD 105	3,550	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy		4R-38 (250)	MFWD 190	30,500	200	10	0.257	3.48	6.55	1.96	1.40	13.41	4.44	9.73	27.59
Boll Buggy		4R-38 (350)	MFWD 190	30,500	200	10	0.257	3.48	6.55	1.96	1.40	13.41	4.44	9.73	27.59
Boll Buggy		4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.32	4.38	1.31	0.94	8.96	2.97	6.50	18.44
Boll Buggy		6R-30 (355)	MFWD 190	30,500	200	10	0.218	2.94	5.54	1.66	1.19	11.35	3.76	8.24	23.36
Boll Buggy		6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.32	4.38	1.31	0.94	8.96	2.97	6.50	18.44
Chisel Plow-Folding		24'	MFWD 190	39,900	150	12	0.076	1.03	1.94	1.10	0.41	4.49	2.14	2.88	9.52
Chisel Plow-Folding		32'	MFWD 225	51,900	150	12	0.057	0.78	1.73	1.08	0.34	3.94	2.10	2.38	8.43
Chisel Plow-Folding		42'	MFWD 225	62,500	150	12	0.044	0.59	1.32	0.99	0.26	3.17	1.93	1.81	6.92
Chisel Plow-Folding		50'	MFWD 225	81,900	150	10	0.036	0.49	1.11	1.31	0.22	3.14	2.35	1.52	7.02
Chisel Plow-Folding		61'	MFWD 225	92,400	150	12	0.030	0.40	0.91	1.01	0.18	2.51	1.96	1.24	5.72
Chisel Plow-Rigid		10'	MFWD 170	7,090	150	12	0.184	2.49	4.20	0.47	0.85	8.03	0.92	5.90	14.85
Chisel Plow-Rigid		15'	2WD 130	11,800	150	12	0.123	1.66	2.14	0.52	0.39	4.73	1.02	2.63	8.38
Chisel Plow-Rigid		20'	MFWD 225	11,300	150	12	0.102	1.38	3.09	0.41	0.61	5.51	0.81	4.23	10.56
Chisel Plow-Rigid		24'	MFWD 190	11,700	150	12	0.077	1.04	1.95	0.32	0.42	3.74	0.63	2.90	7.28
Cultivate		4R-30	2WD 105	12,100	150	10	0.206	2.78	2.89	0.66	0.44	6.79	1.94	2.96	11.70
Cultivate		4R-38	2WD 105	12,200	150	10	0.162	2.19	2.28	0.52	0.31	5.31	1.54	2.06	8.92
Cultivate		6R-30	MFWD 150	16,300	150	10	0.137	1.85	2.76	0.59	0.55	5.77	1.74	3.71	11.23
Cultivate		6R-38	MFWD 150	17,200	150	10	0.108	1.46	2.17	0.49	0.44	4.58	1.45	2.92	8.96
Cultivate		8R-30	MFWD 190	21,400	150	10	0.103	1.39	2.62	0.58	0.56	5.16	1.71	3.89	10.78
Cultivate		8R-38	MFWD 190	22,600	150	10	0.073	0.99	1.87	0.44	0.40	3.71	1.29	2.78	7.79
Cultivate		8R-38 2x1	MFWD 190	35,400	150	10	0.054	0.73	1.38	0.51	0.29	2.92	1.49	2.05	6.47
Cultivate		12R-30	MFWD 225	39,900	150	10	0.068	0.92	2.07	0.73	0.41	4.14	2.13	2.83	9.11
Cultivate		12R-38	MFWD 225	39,100	150	10	0.054	0.73	1.63	0.56	0.32	3.25	1.65	2.23	7.14
Cultivate		16R-30	MFWD 225	47,800	150	10	0.051	0.69	1.55	0.65	0.30	3.21	1.92	2.12	7.25
Cultivate & Post		4R-30	2WD 105	19,400	150	10	0.220	3.96	3.09	1.13	0.42	8.61	3.32	2.79	14.73
Cultivate & Post		4R-38	2WD 105	19,500	150	10	0.173	3.12	2.43	0.90	0.33	6.79	2.63	2.20	11.62
Cultivate & Post		6R-30	MFWD 150	23,600	150	10	0.146	2.64	2.94	0.92	0.59	7.10	2.69	3.95	13.76
Cultivate & Post		6R-38	MFWD 150	24,500	150	10	0.115	2.08	2.32	0.75	0.47	5.64	2.21	3.12	10.97
Cultivate & Post		8R-30	MFWD 190	28,700	150	10	0.110	1.98	2.79	0.84	0.60	6.22	2.45	4.15	12.83
Cultivate & Post		8R-38	MFWD 190	29,800	150	10	0.086	1.56	2.21	0.69	0.47	4.94	2.01	3.28	10.25
Cultivate & Post		8R-38 2x1	MFWD 190	47,800	150	10	0.057	1.04	1.47	0.73	0.31	3.57	2.15	2.18	7.91

(continued)

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

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

(continued)

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

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

(continued)

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

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

(continued)

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

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

Notes:

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

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

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

(continued)

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

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

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

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

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

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

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

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	14.23
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)	
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2019

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

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2018 for the stated contract months.

^b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2018 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.

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

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

^e Price used in MSU Extension Service Planning Budgets.

^f Cottonseed price is the average marketing year price over the years 2008-2017.

Appendix Table 8. Estimated costs for field operations, per acre
 Cotton irrigated with roll-out pipe
 160-acre roll-out pipe system, 10.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Land Plane	50'x16'		0.96	0.32	0.51		0.01	1.80	1.75	3.55
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.21	0.06	0.13		0.01	0.41	0.33	0.74
Roll-Out Pipe	ft	8.25					0.21	8.46		8.46
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.28	0.09	0.40		0.02	0.79	0.72	1.51
IRRIGATE LABOR	hour				1.81		0.05	1.86		1.86
Apply Water										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.43	0.13	0.59		0.01	1.16	1.07	2.23
Land Forming (\$450)	each								36.89	36.89
Well & Pump, Furrow	each			2.96			0.07	3.03	10.09	13.12
Main Line Pipe	each								4.99	4.99
Engine, RPF, 75	each								9.53	9.53
June Irrigation	ac-in		7.41	1.31			0.22	8.94		8.94
July Irrigation	ac-in		7.41	1.31			0.17	8.89		8.89
August Irrigation	ac-in		7.41	1.31			0.13	8.85		8.85
TOTALS		8.25	24.11	7.49	4.36	0.00	0.92	45.13	65.37	110.50

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

Appendix Table 9. 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, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			TOTAL
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.27		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			0.34	13.82	61.18	75.00
Well & Pump, 1/4 CP	each			3.50			0.09	3.59	11.96	15.55
Engine, 1/4 CP, 65	each								11.29	11.29
June Irr. 3app@.75"	ac-in		8.74	1.40			0.25	10.39		10.39
July Irr. 4app@.75"	ac-in		11.65	1.87			0.27	13.79		13.79
Aug Irr. 3app@.75"	ac-in		8.74	1.40			0.15	10.29		10.29
TOTALS		0.00	29.13	21.65	1.84	0.00	1.14	53.76	84.43	138.19

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

Appendix Table 10. Estimated costs for field operations, per acre
 Full-season soybeans irrigated with roll-out pipe
 160-acre system, 9 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			TOTAL
-----dollars-----										
Land Plane	50'x16'		0.96	0.32	0.51		0.11	1.90	1.75	3.65
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.21	0.06	0.13		0.01	0.41	0.33	0.74
Roll-Out Pipe	ft	8.25					0.16	8.41		8.41
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.28	0.09	0.40		0.02	0.79	0.72	1.51
IRRIGATE LABOR	hour				1.81		0.04	1.85		1.85
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.43	0.13	0.59		0.01	1.16	1.07	2.23
Land Forming (\$450)	each								36.89	36.89
Well & Pump, Furrow	each			2.96			0.06	3.02	10.09	13.11
Main Line Pipe	each								4.99	4.99
Engine, RPF, ESB	each								9.53	9.53
1st June Irrigation	ac-in		6.35	1.31			0.15	7.81		7.81
2nd June Irrigation	ac-in		6.35	1.31			0.15	7.81		7.81
July Irrigation	ac-in		6.35	1.31			0.11	7.77		7.77
TOTALS		8.25	20.93	7.49	4.36	0.00	0.83	41.86	65.37	107.23

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

Appendix Table 11. Estimated costs for field operations, per acre
 Irrigation with a contour flood system
 80-acre system, 13.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.37	0.09	0.22			0.02	0.70	0.64
Survey & Mark Levees	acre	2.25						0.06	2.31	2.31
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.49	0.13	0.29			0.02	0.93	0.86
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27			0.02	0.85	0.65
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80)	32"		0.38	0.10	0.23			0.02	0.73	0.67
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.49	0.13	0.29			0.02	0.93	0.86
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27			0.02	0.85	0.65
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80)	32"		0.38	0.10	0.23			0.01	0.72	0.67
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.49	0.13	0.29			0.01	0.92	0.86
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27			0.01	0.84	0.65
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80)	32"		0.38	0.10	0.23			0.01	0.72	0.67
Tear Down Levees										
Levee Splitter (1/80)	32"		0.28	0.08	0.17			0.01	0.54	0.50
Land Forming (\$113)	each									9.26
Well & Pump, Flood	each							0.15	6.06	20.19
Engine, CF, 75	each									19.06
June Irrigation	ac-in		9.53	2.63				0.30	12.46	12.46
July Irrigation	ac-in		9.53	2.63				0.24	12.40	12.40
August Irrigation	ac-in		9.53	2.63				0.18	12.34	12.34
TOTALS		2.25	33.23	14.96	5.58	0.00	1.15	57.17	56.19	113.36

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

Appendix Table 12. Estimated costs for field operations, per acre
 Irrigation with a 1/2-mile center pivot system
 530-acre system, 7.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.07				0.07	0.07
Maintenance										
IRRIGATE LABOR	hour				0.27		0.01		0.28	0.28
Apply Water										
IRRIGATE LABOR	hour				0.04				0.04	0.04
Apply Water										
IRRIGATE LABOR	hour				0.05				0.05	0.05
Apply Water										
IRRIGATE LABOR	hour				0.04				0.04	0.04
Pivot, 1/2 CP	each			8.60			0.22		8.82	39.04
Well & Pump, 1/2 CP	each			1.13			0.03		1.16	3.87
Engine, 1/2 CP, 174	each									4.45
June Irr. 3app@.75"	ac-in		12.80	0.55			0.33		13.68	13.68
July Irr. 4app@.75"	ac-in		17.06	0.74			0.36		18.16	18.16
Aug Irr. 3app@.75"	ac-in		12.80	0.55			0.20		13.55	13.55
TOTALS		0.00	42.66	11.57	0.47	0.00	1.15		55.85	47.36
										103.21

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

Appendix Table 13. Estimated costs for field operations, per acre
 Corn irrigated with roll-out pipe
 160-acre system, 13 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Land Plane	50'x16'		0.96	0.32	0.51		0.11	1.90	1.75	3.65
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.21	0.06	0.13		0.01	0.41	0.33	0.74
Roll-Out Pipe	ft	8.25					0.16	8.41		8.41
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.28	0.09	0.40		0.02	0.79	0.72	1.51
IRRIGATE LABOR	hour				1.81		0.04	1.85		1.85
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.43	0.13	0.59		0.01	1.16	1.07	2.23
Land Forming (\$450)	each								36.89	36.89
Well & Pump, Furrow	each			2.96			0.06	3.02	10.09	13.11
Main Line Pipe	each								4.99	4.99
Engine, RPF, Corn	each								9.53	9.53
1st June Irrigation	ac-in		6.88	0.98			0.16	8.02		8.02
2nd June Irrigation	ac-in		6.88	0.98			0.16	8.02		8.02
3rd June Irrigation	ac-in		6.88	0.98			0.16	8.02		8.02
July Irrigation	ac-in		6.88	0.98			0.12	7.98		7.98
TOTALS		8.25	29.40	7.48	4.59	0.00	1.02	50.74	65.37	116.11

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

Appendix Table 14. Estimated costs for field operations, per acre
 Contour levee rice flood irrigation system
 80-acre system, 33 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.37	0.09	0.22			0.02	0.70	0.64
Survey & Mark Levees	acre	4.50						0.14	4.64	4.64
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.97	0.26	0.58			0.05	1.86	1.73
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27			0.02	0.85	0.65
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Install Gates										
IRRIGATE LABOR	hour				2.72			0.08	2.80	2.80
Apply Water										
IRRIGATE LABOR	hour				6.80			0.20	7.00	7.00
Apply Water										
IRRIGATE LABOR	hour				6.80			0.17	6.97	6.97
Apply Water										
IRRIGATE LABOR	hour				6.80			0.14	6.94	6.94
Apply Water										
IRRIGATE LABOR	hour				6.80			0.10	6.90	6.90
Remove Gates										
IRRIGATE LABOR	hour				0.91			0.01	0.92	0.92
Tear Down Levees										
Levee Splitter (1/80)	32"		0.76	0.20	0.45			0.01	1.42	1.34
Tear Down Levees										
Levee Splitter (1/80)	32"		0.28	0.08	0.17			0.01	0.54	0.50
Land Forming (\$113)	each								9.26	9.26
Levee Gates	each								0.67	0.67
Well & Pump, Flood	each			5.91				0.15	6.06	20.19
Engine, Rice CL, 75	each								19.06	19.06
May Irrigation	ac-in		12.71	1.43				0.42	14.56	14.56
June Irrigation	ac-in		19.06	2.15				0.53	21.74	21.74
July Irrigation	ac-in		19.06	2.15				0.42	21.63	21.63
August Irrigation	ac-in		19.06	2.15				0.32	21.53	21.53
TOTALS		4.50	72.73	14.52	33.65	0.00	2.82	128.22	54.04	182.26

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

Appendix Table 15. Estimated costs for field operations, per acre
 Straight levee rice flood irrigation system
 80-acre system, 27 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----					FIXED COST	TOTAL COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE			INTER	TOTAL
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46	
Survey & Mark Levees	acre	2.25					0.07	2.32	2.32	
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.73	0.20	0.43		0.04	1.40	1.30	2.70
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27		0.02	0.85	0.65	1.50
IRRIGATE LABOR	hour				0.68		0.02	0.70		0.70
Install Gates										
IRRIGATE LABOR	hour				1.36		0.04	1.40		1.40
Apply Water										
IRRIGATE LABOR	hour				4.53		0.14	4.67		4.67
Apply Water										
IRRIGATE LABOR	hour				4.53		0.11	4.64		4.64
Apply Water										
IRRIGATE LABOR	hour				4.53		0.09	4.62		4.62
Apply Water										
IRRIGATE LABOR	hour				4.53		0.07	4.60		4.60
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.57	0.16	0.34		0.01	1.08	1.01	2.09
Land Forming (\$450)	each								36.89	36.89
Levee Gates	each								0.67	0.67
Well & Pump, Flood	each			5.91			0.15	6.06	20.19	26.25
Engine, Rice SL, 75	each								19.06	19.06
May Irrigation	ac-in		12.71	1.75			0.43	14.89		14.89
June Irrigation	ac-in		14.83	2.04			0.42	17.29		17.29
July Irrigation	ac-in		14.83	2.04			0.34	17.21		17.21
August Irrigation	ac-in		14.83	2.04			0.25	17.12		17.12
TOTALS		2.25	58.96	14.24	22.56	0.00	2.22	100.23	79.77	180.00

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

Table 16. Estimated costs for field operations, per acre
 Straight levee rice multi inlet flood irrigation system
 80-acre system, 23 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Survey & Mark Levees	acre	2.25						0.07	2.32	2.32
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.73	0.20	0.43			0.04	1.40	1.30
Butt Levees										
Blade-Box	6'-7'		0.46	0.10	0.27			0.02	0.85	0.65
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Ditcher (1m/160a)			0.21	0.06	0.13			0.01	0.41	0.33
Roll-Out Pipe	ft	8.25						0.25	8.50	8.50
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.28	0.09	0.40			0.02	0.79	0.72
Install Gates										
IRRIGATE LABOR	hour				1.36			0.04	1.40	1.40
Apply Water										
IRRIGATE LABOR	hour				1.81			0.05	1.86	1.86
Apply Water										
IRRIGATE LABOR	hour				1.81			0.05	1.86	1.86
Apply Water										
IRRIGATE LABOR	hour				1.81			0.04	1.85	1.85
Apply Water										
IRRIGATE LABOR	hour				1.81			0.03	1.84	1.84
Remove Gates										
IRRIGATE LABOR	hour				0.45				0.45	0.45
Tear Down Levees										
Levee Splitter (1/80	32"		0.57	0.16	0.34			0.01	1.08	1.01
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.14	0.04	0.19				0.37	0.36
Land Forming (\$450)	each								36.89	36.89
Levee Gates	each								0.34	0.34
Well & Pump, Flood	each			5.91				0.15	6.06	20.19
Engine, Mult In Rice	each								19.06	19.06
May Irrigation	ac-in		10.59	1.64				0.37	12.60	12.60
June Irrigation	ac-in		12.71	1.97				0.37	15.05	15.05
July Irrigation	ac-in		12.71	1.97				0.29	14.97	14.97
August Irrigation	ac-in		12.71	1.97				0.22	14.90	14.90
TOTALS		10.50	51.11	14.11	11.94	0.00	2.06	89.72	80.85	170.57

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

Appendix Table 17. Estimated costs for field operations, per acre
 Straight levee rice - zero grade flood irrigation
 80-acre system, 19 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Set Up Engine									
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46
Apply Water									
IRRIGATE LABOR	hour				2.27		0.07	2.34	2.34
Apply Water									
IRRIGATE LABOR	hour				2.27		0.06	2.33	2.33
Apply Water									
IRRIGATE LABOR	hour				2.27		0.05	2.32	2.32
Apply Water									
IRRIGATE LABOR	hour				2.27		0.03	2.30	2.30
Land Forming (\$450)	each							36.89	36.89
Well & Pump, Flood	each			5.91			0.15	6.06	20.19
Engine, Rice SL, 75	each							19.06	19.06
May Irrigation	ac-in		8.47	1.17			0.29	9.93	9.93
June Irrigation	ac-in		10.59	1.46			0.30	12.35	12.35
July Irrigation	ac-in		10.59	1.46			0.24	12.29	12.29
August Irrigation	ac-in		10.59	1.46			0.18	12.23	12.23
TOTALS		0.00	40.24	11.46	9.53	0.00	1.38	62.61	76.14

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

Appendix Table 18. Estimated costs for field operations, per acre
 Peanuts irrigated with a roll-out pipe
 160-acre system, 12 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			TOTAL
-----dollars-----										
Land Plane	50'x16'		0.96	0.32	0.51		0.11	1.90	1.75	3.65
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.21	0.06	0.13		0.01	0.41	0.33	0.74
Roll-Out Pipe	ft	8.25					0.21	8.46		8.46
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.28	0.09	0.40		0.02	0.79	0.72	1.51
IRRIGATE LABOR	hour				1.81		0.05	1.86		1.86
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		0.43	0.13	0.59		0.01	1.16	1.07	2.23
Land Forming (\$450)	each								36.89	36.89
Well & Pump, Furrow	each			2.96			0.07	3.03	10.09	13.12
Main Line Pipe	each								4.99	4.99
Engine, RPF, PNUT	each								9.53	9.53
1st July Irrigation	ac-in		6.35	0.98			0.15	7.48		7.48
2nd Aug Irrigation	ac-in		6.35	0.98			0.11	7.44		7.44
2nd Aug Irrigation	ac-in		6.35	0.98			0.11	7.44		7.44
1st Sep Irrigation	ac-in		6.35	0.98			0.07	7.40		7.40
TOTALS		8.25	27.28	7.48	4.59	0.00	0.93	48.53	65.37	113.90

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

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