

DELTA 2021 PLANNING BUDGETS

**Mississippi State University
Department of Agricultural Economics
Budget Report 2020-05**

October 2020

Foreword

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

Acknowledgments

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

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

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2021 Planning Budgets

Budgets for Agricultural Enterprises

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

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

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

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

Methods and Procedures

Production Practices

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

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

Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2020. (Appendix Tables 1, 2, and 3).

A performance rate reflects the time required to perform a given task or operation and is expressed as that part of an hour per acre.

Previous studies and expert knowledge of the equipment committee members are used to estimate performance rates for new and larger equipment (1, 4, 5, 6, 7, 9, and 13).

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

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

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

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

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

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

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

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

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

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 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/W3FE variety, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	
App by Air (3 gal)	appl	5.50	5.2500	28.88	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	
Ethephon 6E	pt	4.00	2.3125	9.25	
Tribufos 6lb	pt	10.21	0.5000	5.11	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	
UAN (32%)	gal	1.34	34.3582	46.04	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Select Max	pt	12.74	1.0000	12.74	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Cotoran	pt	6.01	2.0000	12.02	
Dual Magnum	pt	13.33	1.0000	13.33	
Liberty 280	oz	0.44	58.0000	25.52	
Warrant	pt	4.39	3.0000	13.17	
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	
Bidrin 8EC	oz	1.16	5.2000	6.03	
Centric 40WG	oz	5.08	2.0000	10.16	
Diamond .83EC	oz	1.28	6.0000	7.68	
Imidacloprid 4F	oz	1.31	2.0000	2.62	
Bifenthrin	oz	0.94	12.8000	12.03	
Lambda	oz	0.95	1.0000	0.95	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
Transform WG	oz	7.35	1.5000	11.02	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	48.0000	2.88	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.3993	5.86	
Self-Propelled	hour	14.68	0.2075	3.04	
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR	hour	14.68	0.4855	7.13	
DIESEL FUEL					
Tractors	gal	1.53	4.6248	7.08	
Self-Propelled	gal	1.53	4.8836	7.47	
REPAIR & MAINTENANCE					
Implements	acre	7.40	1.0000	7.40	
Tractors	acre	2.91	1.0000	2.91	
Self-Propelled	acre	22.33	1.0000	22.33	
INTEREST ON OP. CAP.	acre	11.78	1.0000	11.78	
TOTAL DIRECT EXPENSES				718.02	
FIXED EXPENSES					
Implements	acre	10.22	1.0000	10.22	
Tractors	acre	17.71	1.0000	17.71	
Self-Propelled	acre	87.04	1.0000	87.04	
TOTAL FIXED EXPENSES				114.97	
TOTAL SPECIFIED EXPENSES				832.99	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	1200.0000	773.04	_____
Cotton Seed	lb	0.08	1620.0000	129.60	_____

TOTAL INCOME				902.64	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	79.21	1.0000	79.21	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	95.43	1.0000	95.43	_____
INSECTICIDES	acre	77.66	1.0000	77.66	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	2.88	1.0000	2.88	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
OPERATOR LABOR	hour	14.68	0.6069	8.90	_____
UNALLOCATED LABOR	hour	14.68	0.4855	7.13	_____
DIESEL FUEL	gal	1.53	9.5084	14.55	_____
REPAIR & MAINTENANCE	acre	32.64	1.0000	32.64	_____
INTEREST ON OP. CAP.	acre	11.78	1.0000	11.78	_____

TOTAL DIRECT EXPENSES				718.02	_____
RETURNS ABOVE DIRECT EXPENSES				184.62	_____
TOTAL FIXED EXPENSES				114.97	_____

TOTAL SPECIFIED EXPENSES				832.99	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				69.65	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
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
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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				
Transform WG	oz					1.5000				
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							0.60	0.39	0.92	0.48

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 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/W3FE variety, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50		34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42		0.16	4.24	4.59	8.83
Bed/Disk (Hipper)	12R-38		0.44	0.50	0.65		0.06	1.65	1.90	3.55
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Clarity	pt	5.37					0.14	5.51		5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Select Max	pt	12.74					0.34	13.08		13.08
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.08	3.65	3.01	6.66
UAN (32%)	gal	23.02					0.54	23.56		23.56
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43	2.97	5.40
Plant - Folding	12R-38		0.88	1.91	1.76		0.09	4.64	5.06	9.70
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42		118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40		20.40
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Cotoran	pt	12.02					0.24	12.26		12.26
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.16	8.16		8.16
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Dual Magnum	pt	13.33					0.27	13.60		13.60
Liberty 280	oz	12.76					0.26	13.02		13.02
Acephate 90%	lb	1.74					0.03	1.77		1.77
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.01	0.80	1.29	2.09
Bidrin 8EC	oz	3.71					0.06	3.77		3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63	3.01	6.64
UAN (32%)	gal	23.02					0.38	23.40		23.40
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.05	2.93	2.45	5.38
Warrant	pt	13.17					0.22	13.39		13.39
Liberty 280	oz	12.76					0.21	12.97		12.97
Mepiquat Chloride	oz	0.96					0.02	0.98		0.98
Centric 40WG	oz	10.16					0.17	10.33		10.33
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Diamond .83EC	oz	7.68					0.10	7.78		7.78
Imidacloprid 4F	oz	2.62					0.03	2.65		2.65
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.21					0.07	5.28		5.28
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
Bifenthrin	oz	6.02					0.08	6.10		6.10
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	0.95					0.01	0.96		0.96
Bidrin 8EC	oz	2.32					0.03	2.35		2.35
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
IncidentalPestTrt\$15	acre	15.00					0.20	15.20		15.20
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Acephate 90%	lb	5.21					0.05	5.26		5.26
Bifenthrin	oz	6.02					0.06	6.08		6.08
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Transform WG	oz	11.02					0.11	11.13		11.13
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45		3.45
Ethephon 6E	pt	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.11					0.03	5.14		5.14
Ethephon 6E	pt	1.25					0.01	1.26		1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74	83.17	117.91
Gin & Haul	lb	132.00					0.44	132.44		132.44
Stalk Shredder-Flail	20'		1.46	2.79	2.18		0.02	6.45	4.94	11.39
TOTALS		640.20	14.55	32.64	18.85	0.00	11.78	718.02	114.97	832.99

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

Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 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/W3FE variety, Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	902.64
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	23.02	0.00	23.02	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	22.27	0.00	47.23	25.93	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	39.80	22.25	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	1.92	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.07	0.00	0.00	0.00	0.00	1.60	3.56	3.33	0.00	0.00	0.00	8.29
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	1.39	0.00	0.00	0.00	0.00	0.92	2.06	1.94	0.00	0.00	0.00	8.24
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	1.05	2.89	1.97	0.00	0.00	0.00	24.52
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.80	0.62	4.07	1.18	0.77	0.34	0.18	0.58
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	30.73	27.21	207.31	72.20	60.37	33.59	28.47	173.63
NET INCOME	-84.51	0.00	0.00	0.00	-30.73	-27.21	-207.31	-72.20	-60.37	-33.59	-28.47	729.01
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-115.24	-142.45	-349.76	-421.96	-482.33	-515.92	-544.39	184.62

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, Delta Area, Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	-----dollars-----										
50	600.00	lb	-232	-212	-193	-174	-155	-135	-116	-97	-77	-58	-39
			-347	-327	-308	-289	-269	-250	-231	-211	-192	-173	-154
60	720.00	lb	-187	-164	-141	-118	-94	-71	-48	-25	-2	21	44
			-302	-279	-256	-232	-209	-186	-163	-140	-117	-93	-70
70	840.00	lb	-142	-115	-88	-61	-34	-7	19	46	73	100	127
			-257	-230	-203	-176	-149	-122	-95	-68	-41	-14	12
80	960.00	lb	-98	-67	-36	-5	25	56	87	118	149	180	211
			-213	-182	-151	-120	-89	-58	-27	3	34	65	96
90	1080.00	lb	-53	-18	16	50	85	120	155	190	224	259	294
			-168	-133	-98	-63	-29	5	40	75	109	144	179
100	1200.00	lb	-8	30	68	107	145	184	223	261	300	339	377
			-123	-84	-46	-7	30	69	108	146	185	224	262
110	1320.00	lb	36	78	121	163	206	248	291	333	376	418	461
			-78	-36	6	48	91	133	176	218	261	303	346
120	1440.00	lb	80	127	173	219	266	312	359	405	451	498	544
			-34	12	58	105	151	197	244	290	336	383	429
130	1560.00	lb	125	175	226	276	326	376	427	477	527	577	628
			10	60	111	161	211	261	312	362	412	462	513
140	1680.00	lb	170	224	278	332	386	440	494	549	603	657	711
			55	109	163	217	271	325	380	434	488	542	596
150	1800.00	lb	215	273	330	388	446	504	562	620	678	736	794
			100	158	216	273	331	389	447	505	563	621	679

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

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

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

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

Table 2.A Estimated costs per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	
App by Air (3 gal)	appl	5.50	5.7500	31.63	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	
Ethephon 6E	pt	4.00	2.3125	9.25	
Tribufos 6lb	pt	10.21	0.5000	5.11	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	
UAN (32%)	gal	1.34	34.3582	46.04	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Select Max	pt	12.74	1.0000	12.74	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Cotoran	pt	6.01	2.0000	12.02	
Dual Magnum	pt	13.33	1.0000	13.33	
Liberty 280	oz	0.44	58.0000	25.52	
Warrant	pt	4.39	3.0000	13.17	
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	
Bidrin 8EC	oz	1.16	5.2000	6.03	
Diamond .83EC	oz	1.28	6.0000	7.68	
Imidacloprid 4F	oz	1.31	2.0000	2.62	
Centric 40WG	oz	5.08	2.0000	10.16	
Bifenthrin	oz	0.94	12.8000	12.03	
Lambda	oz	0.95	1.0000	0.95	
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	
Transform WG	oz	7.35	1.5000	11.02	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	51.0000	3.06	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.5025	7.38	
Self-Propelled	hour	14.68	0.2075	3.04	
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	0.1899	1.71	
UNALLOCATED LABOR	hour	14.68	0.5052	7.42	
DIESEL FUEL					
Tractors	gal	1.53	5.6368	8.63	
Self-Propelled	gal	1.53	4.8836	7.47	
Roll-Out Pipe Irr.	gal	1.53	8.5535	13.08	
REPAIR & MAINTENANCE					
Implements	acre	7.90	1.0000	7.90	
Tractors	acre	3.52	1.0000	3.52	
Self-Propelled	acre	22.33	1.0000	22.33	
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	12.46	1.0000	12.46	
TOTAL DIRECT EXPENSES				798.06	
FIXED EXPENSES					
Implements	acre	12.27	1.0000	12.27	
Tractors	acre	21.45	1.0000	21.45	
Self-Propelled	acre	87.04	1.0000	87.04	
Roll-Out Pipe Irr.	acre	51.84	1.0000	51.84	
TOTAL FIXED EXPENSES				172.60	
TOTAL SPECIFIED EXPENSES				970.66	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	1500.0000	966.30	_____
Cotton Seed	lb	0.08	2025.0000	162.00	_____

TOTAL INCOME				1128.30	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.13	1.0000	49.13	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	79.21	1.0000	79.21	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	95.43	1.0000	95.43	_____
INSECTICIDES	acre	85.16	1.0000	85.16	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	3.06	1.0000	3.06	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.68	0.7101	10.42	_____
UNALLOCATED LABOR	hour	14.68	0.5052	7.42	_____
DIESEL FUEL	gal	1.53	19.0740	29.18	_____
REPAIR & MAINTENANCE	acre	40.91	1.0000	40.91	_____
INTEREST ON OP. CAP.	acre	12.46	1.0000	12.46	_____

TOTAL DIRECT EXPENSES				798.06	_____
RETURNS ABOVE DIRECT EXPENSES				330.24	_____
TOTAL FIXED EXPENSES				172.60	_____

TOTAL SPECIFIED EXPENSES				970.66	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				157.64	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	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
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air (3 gal)	appl			1.00	Jul	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
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					19.0000				
Centric 40WG	oz					2.0000				
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				
Transform WG	oz					1.5000				
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	
TOTALS							0.71	0.50	1.38	0.50

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50		34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42		0.16	4.24	4.59	8.83
Bed/Disk (Hipper)	12R-38		0.87	0.99	1.30		0.13	3.29	3.81	7.10
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Clarity	pt	5.37					0.14	5.51		5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Select Max	pt	12.74					0.34	13.08		13.08
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.08	3.65	3.01	6.66
UAN (32%)	gal	23.02					0.54	23.56		23.56
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43	2.97	5.40
Plant - Folding	12R-38		0.88	1.91	1.76		0.09	4.64	5.06	9.70
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42		118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40		20.40
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Cotoran	pt	12.02					0.24	12.26		12.26
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.16	8.16		8.16
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Dual Magnum	pt	13.33					0.27	13.60		13.60
Liberty 280	oz	12.76					0.26	13.02		13.02
Acephate 90%	lb	1.74					0.03	1.77		1.77
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.01	0.80	1.29	2.09
Bidrin 8EC	oz	3.71					0.06	3.77		3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63	3.01	6.64
UAN (32%)	gal	23.02					0.38	23.40		23.40
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Diamond .83EC	oz	7.68					0.10	7.78		7.78
Imidacloprid 4F	oz	2.62					0.03	2.65		2.65
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.04	2.92	2.45	5.37
Warrant	pt	13.17					0.18	13.35		13.35
Liberty 280	oz	12.76					0.17	12.93		12.93
Mepiquat Chloride	oz	1.14					0.02	1.16		1.16
Centric 40WG	oz	10.16					0.14	10.30		10.30
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.21					0.07	5.28		5.28
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
Bifenthrin	oz	6.02					0.08	6.10		6.10
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	0.95					0.01	0.96		0.96
Bidrin 8EC	oz	2.32					0.03	2.35		2.35
Incidental Pest										
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
IncidentalPestTrt\$15	acre	22.50					0.30	22.80		22.80
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Acephate 90%	lb	5.21					0.05	5.26		5.26
Bifenthrin	oz	6.02					0.06	6.08		6.08
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Transform WG	oz	11.02					0.11	11.13		11.13
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45		3.45
Ethephon 6E	pt	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.11					0.03	5.14		5.14
Ethephon 6E	pt	1.25					0.01	1.26		1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74	83.17	117.91
Gin & Haul	lb	165.00					0.55	165.55		165.55
Stalk Shredder-Flail	20'		1.46	2.79	2.18		0.02	6.45	4.94	11.39
Roll-Out Pipe Irr.	acre	7.92	14.20	7.78	4.46		0.48	34.84	55.72	90.56
TOTALS		691.55	29.18	40.91	23.96	0.00	12.46	798.06	172.60	970.66

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1128.30
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	20.63	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	23.02	0.00	23.02	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	22.27	0.00	47.23	0.00	25.93	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	3.71	57.46	22.25	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.72	0.00	0.00	0.00	0.00	1.60	3.79	4.55	1.60	0.23	0.62	8.85
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.82	0.00	0.00	0.00	0.00	0.92	2.06	5.81	5.15	4.36	0.25	8.81
REPAIR & MAINTENANCE	2.70	0.00	0.00	0.00	0.00	1.05	2.89	5.78	2.12	1.40	0.15	24.82
INTEREST ON OP. CAP.	3.31	0.00	0.00	0.00	0.80	0.62	4.07	0.84	1.54	0.40	0.19	0.69
TOTAL DIRECT EXPENSES	86.15	0.00	0.00	0.00	30.73	27.21	207.54	51.63	117.49	39.64	29.50	208.17
NET INCOME	-86.15	0.00	0.00	0.00	-30.73	-27.21	-207.54	-51.63	-117.49	-39.64	-29.50	920.13
NET INCOME TO DATE	-86.15	-86.15	-86.15	-86.15	-116.88	-144.09	-351.63	-403.26	-520.75	-560.39	-589.89	330.24

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-190	-166	-142	-118	-94	-70	-45	-21	2	26	50
			-363	-339	-315	-291	-266	-242	-218	-194	-170	-146	-121
60	900.00	lb	-135	-106	-77	-48	-19	9	38	67	96	125	154
			-307	-278	-249	-220	-191	-162	-133	-104	-75	-46	-17
70	1050.00	lb	-79	-45	-11	22	56	90	123	157	191	225	259
			-251	-217	-184	-150	-116	-82	-48	-14	18	52	86
80	1200.00	lb	-23	15	54	92	131	170	208	247	286	324	363
			-195	-157	-118	-79	-41	-2	36	74	113	152	190
90	1350.00	lb	32	76	119	163	206	250	293	337	380	424	467
			-139	-96	-52	-9	34	77	121	164	208	251	294
100	1500.00	lb	88	136	185	233	281	330	378	426	475	523	571
			-83	-35	12	61	109	157	205	254	302	350	399
110	1650.00	lb	144	197	250	304	357	410	463	516	569	622	676
			-28	25	78	131	184	237	290	344	397	450	503
120	1800.00	lb	200	258	316	374	432	490	548	606	664	722	780
			27	85	143	201	259	317	375	433	491	549	607
130	1950.00	lb	256	319	382	444	507	570	633	696	758	821	884
			83	146	209	272	335	397	460	523	586	649	711
140	2100.00	lb	312	379	447	515	582	650	718	785	853	921	988
			139	207	275	342	410	477	545	613	680	748	816
150	2250.00	lb	368	440	513	585	658	730	803	875	948	1020	1092
			195	268	340	413	485	558	630	702	775	847	920

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

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

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

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

Table 3.A Estimated costs per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	
App by Air (3 gal)	appl	5.50	5.7500	31.63	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	
Ethephon 6E	pt	4.00	2.3125	9.25	
Tribufos 6lb	pt	10.21	0.5000	5.11	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	
UAN (32%)	gal	1.34	34.3582	46.04	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Select Max	pt	12.74	1.0000	12.74	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Cotoran	pt	6.01	2.0000	12.02	
Dual Magnum	pt	13.33	1.0000	13.33	
Liberty 280	oz	0.44	58.0000	25.52	
Warrant	pt	4.39	3.0000	13.17	
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	
Bidrin 8EC	oz	1.16	5.2000	6.03	
Centric 40WG	oz	5.08	2.0000	10.16	
Diamond .83EC	oz	1.28	6.0000	7.68	
Imidacloprid 4F	oz	1.31	2.0000	2.62	
Bifenthrin	oz	0.94	12.8000	12.03	
Lambda	oz	0.95	1.0000	0.95	
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	
Transform WG	oz	7.35	1.5000	11.02	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	48.0000	2.88	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.3993	5.86	
Self-Propelled	hour	14.68	0.2075	3.04	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR	hour	14.68	0.4855	7.13	
DIESEL FUEL					
Tractors	gal	1.53	4.6248	7.08	
Self-Propelled	gal	1.53	4.8836	7.47	
1/4-mi. Pivot Irr.	gal	1.53	11.2011	17.14	
REPAIR & MAINTENANCE					
Implements	acre	7.40	1.0000	7.40	
Tractors	acre	2.91	1.0000	2.91	
Self-Propelled	acre	22.33	1.0000	22.33	
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	
INTEREST ON OP. CAP.	acre	12.64	1.0000	12.64	
TOTAL DIRECT EXPENSES				803.06	
FIXED EXPENSES					
Implements	acre	10.22	1.0000	10.22	
Tractors	acre	17.71	1.0000	17.71	
Self-Propelled	acre	87.04	1.0000	87.04	
1/4-mi. Pivot Irr.	acre	71.85	1.0000	71.85	
TOTAL FIXED EXPENSES				186.82	
TOTAL SPECIFIED EXPENSES				989.88	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	1500.0000	966.30	_____
Cotton Seed	lb	0.08	2025.0000	162.00	_____

TOTAL INCOME				1128.30	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.13	1.0000	49.13	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	79.21	1.0000	79.21	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	95.43	1.0000	95.43	_____
INSECTICIDES	acre	85.16	1.0000	85.16	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	2.88	1.0000	2.88	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	14.68	0.6069	8.90	_____
UNALLOCATED LABOR	hour	14.68	0.4855	7.13	_____
DIESEL FUEL	gal	1.53	20.7096	31.69	_____
REPAIR & MAINTENANCE	acre	54.59	1.0000	54.59	_____
INTEREST ON OP. CAP.	acre	12.64	1.0000	12.64	_____

TOTAL DIRECT EXPENSES				803.06	_____
RETURNS ABOVE DIRECT EXPENSES				325.24	_____
TOTAL FIXED EXPENSES				186.82	_____

TOTAL SPECIFIED EXPENSES				989.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				138.42	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 3.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
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
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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				
Transform WG	oz					1.5000				
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							0.60	0.39	1.12	0.48

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50		34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42		0.16	4.24	4.59	8.83
Bed/Disk (Hipper)	12R-38		0.44	0.50	0.65		0.06	1.65	1.90	3.55
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Clarity	pt	5.37					0.14	5.51		5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Select Max	pt	12.74					0.34	13.08		13.08
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.08	3.65	3.01	6.66
UAN (32%)	gal	23.02					0.54	23.56		23.56
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43	2.97	5.40
Plant - Folding	12R-38		0.88	1.91	1.76		0.09	4.64	5.06	9.70
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42		118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40		20.40
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Cotoran	pt	12.02					0.24	12.26		12.26
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.16	8.16		8.16
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Dual Magnum	pt	13.33					0.27	13.60		13.60
Liberty 280	oz	12.76					0.26	13.02		13.02
Acephate 90%	lb	1.74					0.03	1.77		1.77
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.01	0.80	1.29	2.09
Bidrin 8EC	oz	3.71					0.06	3.77		3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63	3.01	6.64
UAN (32%)	gal	23.02					0.38	23.40		23.40
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.05	2.93	2.45	5.38
Warrant	pt	13.17					0.22	13.39		13.39
Liberty 280	oz	12.76					0.21	12.97		12.97
Mepiquat Chloride	oz	0.96					0.02	0.98		0.98
Centric 40WG	oz	10.16					0.17	10.33		10.33
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Diamond .83EC	oz	7.68					0.10	7.78		7.78
Imidacloprid 4F	oz	2.62					0.03	2.65		2.65
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.21					0.07	5.28		5.28
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
Bifenthrin	oz	6.02					0.08	6.10		6.10
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	0.95					0.01	0.96		0.96
Bidrin 8EC	oz	2.32					0.03	2.35		2.35
Incidental Pest										
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
IncidentalPestTrt\$15	acre	22.50					0.30	22.80		22.80
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Acephate 90%	lb	5.21					0.05	5.26		5.26
Bifenthrin	oz	6.02					0.06	6.08		6.08
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Transform WG	oz	11.02					0.11	11.13		11.13
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45		3.45
Ethephon 6E	pt	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.11					0.03	5.14		5.14
Ethephon 6E	pt	1.25					0.01	1.26		1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74	83.17	117.91
Gin & Haul	lb	165.00					0.55	165.55		165.55
Stalk Shredder-Flail	20'		1.46	2.79	2.18		0.02	6.45	4.94	11.39
1/4-mi. Pivot Irr.	acre		17.14	21.95	1.84		0.61	41.54	71.85	113.39
TOTALS		683.45	31.69	54.59	20.69	0.00	12.64	803.06	186.82	989.88

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1128.30
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	20.63	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	23.02	0.00	23.02	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	22.27	0.00	47.23	25.93	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	47.30	22.25	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	1.92	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.07	0.00	0.00	0.00	0.00	1.60	4.90	3.48	0.20	0.15	0.00	8.29
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	1.39	0.00	0.00	0.00	0.00	0.92	2.06	7.08	6.86	5.14	0.00	8.24
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	1.05	2.89	20.44	1.99	1.49	0.00	24.52
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.80	0.62	4.10	1.57	1.03	0.41	0.18	0.69
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	30.73	27.21	208.68	96.35	79.93	40.44	28.47	206.74
NET INCOME	-84.51	0.00	0.00	0.00	-30.73	-27.21	-208.68	-96.35	-79.93	-40.44	-28.47	921.56
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-115.24	-142.45	-351.13	-447.48	-527.41	-567.85	-596.32	325.24

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-195 -382	-171 -358	-147 -334	-123 -310	-99 -286	-75 -261	-50 -237	-26 -213	-2 -189	21 -165	45 -141
60	900.00	lb	-140 -326	-111 -297	-82 -268	-53 -239	-24 -210	4 -181	33 -152	62 -123	91 -94	120 -65	149 -36
70	1050.00	lb	-84 -270	-50 -237	-16 -203	17 -169	51 -135	85 -101	118 -67	152 -34	186 -0	220 33	254 67
80	1200.00	lb	-28 -214	10 -176	49 -137	87 -99	126 -60	165 -21	203 16	242 55	281 94	319 132	358 171
90	1350.00	lb	27 -159	71 -115	114 -72	158 -28	201 14	245 58	288 101	332 145	375 188	419 232	462 275
100	1500.00	lb	83 -103	131 -54	180 -6	228 41	276 90	325 138	373 186	421 235	470 283	518 331	566 379
110	1650.00	lb	139 -47	192 5	245 59	299 112	352 165	405 218	458 271	511 324	564 377	617 431	671 484
120	1800.00	lb	195 8	253 66	311 124	369 182	427 240	485 298	543 356	601 414	659 472	717 530	775 588
130	1950.00	lb	251 64	314 127	377 190	439 253	502 315	565 378	628 441	691 504	753 567	816 629	879 692
140	2100.00	lb	307 120	374 188	442 255	510 323	577 391	645 458	713 526	780 594	848 661	916 729	983 796
150	2250.00	lb	363 176	435 248	508 321	580 393	653 466	725 538	798 611	870 683	943 756	1015 828	1087 901

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

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

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

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

Table 4.A Estimated costs per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	
App by Air (3 gal)	appl	5.50	5.2500	28.88	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	
Ethephon 6E	pt	4.00	2.3125	9.25	
Tribufos 6lb	pt	10.21	0.5000	5.11	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	
UAN (32%)	gal	1.34	25.4000	34.04	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Select Max	pt	12.74	1.0000	12.74	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Cotoran	pt	6.01	2.0000	12.02	
Dual Magnum	pt	13.33	1.0000	13.33	
Liberty 280	oz	0.44	58.0000	25.52	
Warrant	pt	4.39	3.0000	13.17	
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	
Bidrin 8EC	oz	1.16	5.2000	6.03	
Centric 40WG	oz	5.08	2.0000	10.16	
Diamond .83EC	oz	1.28	6.0000	7.68	
Imidacloprid 4F	oz	1.31	2.0000	2.62	
Bifenthrin	oz	0.94	12.8000	12.03	
Lambda	oz	0.95	1.0000	0.95	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
Transform WG	oz	7.35	1.5000	11.02	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	48.0000	2.88	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.2712	3.98	
Self-Propelled	hour	14.68	0.2075	3.04	
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR	hour	14.69	0.3830	5.63	
DIESEL FUEL					
Tractors	gal	1.53	3.1417	4.81	
Self-Propelled	gal	1.53	4.8836	7.47	
REPAIR & MAINTENANCE					
Implements	acre	5.35	1.0000	5.35	
Tractors	acre	1.98	1.0000	1.98	
Self-Propelled	acre	22.33	1.0000	22.33	
INTEREST ON OP. CAP.	acre	11.14	1.0000	11.14	
TOTAL DIRECT EXPENSES				696.54	
FIXED EXPENSES					
Implements	acre	6.97	1.0000	6.97	
Tractors	acre	12.03	1.0000	12.03	
Self-Propelled	acre	87.04	1.0000	87.04	
TOTAL FIXED EXPENSES				106.04	
TOTAL SPECIFIED EXPENSES				802.58	

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	1200.0000	773.04	_____
Cotton Seed	lb	0.08	1620.0000	129.60	_____

TOTAL INCOME				902.64	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	67.21	1.0000	67.21	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	95.43	1.0000	95.43	_____
INSECTICIDES	acre	77.66	1.0000	77.66	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	2.88	1.0000	2.88	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2897	2.61	_____
OPERATOR LABOR	hour	14.68	0.4788	7.02	_____
UNALLOCATED LABOR	hour	14.69	0.3830	5.63	_____
DIESEL FUEL	gal	1.53	8.0253	12.28	_____
REPAIR & MAINTENANCE	acre	29.66	1.0000	29.66	_____
INTEREST ON OP. CAP.	acre	11.14	1.0000	11.14	_____

TOTAL DIRECT EXPENSES				696.54	_____
RETURNS ABOVE DIRECT EXPENSES				206.10	_____
TOTAL FIXED EXPENSES				106.04	_____

TOTAL SPECIFIED EXPENSES				802.58	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				100.06	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
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
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					25.4000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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				
Transform WG	oz					1.5000				
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							0.47	0.27	0.76	0.38

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50		34.50
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Clarity	pt	5.37					0.14	5.51		5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Select Max	pt	12.74					0.34	13.08		13.08
Surfactant	pt	0.66					0.02	0.68		0.68
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43	2.97	5.40
NT Plant-Folding	12R-38		0.92	2.19	1.84		0.10	5.05	5.63	10.68
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42		118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40		20.40
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Cotoran	pt	12.02					0.24	12.26		12.26
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.16	8.16		8.16
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Dual Magnum	pt	13.33					0.27	13.60		13.60
Liberty 280	oz	12.76					0.26	13.02		13.02
Acephate 90%	lb	1.74					0.03	1.77		1.77
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.01	0.80	1.29	2.09
Bidrin 8EC	oz	3.71					0.06	3.77		3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63	3.01	6.64
UAN (32%)	gal	34.04					0.57	34.61		34.61
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.05	2.93	2.45	5.38
Warrant	pt	13.17					0.22	13.39		13.39
Liberty 280	oz	12.76					0.21	12.97		12.97
Mepiquat Chloride	oz	0.96					0.02	0.98		0.98
Centric 40WG	oz	10.16					0.17	10.33		10.33
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Diamond .83EC	oz	7.68					0.10	7.78		7.78
Imidacloprid 4F	oz	2.62					0.03	2.65		2.65
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.21					0.07	5.28		5.28
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
Bifenthrin	oz	6.02					0.08	6.10		6.10
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	0.95					0.01	0.96		0.96
Bidrin 8EC	oz	2.32					0.03	2.35		2.35
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
IncidentalPestTrt\$15	acre	15.00					0.20	15.20		15.20
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Acephate 90%	lb	5.21					0.05	5.26		5.26
Bifenthrin	oz	6.02					0.06	6.08		6.08
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Transform WG	oz	11.02					0.11	11.13		11.13
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45		3.45
Ethephon 6E	pt	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.11					0.03	5.14		5.14
Ethephon 6E	pt	1.25					0.01	1.26		1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74	83.17	117.91
Gin & Haul	lb	132.00					0.44	132.44		132.44
Stalk Shredder-Flail	20'		1.46	2.79	2.18		0.02	6.45	4.94	11.39
TOTALS		628.20	12.28	29.66	15.26	0.00	11.14	696.54	106.04	802.58

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	902.64
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	0.00	0.00	34.04	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	22.27	0.00	47.23	25.93	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	39.80	22.25	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	1.92	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	3.64	3.33	0.00	0.00	0.00	8.29
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	2.10	1.94	0.00	0.00	0.00	8.24
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.17	1.97	0.00	0.00	0.00	24.52
INTEREST ON OP. CAP.	3.02	0.00	0.00	0.00	0.80	0.00	4.08	1.37	0.77	0.34	0.18	0.58
TOTAL DIRECT EXPENSES	78.62	0.00	0.00	0.00	30.73	0.00	207.72	83.41	60.37	33.59	28.47	173.63
NET INCOME	-78.62	0.00	0.00	0.00	-30.73	0.00	-207.72	-83.41	-60.37	-33.59	-28.47	729.01
NET INCOME TO DATE	-78.62	-78.62	-78.62	-78.62	-109.35	-109.35	-317.07	-400.48	-460.85	-494.44	-522.91	206.10

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

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

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	-----dollars-----										
50	600.00	lb	-210 -316	-191 -297	-172 -278	-152 -258	-133 -239	-114 -220	-94 -200	-75 -181	-56 -162	-36 -142	-17 -123
60	720.00	lb	-166 -272	-142 -248	-119 -225	-96 -202	-73 -179	-50 -156	-26 -132	-3 -109	19 -86	42 -63	65 -40
70	840.00	lb	-121 -227	-94 -200	-67 -173	-40 -146	-13 -119	13 -92	40 -65	68 -38	95 -10	122 16	149 43
80	960.00	lb	-76 -182	-45 -151	-14 -120	16 -89	47 -58	77 -28	108 2	139 33	170 64	201 95	232 126
90	1080.00	lb	-31 -137	2 -103	37 -68	72 -33	107 1	142 36	176 70	211 105	246 140	281 175	315 209
100	1200.00	lb	12 -93	51 -54	90 -15	128 22	167 61	206 100	244 138	283 177	322 216	360 254	399 293
110	1320.00	lb	57 -48	100 -5	142 36	185 79	227 121	270 164	312 206	355 249	397 291	440 334	482 376
120	1440.00	lb	102 -3	148 42	195 89	241 135	287 181	334 228	380 274	426 320	473 367	519 413	566 460
130	1560.00	lb	147 41	197 91	247 141	297 191	348 241	398 292	448 342	498 392	549 442	599 493	649 543
140	1680.00	lb	191 85	245 139	300 193	354 248	408 302	462 356	516 410	570 464	624 518	678 572	732 626
150	1800.00	lb	236 130	294 188	352 246	410 304	468 362	526 420	584 478	642 536	700 594	758 652	816 710

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2020 input prices.

Table 5.A Estimated costs per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	
App by Air (3 gal)	appl	5.50	5.2500	28.88	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	
Ethephon 6E	pt	4.00	2.3125	9.25	
Tribufos 6lb	pt	10.21	0.5000	5.11	
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	
UAN (32%)	gal	1.34	32.5498	43.62	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Select Max	pt	12.74	1.0000	12.74	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Cotoran	pt	6.01	2.0000	12.02	
Dual Magnum	pt	13.33	1.0000	13.33	
Liberty 280	oz	0.44	58.0000	25.52	
Warrant	pt	4.39	2.0000	8.78	
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	
Bidrin 8EC	oz	1.16	5.2000	6.03	
Centric 40WG	oz	5.08	1.3400	6.81	
Diamond .83EC	oz	1.28	6.0000	7.68	
Imidacloprid 4F	oz	1.31	2.0000	2.62	
Bifenthrin	oz	0.94	12.8000	12.03	
Lambda	oz	0.95	1.0000	0.95	
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	
Transform WG	oz	7.35	1.5000	11.02	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	30.0000	77.40	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	42.7200	2.56	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.8159	11.97	
Self-Propelled	hour	14.68	0.1958	2.87	
HAND LABOR					
Implements	hour	9.06	0.3181	2.87	
Self-Propelled	hour	9.06	0.1840	1.66	
UNALLOCATED LABOR	hour	14.66	0.8094	11.87	
DIESEL FUEL					
Tractors	gal	1.53	9.4502	14.46	
Self-Propelled	gal	1.53	3.4035	5.21	
REPAIR & MAINTENANCE					
Implements	acre	10.87	1.0000	10.87	
Tractors	acre	5.93	1.0000	5.93	
Self-Propelled	acre	10.01	1.0000	10.01	
INTEREST ON OP. CAP.	acre	10.62	1.0000	10.62	
TOTAL DIRECT EXPENSES				629.97	
FIXED EXPENSES					
Implements	acre	16.42	1.0000	16.42	
Tractors	acre	36.21	1.0000	36.21	
Self-Propelled	acre	39.37	1.0000	39.37	
TOTAL FIXED EXPENSES				92.00	
TOTAL SPECIFIED EXPENSES				721.97	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.64	811.0000	522.45	_____
Cotton Seed	lb	0.08	1095.0000	87.60	_____

TOTAL INCOME				610.05	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	76.79	1.0000	76.79	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	91.04	1.0000	91.04	_____
INSECTICIDES	acre	74.31	1.0000	74.31	_____
SEED/PLANTS	acre	77.40	1.0000	77.40	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5022	4.53	_____
OPERATOR LABOR	hour	14.68	1.0118	14.84	_____
UNALLOCATED LABOR	hour	14.66	0.8094	11.87	_____
DIESEL FUEL	gal	1.53	12.8538	19.67	_____
REPAIR & MAINTENANCE	acre	26.81	1.0000	26.81	_____
INTEREST ON OP. CAP.	acre	10.62	1.0000	10.62	_____

TOTAL DIRECT EXPENSES				629.97	_____
RETURNS ABOVE DIRECT EXPENSES				-19.92	_____
TOTAL FIXED EXPENSES				92.00	_____

TOTAL SPECIFIED EXPENSES				721.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-111.92	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, Delta, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	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
Cot. Seed B3XF/W3FE	thous					30.0000				
Cotton Seed Trt.	acre					0.6700				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
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				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Bidrin 8EC	oz					3.2000				
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				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					2.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					10.7200				
Centric 40WG	oz					1.3400				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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				
Transform WG	oz					1.5000				
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							1.01	0.81	1.51	0.80

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, Delta, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50		34.50
Bed-Subsoil Fold	8R-38 2x1		0.95	1.71	1.42		0.16	4.24	4.59	8.83
Bed/Disk (Hipper)	8R-38 2x1		0.44	0.50	0.65		0.06	1.65	1.90	3.55
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Clarity	pt	5.37					0.14	5.51		5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Select Max	pt	12.74					0.34	13.08		13.08
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	8R-38 2x1		0.92	1.10	1.60		0.08	3.70	3.08	6.78
UAN (32%)	gal	21.81					0.51	22.32		22.32
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43	2.97	5.40
Plant - Folding	8R-38 2x1		0.88	1.91	1.76		0.09	4.64	5.06	9.70
Cot. Seed B3XF/W3FE	thous	77.40					1.55	78.95		78.95
Cotton Seed Trt.	acre	13.40					0.27	13.67		13.67
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Cotoran	pt	12.02					0.24	12.26		12.26
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.16	8.16		8.16
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29	2.10
Dual Magnum	pt	13.33					0.27	13.60		13.60
Liberty 280	oz	12.76					0.26	13.02		13.02
Acephate 90%	lb	1.74					0.03	1.77		1.77
Spray (Direct/Layby)	8R-38 2x1		0.79	0.72	1.37		0.05	2.93	2.45	5.38
Bidrin 8EC	oz	3.71					0.06	3.77		3.77
Fert Appl (Liquid)	8R-38 2x1		0.92	1.10	1.60		0.06	3.68	3.08	6.76
UAN (32%)	gal	21.81					0.36	22.17		22.17
Spray (Direct/Layby)	8R-38 2x1		0.79	0.72	1.37		0.05	2.93	2.45	5.38
Warrant	pt	8.78					0.15	8.93		8.93
Liberty 280	oz	12.76					0.21	12.97		12.97
Mepiquat Chloride	oz	0.64					0.01	0.65		0.65
Centric 40WG	oz	6.81					0.11	6.92		6.92
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Diamond .83EC	oz	7.68					0.10	7.78		7.78
Imidacloprid 4F	oz	2.62					0.03	2.65		2.65
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.21					0.07	5.28		5.28
Mepiquat Chloride	oz	0.96					0.01	0.97		0.97
Bifenthrin	oz	6.02					0.08	6.10		6.10
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	0.95					0.01	0.96		0.96
Bidrin 8EC	oz	2.32					0.03	2.35		2.35
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
IncidentalPestTrt\$15	acre	15.00					0.20	15.20		15.20
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Acephate 90%	lb	5.21					0.05	5.26		5.26
Bifenthrin	oz	6.02					0.06	6.08		6.08
App by Air (3 gal)	appl	5.50					0.06	5.56		5.56
Transform WG	oz	11.02					0.11	11.13		11.13
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45		3.45
Ethephon 6E	pt	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Ethephon 6E	pt	1.25					0.01	1.26		1.26
Tribufos 6lb	pt	5.11					0.03	5.14		5.14
Cotton Picker	4R2x1 (350)		4.75	9.61	6.11		0.07	20.54	36.79	57.33
Boll Buggy	4R2x1 (350)		3.05	2.56	4.55		0.03	10.19	10.22	20.41
Module Builder	4R2x1 (350)		3.05	2.74	6.11		0.04	11.94	10.58	22.52
Gin & Haul	lb	89.21					0.30	89.51		89.51
Stalk Shredder-Flail	15'		1.95	3.16	2.90		0.03	8.04	6.25	14.29
TOTALS		541.63	19.67	26.81	31.24	0.00	10.62	629.97	92.00	721.97

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, Delta, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	610.05
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.21
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	21.81	0.00	21.81	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	22.27	0.00	47.23	21.54	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	10.52	39.80	22.25	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.40	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	0.64	1.92	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.07	0.00	0.00	0.00	0.00	1.60	3.56	4.34	0.00	0.00	0.00	19.67
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.39	0.00	0.00	0.00	0.00	0.92	2.06	2.50	0.00	0.00	0.00	12.80
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	1.10	2.89	2.54	0.00	0.00	0.00	18.07
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.80	0.59	3.17	1.06	0.77	0.34	0.18	0.47
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	30.73	26.02	161.11	64.95	60.37	33.59	28.47	140.22
NET INCOME	-84.51	0.00	0.00	0.00	-30.73	-26.02	-161.11	-64.95	-60.37	-33.59	-28.47	469.83
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-115.24	-141.26	-302.37	-367.32	-427.69	-461.28	-489.75	-19.92

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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/W3FE variety, Delta, Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-301	-288	-275	-262	-249	-236	-223	-210	-197	-184	-171
			-393	-380	-367	-354	-341	-328	-315	-302	-289	-276	-263
60	486.60	lb	-271	-255	-240	-224	-208	-193	-177	-161	-146	-130	-114
			-363	-347	-332	-316	-300	-285	-269	-253	-238	-222	-206
70	567.70	lb	-241	-222	-204	-186	-168	-149	-131	-113	-94	-76	-58
			-333	-314	-296	-278	-260	-241	-223	-205	-186	-168	-150
80	648.80	lb	-210	-190	-169	-148	-127	-106	-85	-64	-43	-22	-2
			-302	-282	-261	-240	-219	-198	-177	-156	-135	-114	-94
90	729.90	lb	-180	-157	-133	-110	-86	-63	-39	-16	7	30	54
			-272	-249	-225	-202	-178	-155	-131	-108	-84	-61	-37
100	811.00	lb	-150	-124	-98	-72	-46	-19	6	32	58	84	110
			-242	-216	-190	-164	-138	-111	-85	-59	-33	-7	18
110	892.10	lb	-120	-91	-62	-34	-5	23	52	80	109	138	167
			-212	-183	-154	-126	-97	-68	-39	-11	17	46	75
120	973.20	lb	-90	-58	-27	3	35	66	98	129	160	192	223
			-182	-150	-119	-88	-56	-25	6	37	68	100	131
130	1054.30	lb	-59	-25	8	42	76	109	143	177	211	245	279
			-151	-117	-83	-49	-15	17	51	85	119	153	187
140	1135.40	lb	-29	6	43	80	116	153	189	226	262	299	336
			-121	-85	-48	-11	24	61	97	134	170	207	244
150	1216.50	lb	0	39	78	118	157	196	235	274	314	353	392
			-91	-52	-13	26	65	104	143	182	222	261	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 2020 input prices.

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	64.0000	8.32	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Select Max	pt	12.74	1.0000	12.74	
Valor SX	oz	4.51	2.0000	9.02	
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Liberty 280	oz	0.44	29.0000	12.76	
Dual Magnum	pt	13.33	1.0000	13.33	
Zidua DF	oz	8.72	1.5000	13.08	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.2942	4.30	
Harvesters	hour	14.68	0.0851	1.25	
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	
UNALLOCATED LABOR	hour	14.64	0.3414	5.00	
DIESEL FUEL					
Tractors	gal	1.53	3.4079	5.22	
Harvesters	gal	1.53	1.4243	2.18	
REPAIR & MAINTENANCE					
Implements	acre	5.23	1.0000	5.23	
Tractors	acre	2.15	1.0000	2.15	
Harvesters	acre	3.50	1.0000	3.50	
INTEREST ON OP. CAP.	acre	7.65	1.0000	7.65	
TOTAL DIRECT EXPENSES				351.66	
FIXED EXPENSES					
Implements	acre	10.36	1.0000	10.36	
Tractors	acre	13.04	1.0000	13.04	
Harvesters	acre	13.41	1.0000	13.41	
TOTAL FIXED EXPENSES				36.81	
TOTAL SPECIFIED EXPENSES				388.47	

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

Table 6.B Summary of estimated costs and returns per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

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

TOTAL INCOME				406.14	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	105.01	1.0000	105.01	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	3.30	1.0000	3.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	14.68	0.3794	5.55	_____
UNALLOCATED LABOR	hour	14.64	0.3414	5.00	_____
DIESEL FUEL	gal	1.53	4.8323	7.40	_____
REPAIR & MAINTENANCE	acre	10.88	1.0000	10.88	_____
INTEREST ON OP. CAP.	acre	7.65	1.0000	7.65	_____

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

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

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

Table 6.C Estimated resource use for field operations, per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.37	0.37	0.47	0.34

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

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

Table 6.D Estimated costs for field operations, per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Subsoiler	3 shank		0.72	0.39	1.14		0.09	2.34	2.01	4.35
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus(46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Disk Harrow	32'		1.09	1.50	1.71		0.17	4.47	4.85	9.32
Field Cultivate Fld	32'		0.83	0.85	1.30		0.12	3.10	4.14	7.24
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Select Max	pt	12.74					0.34	13.08		13.08
Valor SX	oz	9.02					0.24	9.26		9.26
Surfactant	pt	1.32					0.04	1.36		1.36
Plant & Pre-Folding	12R-30		1.20	2.55	2.49		0.12	6.36	6.79	13.15
Soybean Enlist E3	lb	60.00					1.20	61.20		61.20
CruiserMaxx Vibrance	oz	7.60					0.15	7.75		7.75
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Surfactant	pt	1.32					0.03	1.35		1.35
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Liberty 280	oz	12.76					0.21	12.97		12.97
Dual Magnum	pt	13.33					0.22	13.55		13.55
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16					0.07	4.23		4.23
Zidua DF	oz	13.08					0.22	13.30		13.30
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Acephate 90SP	lb	4.81					0.03	4.84		4.84
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06					0.03	4.09		4.09
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37		0.03	9.01	14.76	23.77
Haul Soybeans	bu	11.34					0.04	11.38		11.38
Grain Cart Soybean	700 bu		0.38	0.40	0.59			1.37	1.36	2.73
TOTALS		314.31	7.40	10.88	11.42	0.00	7.65	351.66	36.81	388.47

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

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

Table 6.E Estimated monthly income and expense flows per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	406.14
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.42	0.00	31.26	43.33	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.81	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	2.49	1.82	0.00	0.00	0.00	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.64	0.00	0.00	0.00	0.00	0.00	1.20	1.00	0.00	0.00	0.00	2.56
REPAIR & MAINTENANCE	2.74	0.00	0.00	0.00	0.00	0.00	2.55	0.76	0.00	0.00	0.00	4.83
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	1.04	0.00	2.15	0.89	0.00	0.00	0.28	0.07
TOTAL DIRECT EXPENSES	83.85	0.00	0.00	0.00	39.78	0.00	110.12	54.30	0.00	0.00	41.85	21.76
NET INCOME	-83.85	0.00	0.00	0.00	-39.78	0.00	-110.12	-54.30	0.00	0.00	-41.85	384.38
NET INCOME TO DATE	-83.85	-83.85	-83.85	-83.85	-123.63	-123.63	-233.75	-288.05	-288.05	-288.05	-329.90	54.48

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

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

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

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Non-irrigated, Delta Area, Mississippi, 2021

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

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

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

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

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

Table 7.A Estimated costs per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.0000	35.00	
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
Miravis Top	oz	1.44	13.7000	19.73	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	64.0000	8.32	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Select Max	pt	12.74	1.0000	12.74	
Valor SX	oz	4.51	2.0000	9.02	
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Liberty 280	oz	0.44	29.0000	12.76	
Dual Magnum	pt	13.33	1.0000	13.33	
Zidua DF	oz	8.72	1.5000	13.08	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.4536	6.65	
Harvesters	hour	14.68	0.0851	1.25	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	
Implements	hour	9.06	0.0625	0.57	
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	
UNALLOCATED LABOR	hour	14.65	0.4142	6.07	
DIESEL FUEL					
Tractors	gal	1.53	5.0709	7.77	
Harvesters	gal	1.53	1.4243	2.18	
Roll-Out Pipe Irr.	gal	1.53	7.3316	11.22	
REPAIR & MAINTENANCE					
Implements	acre	6.18	1.0000	6.18	
Tractors	acre	3.17	1.0000	3.17	
Harvesters	acre	3.50	1.0000	3.50	
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	8.56	1.0000	8.56	
TOTAL DIRECT EXPENSES				422.03	
FIXED EXPENSES					
Implements	acre	13.55	1.0000	13.55	
Tractors	acre	19.27	1.0000	19.27	
Harvesters	acre	13.41	1.0000	13.41	
Roll-Out Pipe Irr.	acre	51.84	1.0000	51.84	
TOTAL FIXED EXPENSES				98.07	
TOTAL SPECIFIED EXPENSES				520.10	

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

Table 7.B Summary of estimated costs and returns per acre
 Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

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

TOTAL INCOME				580.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	105.01	1.0000	105.01	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.68	0.5388	7.90	_____
UNALLOCATED LABOR	hour	14.65	0.4142	6.07	_____
DIESEL FUEL	gal	1.53	13.8269	21.17	_____
REPAIR & MAINTENANCE	acre	20.01	1.0000	20.01	_____
INTEREST ON OP. CAP.	acre	8.56	1.0000	8.56	_____

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

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

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

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

Table 7.C Estimated resource use for field operations, per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.53	0.53	0.99	0.41

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

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

Table 7.D Estimated costs for field operations, per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Subsoiler	3 shank		0.72	0.39	1.14		0.09	2.34	2.01	4.35
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Disk Harrow	32'		1.09	1.50	1.71		0.17	4.47	4.85	9.32
Field Cultivate Fld	32'		0.83	0.85	1.30		0.12	3.10	4.14	7.24
Bed/Lister-Roll-Fo	12R-30		1.43	1.35	2.26		0.20	5.24	5.54	10.78
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Select Max	pt	12.74					0.34	13.08		13.08
Valor SX	oz	9.02					0.24	9.26		9.26
Surfactant	pt	1.32					0.04	1.36		1.36
Plant & Pre-Folding	12R-30		1.20	2.55	2.49		0.12	6.36	6.79	13.15
Soybean Enlist E3	lb	60.00					1.20	61.20		61.20
CruiserMaxx Vibrance	oz	7.60					0.15	7.75		7.75
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Surfactant	pt	1.32					0.03	1.35		1.35
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Liberty 280	oz	12.76					0.21	12.97		12.97
Dual Magnum	pt	13.33					0.22	13.55		13.55
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16					0.07	4.23		4.23
Zidua DF	oz	13.08					0.22	13.30		13.30
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Miravis Top	oz	19.73					0.20	19.93		19.93
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Acephate 90SP	lb	4.81					0.03	4.84		4.84
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06					0.03	4.09		4.09
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37		0.03	9.01	14.76	23.77
Haul Soybeans	bu	16.20					0.05	16.25		16.25
Grain Cart Soybean	700 bu		0.38	0.40	0.59			1.37	1.36	2.73
Roll-Out Pipe Irr.	acre	7.92	12.34	7.78	4.46		0.43	32.93	55.72	88.65
TOTALS		354.15	21.17	20.01	18.14	0.00	8.56	422.03	98.07	520.10

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

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

Table 7.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	580.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	7.00	21.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	19.73	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.42	0.00	31.26	43.33	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.81	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.33	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.97	0.00	0.00	0.00	0.00	0.00	2.49	2.05	2.82	0.23	0.00	3.58
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.64	0.00	0.00	0.00	0.00	0.00	1.20	1.00	7.78	3.74	0.00	2.81
REPAIR & MAINTENANCE	4.39	0.00	0.00	0.00	0.00	0.00	2.55	0.76	5.93	1.40	0.00	4.98
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.00	1.04	0.00	2.15	0.89	0.32	0.32	0.28	0.08
TOTAL DIRECT EXPENSES	90.58	0.00	0.00	0.00	39.78	0.00	110.12	54.53	24.77	32.75	41.85	27.65
NET INCOME	-90.58	0.00	0.00	0.00	-39.78	0.00	-110.12	-54.53	-24.77	-32.75	-41.85	552.55
NET INCOME TO DATE	-90.58	-90.58	-90.58	-90.58	-130.36	-130.36	-240.48	-295.01	-319.78	-352.53	-394.38	158.17

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

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

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

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2020 input prices.

Table 8.A Estimated costs per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
Miravis Top	oz	1.44	13.7000	19.73	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	64.0000	8.32	
Select Max	pt	12.74	1.0000	12.74	
Valor SX	oz	4.51	2.0000	9.02	
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Liberty 280	oz	0.44	29.0000	12.76	
Dual Magnum	pt	13.33	1.0000	13.33	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.4377	6.37	
Harvesters	hour	14.68	0.0851	1.25	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	
UNALLOCATED LABOR	hour	14.61	0.2880	4.21	
DIESEL FUEL					
Tractors	gal	1.53	4.4959	6.90	
Harvesters	gal	1.53	1.4243	2.18	
Contour Flood Irr.	gal	1.53	10.9974	16.83	
REPAIR & MAINTENANCE					
Implements	acre	5.09	1.0000	5.09	
Tractors	acre	2.73	1.0000	2.73	
Harvesters	acre	3.50	1.0000	3.50	
Contour Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	8.18	1.0000	8.18	
TOTAL DIRECT EXPENSES				397.38	
FIXED EXPENSES					
Implements	acre	9.53	1.0000	9.53	
Tractors	acre	16.59	1.0000	16.59	
Harvesters	acre	13.41	1.0000	13.41	
Contour Flood Irr.	acre	41.43	1.0000	41.43	
TOTAL FIXED EXPENSES				80.96	
TOTAL SPECIFIED EXPENSES				478.34	

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

Table 8.B Summary of estimated costs and returns per acre
 Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

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

TOTAL INCOME				512.51	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	87.43	1.0000	87.43	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1100	1.00	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	14.68	0.5229	7.62	_____
UNALLOCATED LABOR	hour	14.61	0.2880	4.21	_____
DIESEL FUEL	gal	1.53	16.9177	25.91	_____
REPAIR & MAINTENANCE	acre	25.63	1.0000	25.63	_____
INTEREST ON OP. CAP.	acre	8.18	1.0000	8.18	_____

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

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

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

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

Table 8.C Estimated resource use for field operations, per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Disk Harrow	32'	MFWD 225	0.061	1.00	Nov		0.06	0.06	0.06	0.05
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Valor SX	oz					2.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.52	0.52	0.94	0.28

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

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

Table 8.D Estimated costs for field operations, per acre
Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Disk Harrow	32'		1.09	1.50	1.71		0.17	4.47	4.85	9.32
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus(46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Spray (Broadcast)	60'		0.50	0.38	0.91		0.05	1.84	1.45	3.29
Glyphosate 3lbs a.e	oz	4.16					0.12	4.28		4.28
Select Max	pt	12.74					0.38	13.12		13.12
Surfactant	pt	1.32					0.04	1.36		1.36
Valor SX	oz	9.02					0.27	9.29		9.29
Soybeans Consultant	acre	6.50					0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.49		0.12	6.36	6.79	13.15
Soybean Enlist E3	lb	60.00					1.20	61.20		61.20
CruiserMaxx Vibrance	oz	7.60					0.15	7.75		7.75
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Surfactant	pt	1.32					0.03	1.35		1.35
Spray (Broadcast)	60'		0.50	0.38	0.91		0.04	1.83	1.45	3.28
Liberty 280	oz	12.76					0.26	13.02		13.02
Dual Magnum	pt	13.33					0.27	13.60		13.60
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16					0.07	4.23		4.23
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Miravis Top	oz	19.73					0.26	19.99		19.99
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Acephate 90SP	lb	4.81					0.05	4.86		4.86
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06					0.03	4.09		4.09
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37		0.03	9.01	14.76	23.77
Haul Soybeans	bu	14.31					0.05	14.36		14.36
Grain Cart Soybean	700 bu		0.38	0.40	0.59			1.37	1.36	2.73
Contour Flood Irr.	acre	2.25	19.56	15.61	5.76		0.61	43.79	48.85	92.64
TOTALS		322.01	25.91	25.63	15.65	0.00	8.18	397.38	80.96	478.34

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

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

Table 8.E Estimated monthly income and expense flows per acre
 Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	512.51
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	7.00	14.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	19.73	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	25.92	0.00	0.00	57.35	4.16	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.81	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.32	0.00	0.00	1.32	0.00	0.33	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.71	0.00	0.00	0.91	0.00	0.00	3.85	2.78	1.63	1.63	0.18	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.09	0.00	0.00	0.50	0.00	0.00	1.70	7.11	6.39	6.39	0.17	2.56
REPAIR & MAINTENANCE	1.50	0.00	0.00	0.38	0.00	0.00	2.93	9.57	3.17	3.17	0.08	4.83
INTEREST ON OP. CAP.	3.01	0.00	0.00	0.86	0.00	0.00	2.86	0.43	0.50	0.24	0.20	0.08
TOTAL DIRECT EXPENSES	78.41	0.00	0.00	29.89	0.00	0.00	145.66	26.30	38.75	23.24	30.39	24.74
NET INCOME	-78.41	0.00	0.00	-29.89	0.00	0.00	-145.66	-26.30	-38.75	-23.24	-30.39	487.77
NET INCOME TO DATE	-78.41	-78.41	-78.41	-108.30	-108.30	-108.30	-253.96	-280.26	-319.01	-342.25	-372.64	115.13

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

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

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, Enlist E3, stale seedbed, 12R30"
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2020 input prices.

Table 9.A Estimated costs per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
Miravis Top	oz	1.44	13.7000	19.73	
HERBICIDES					
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Liberty 280	oz	0.44	29.0000	12.76	
Dual Magnum	pt	13.33	1.0000	13.33	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
Prevathon	oz	1.05	14.0000	14.70	
Bifenthrin	oz	0.94	6.4000	6.02	
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.1171	1.71	
Harvesters	hour	14.68	0.1021	1.50	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	
DIESEL FUEL					
Tractors	gal	1.53	1.3567	2.08	
Harvesters	gal	1.53	1.3935	2.13	
1/2-mi Pivot Irr.	gal	1.53	16.4057	25.10	
REPAIR & MAINTENANCE					
Implements	acre	3.40	1.0000	3.40	
Tractors	acre	0.85	1.0000	0.85	
Harvesters	acre	4.16	1.0000	4.16	
1/2-mi Pivot Irr.	acre	12.00	1.0000	12.00	
INTEREST ON OP. CAP.	acre	6.53	1.0000	6.53	
TOTAL DIRECT EXPENSES				364.28	
FIXED EXPENSES					
Implements	acre	5.75	1.0000	5.75	
Tractors	acre	5.19	1.0000	5.19	
Harvesters	acre	15.93	1.0000	15.93	
1/2-mi Pivot Irr.	acre	40.89	1.0000	40.89	
TOTAL FIXED EXPENSES				67.76	
TOTAL SPECIFIED EXPENSES				432.04	

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

Table 9.B Summary of estimated costs and returns per acre
 Soybeans, double crop after wheat, Enlist E3, 12R30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

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

TOTAL INCOME				483.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	57.35	1.0000	57.35	_____
INSECTICIDES	acre	33.53	1.0000	33.53	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	14.68	0.2193	3.21	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL	gal	1.53	19.1560	29.31	_____
REPAIR & MAINTENANCE	acre	20.41	1.0000	20.41	_____
INTEREST ON OP. CAP.	acre	6.53	1.0000	6.53	_____

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

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

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

Table 9.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.21	0.21	0.35	0.18

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

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

Table 9.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Soybeans Consultant	acre	6.50					0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.45		0.10	6.30	6.79	13.09
Soybean Enlist E3	lb	60.00					1.00	61.00		61.00
CruiserMaxx Vibrance	oz	7.60					0.13	7.73		7.73
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.37	22.51		22.51
Gramoxone SL 2.0	oz	9.12					0.15	9.27		9.27
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		0.50	0.38	0.90		0.02	1.80	1.45	3.25
Liberty 280	oz	12.76					0.17	12.93		12.93
Dual Magnum	pt	13.33					0.18	13.51		13.51
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Miravis Top	oz	19.73					0.20	19.93		19.93
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Acephate 90SP	lb	4.81					0.05	4.86		4.86
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Prevathon	oz	14.70					0.15	14.85		14.85
Surfactant	pt	0.33						0.33		0.33
Bifenthrin	oz	6.02					0.06	6.08		6.08
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
Header -Soybean	25' Flex		2.13	5.08	2.79		0.03	10.03	17.27	27.30
Haul Soybeans	bu	13.50					0.05	13.55		13.55
Grain Cart Soybean	700 bu		0.38	0.40	0.58			1.36	1.36	2.72
1/2-mi Pivot Irr.	acre		25.10	12.00	0.47		0.54	38.11	40.89	79.00
TOTALS		300.84	29.31	20.41	7.19	0.00	6.53	364.28	67.76	432.04

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

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

Table 9.E Estimated monthly income and expense flows per acre
 Soybeans, double crop after wheat, Enlist E3, 12R30"
 Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	483.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	19.73	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.26	26.09	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.53	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.66	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.49	0.95	0.04	0.00	3.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	10.54	7.53	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	1.29	0.68	0.00	5.48
INTEREST ON OP. CAP.	2.84	0.00	0.00	0.00	0.00	0.00	0.14	2.10	0.52	0.75	0.10	0.08
TOTAL DIRECT EXPENSES	73.94	0.00	0.00	0.00	0.00	0.00	6.98	128.01	39.39	75.92	15.10	24.94
NET INCOME	-73.94	0.00	0.00	0.00	0.00	0.00	-6.98	-128.01	-39.39	-75.92	-15.10	458.56
NET INCOME TO DATE	-73.94	-73.94	-73.94	-73.94	-73.94	-73.94	-80.92	-208.93	-248.32	-324.24	-339.34	119.22

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

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

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

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

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

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2020 input prices.

Table 10.A Estimated costs per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.0000	21.00	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
HERBICIDES					
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Liberty 280	oz	0.44	29.0000	12.76	
Dual Magnum	pt	13.33	1.0000	13.33	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
Prevathon	oz	1.05	14.0000	14.70	
Bifenthrin	oz	0.94	6.4000	6.02	
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Enlist E3	lb	1.20	50.0000	60.00	
ADJUVANTS					
Surfactant	pt	3.30	0.5000	1.65	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.1171	1.71	
Harvesters	hour	14.68	0.1021	1.50	
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	
DIESEL FUEL					
Tractors	gal	1.53	1.3567	2.08	
Harvesters	gal	1.53	1.3935	2.13	
REPAIR & MAINTENANCE					
Implements	acre	3.40	1.0000	3.40	
Tractors	acre	0.85	1.0000	0.85	
Harvesters	acre	4.16	1.0000	4.16	
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	
TOTAL DIRECT EXPENSES				292.06	
FIXED EXPENSES					
Implements	acre	5.75	1.0000	5.75	
Tractors	acre	5.19	1.0000	5.19	
Harvesters	acre	15.93	1.0000	15.93	
TOTAL FIXED EXPENSES				26.87	
TOTAL SPECIFIED EXPENSES				318.93	

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

Table 10.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

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

TOTAL INCOME				241.75	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	57.35	1.0000	57.35	_____
INSECTICIDES	acre	33.53	1.0000	33.53	_____
SEED/PLANTS	acre	60.00	1.0000	60.00	_____
ADJUVANTS	acre	1.65	1.0000	1.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	14.68	0.2193	3.21	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL	gal	1.53	2.7503	4.21	_____
REPAIR & MAINTENANCE	acre	8.41	1.0000	8.41	_____
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	_____

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

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

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

Table 10.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					25.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.21	0.21	0.30	0.18

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

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

Table 10.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Soybeans Consultant	acre	6.50					0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.45		0.10	6.30	6.79	13.09
Soybean Enlist E3	lb	60.00					1.00	61.00		61.00
CruiserMaxx Vibrance	oz	7.60					0.13	7.73		7.73
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.37	22.51		22.51
Gramoxone SL 2.0	oz	9.12					0.15	9.27		9.27
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		0.50	0.38	0.90		0.02	1.80	1.45	3.25
Liberty 280	oz	12.76					0.17	12.93		12.93
Dual Magnum	pt	13.33					0.18	13.51		13.51
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Acephate 90SP	lb	4.81					0.05	4.86		4.86
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Prevathon	oz	14.70					0.15	14.85		14.85
Surfactant	pt	0.33						0.33		0.33
Bifenthrin	oz	6.02					0.06	6.08		6.08
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
Header -Soybean	25' Flex		2.13	5.08	2.79		0.03	10.03	17.27	27.30
Haul Soybeans	bu	6.75					0.02	6.77		6.77
Grain Cart Soybean	700 bu		0.38	0.40	0.58			1.36	1.36	2.72
TOTALS		267.03	4.21	8.41	6.72	0.00	5.69	292.06	26.87	318.93

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

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

Table 10.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, Enlist E3, 12R30"
Non-irrigated, All Areas, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	241.75
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	7.00	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.26	26.09	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.53	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.33	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.45	0.90	0.00	0.00	3.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.50	0.00	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.38	0.00	0.00	5.48
INTEREST ON OP. CAP.	2.84	0.00	0.00	0.00	0.00	0.00	0.13	1.80	0.37	0.40	0.10	0.05
TOTAL DIRECT EXPENSES	73.94	0.00	0.00	0.00	0.00	0.00	6.63	109.73	28.24	40.26	15.10	18.16
NET INCOME	-73.94	0.00	0.00	0.00	0.00	0.00	-6.63	-109.73	-28.24	-40.26	-15.10	223.59
NET INCOME TO DATE	-73.94	-73.94	-73.94	-73.94	-73.94	-73.94	-80.57	-190.30	-218.54	-258.80	-273.90	-50.31

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

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

Table 10.F Estimated returns for various price/yield combinations, per acre
 Soybeans, double crop after wheat, Enlist E3, 12R30"
 Non-irrigated, All Areas, Mississippi, 2021

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

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

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

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

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

Table 11.A Estimated costs per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	96.0000	12.48	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Select Max	pt	12.74	1.0000	12.74	
Valor SX	oz	4.51	2.0000	9.02	
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Prefix	pt	6.64	2.0000	13.28	
Zidua DF	oz	8.72	1.5000	13.08	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.2942	4.30	
Harvesters	hour	14.68	0.0851	1.25	
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	
UNALLOCATED LABOR	hour	14.64	0.3414	5.00	
DIESEL FUEL					
Tractors	gal	1.53	3.4079	5.22	
Harvesters	gal	1.53	1.4243	2.18	
REPAIR & MAINTENANCE					
Implements	acre	5.23	1.0000	5.23	
Tractors	acre	2.15	1.0000	2.15	
Harvesters	acre	3.50	1.0000	3.50	
INTEREST ON OP. CAP.	acre	7.65	1.0000	7.65	
TOTAL DIRECT EXPENSES				350.01	
FIXED EXPENSES					
Implements	acre	10.36	1.0000	10.36	
Tractors	acre	13.04	1.0000	13.04	
Harvesters	acre	13.41	1.0000	13.41	
TOTAL FIXED EXPENSES				36.81	
TOTAL SPECIFIED EXPENSES				386.82	

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

Table 11.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2021

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

TOTAL INCOME				406.14	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	96.36	1.0000	96.36	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.30	1.0000	3.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	14.68	0.3794	5.55	_____
UNALLOCATED LABOR	hour	14.64	0.3414	5.00	_____
DIESEL FUEL	gal	1.53	4.8323	7.40	_____
REPAIR & MAINTENANCE	acre	10.88	1.0000	10.88	_____
INTEREST ON OP. CAP.	acre	7.65	1.0000	7.65	_____

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

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

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

Table 11.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.37	0.37	0.47	0.34

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

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

Table 11.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Subsoiler	3 shank		0.72	0.39	1.14		0.09	2.34	2.01	4.35
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus(46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Disk Harrow	32'		1.09	1.50	1.71		0.17	4.47	4.85	9.32
Field Cultivate Fld	32'		0.83	0.85	1.30		0.12	3.10	4.14	7.24
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Select Max	pt	12.74					0.34	13.08		13.08
Valor SX	oz	9.02					0.24	9.26		9.26
Surfactant	pt	1.32					0.04	1.36		1.36
Plant & Pre-Folding	12R-30		1.20	2.55	2.49		0.12	6.36	6.79	13.15
Soybean Seed RR2X	lb	67.00					1.34	68.34		68.34
CruiserMaxx Vibrance	oz	7.60					0.15	7.75		7.75
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Surfactant	pt	1.32					0.03	1.35		1.35
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16					0.07	4.23		4.23
Prefix	pt	13.28					0.22	13.50		13.50
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16					0.07	4.23		4.23
Zidua DF	oz	13.08					0.22	13.30		13.30
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Acephate 90SP	lb	4.81					0.03	4.84		4.84
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06					0.03	4.09		4.09
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37		0.03	9.01	14.76	23.77
Haul Soybeans	bu	11.34					0.04	11.38		11.38
Grain Cart Soybean	700 bu		0.38	0.40	0.59			1.37	1.36	2.73
TOTALS		312.66	7.40	10.88	11.42	0.00	7.65	350.01	36.81	386.82

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

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

Table 11.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	406.14
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	21.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.42	0.00	31.26	34.68	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.81	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	2.49	1.82	0.00	0.00	0.00	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.64	0.00	0.00	0.00	0.00	0.00	1.20	1.00	0.00	0.00	0.00	2.56
REPAIR & MAINTENANCE	2.74	0.00	0.00	0.00	0.00	0.00	2.55	0.76	0.00	0.00	0.00	4.83
INTEREST ON OP. CAP.	3.22	0.00	0.00	0.00	1.04	0.00	2.29	0.75	0.00	0.00	0.28	0.07
TOTAL DIRECT EXPENSES	83.85	0.00	0.00	0.00	39.78	0.00	117.26	45.51	0.00	0.00	41.85	21.76
NET INCOME	-83.85	0.00	0.00	0.00	-39.78	0.00	-117.26	-45.51	0.00	0.00	-41.85	384.38
NET INCOME TO DATE	-83.85	-83.85	-83.85	-83.85	-123.63	-123.63	-240.89	-286.40	-286.40	-286.40	-328.25	56.13

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

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

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

* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre
 Soybeans, full-season, RR2X, stale seedbed, 12R 30"
 Non-irrigated, Delta Area, Mississippi, 2021

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

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2020 input prices.

Table 12.A Estimated costs per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.0000	35.00	
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
Miravis Top	oz	1.44	13.7000	19.73	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	96.0000	12.48	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Select Max	pt	12.74	1.0000	12.74	
Valor SX	oz	4.51	2.0000	9.02	
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Prefix	pt	6.64	2.0000	13.28	
Zidua DF	oz	8.72	1.5000	13.08	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.4536	6.65	
Harvesters	hour	14.68	0.0851	1.25	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	
Implements	hour	9.06	0.0625	0.57	
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	
UNALLOCATED LABOR	hour	14.65	0.4142	6.07	
DIESEL FUEL					
Tractors	gal	1.53	4.9868	7.64	
Harvesters	gal	1.53	1.4243	2.18	
Roll-Out Pipe Irr.	gal	1.53	7.3316	11.22	
REPAIR & MAINTENANCE					
Implements	acre	6.18	1.0000	6.18	
Tractors	acre	3.11	1.0000	3.11	
Harvesters	acre	3.50	1.0000	3.50	
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	8.55	1.0000	8.55	
TOTAL DIRECT EXPENSES				420.18	
FIXED EXPENSES					
Implements	acre	13.55	1.0000	13.55	
Tractors	acre	18.92	1.0000	18.92	
Harvesters	acre	13.41	1.0000	13.41	
Roll-Out Pipe Irr.	acre	51.84	1.0000	51.84	
TOTAL FIXED EXPENSES				97.72	
TOTAL SPECIFIED EXPENSES				517.90	

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

Table 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, 2021

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

TOTAL INCOME				580.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	96.36	1.0000	96.36	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.68	0.5388	7.90	_____
UNALLOCATED LABOR	hour	14.65	0.4142	6.07	_____
DIESEL FUEL	gal	1.53	13.7429	21.04	_____
REPAIR & MAINTENANCE	acre	19.95	1.0000	19.95	_____
INTEREST ON OP. CAP.	acre	8.55	1.0000	8.55	_____

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

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

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

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

Table 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	32'	MFWD 225	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 190	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.53	0.53	0.99	0.41

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

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

Table 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Subsoiler	3 shank		0.72	0.39	1.14		0.09	2.34	2.01	4.35
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Disk Harrow	32'		1.09	1.50	1.71		0.17	4.47	4.85	9.32
Field Cultivate Fld	32'		0.70	0.79	1.30		0.11	2.90	3.79	6.69
Bed/Lister-Roll-Fo	12R-30		1.43	1.35	2.26		0.20	5.24	5.54	10.78
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Select Max	pt	12.74					0.34	13.08		13.08
Valor SX	oz	9.02					0.24	9.26		9.26
Surfactant	pt	1.32					0.04	1.36		1.36
Plant & Pre-Folding	12R-30		1.20	2.55	2.49		0.12	6.36	6.79	13.15
Soybean Seed RR2X	lb	67.00					1.34	68.34		68.34
CruiserMaxx Vibrance	oz	7.60					0.15	7.75		7.75
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Surfactant	pt	1.32					0.03	1.35		1.35
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16					0.07	4.23		4.23
Prefix	pt	13.28					0.22	13.50		13.50
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16					0.07	4.23		4.23
Zidua DF	oz	13.08					0.22	13.30		13.30
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Miravis Top	oz	19.73					0.20	19.93		19.93
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Acephate 90SP	lb	4.81					0.03	4.84		4.84
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06					0.03	4.09		4.09
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37		0.03	9.01	14.76	23.77
Haul Soybeans	bu	16.20					0.05	16.25		16.25
Grain Cart Soybean	700 bu		0.38	0.40	0.59			1.37	1.36	2.73
Roll-Out Pipe Irr.	acre	7.92	12.34	7.78	4.46		0.43	32.93	55.72	88.65
TOTALS		352.50	21.04	19.95	18.14	0.00	8.55	420.18	97.72	517.90

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

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

Table 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, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	580.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	7.00	21.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	19.73	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.42	0.00	31.26	34.68	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.81	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.33	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.97	0.00	0.00	0.00	0.00	0.00	2.49	2.05	2.82	0.23	0.00	3.58
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.51	0.00	0.00	0.00	0.00	0.00	1.20	1.00	7.78	3.74	0.00	2.81
REPAIR & MAINTENANCE	4.33	0.00	0.00	0.00	0.00	0.00	2.55	0.76	5.93	1.40	0.00	4.98
INTEREST ON OP. CAP.	3.47	0.00	0.00	0.00	1.04	0.00	2.29	0.75	0.32	0.32	0.28	0.08
TOTAL DIRECT EXPENSES	90.38	0.00	0.00	0.00	39.78	0.00	117.26	45.74	24.77	32.75	41.85	27.65
NET INCOME	-90.38	0.00	0.00	0.00	-39.78	0.00	-117.26	-45.74	-24.77	-32.75	-41.85	552.55
NET INCOME TO DATE	-90.38	-90.38	-90.38	-90.38	-130.16	-130.16	-247.42	-293.16	-317.93	-350.68	-392.53	160.02

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

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

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

* Lease costs are based on hourly usage costs.

Table 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, 2021

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

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

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

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

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

Table 13.A Estimated costs per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	
HARVEST AIDS					
Gramoxone SL	oz	0.19	16.0000	3.04	
Sodium Chlorate 5L	gal	6.77	0.6000	4.06	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
Miravis Top	oz	1.44	13.7000	19.73	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	96.0000	12.48	
Select Max	pt	12.74	1.0000	12.74	
Valor SX	oz	4.51	2.0000	9.02	
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Prefix	pt	6.64	2.0000	13.28	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.4377	6.37	
Harvesters	hour	14.68	0.0851	1.25	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	
UNALLOCATED LABOR	hour	14.61	0.2880	4.21	
DIESEL FUEL					
Tractors	gal	1.53	4.4959	6.90	
Harvesters	gal	1.53	1.4243	2.18	
Contour Flood Irr.	gal	1.53	10.9974	16.83	
REPAIR & MAINTENANCE					
Implements	acre	5.09	1.0000	5.09	
Tractors	acre	2.73	1.0000	2.73	
Harvesters	acre	3.50	1.0000	3.50	
Contour Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	8.14	1.0000	8.14	
TOTAL DIRECT EXPENSES				395.69	
FIXED EXPENSES					
Implements	acre	9.53	1.0000	9.53	
Tractors	acre	16.59	1.0000	16.59	
Harvesters	acre	13.41	1.0000	13.41	
Contour Flood Irr.	acre	41.43	1.0000	41.43	
TOTAL FIXED EXPENSES				80.96	
TOTAL SPECIFIED EXPENSES				476.65	

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

Table 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, 2021

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

TOTAL INCOME				512.51	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	7.10	1.0000	7.10	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	78.78	1.0000	78.78	_____
INSECTICIDES	acre	12.81	1.0000	12.81	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1100	1.00	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	14.68	0.5229	7.62	_____
UNALLOCATED LABOR	hour	14.61	0.2880	4.21	_____
DIESEL FUEL	gal	1.53	16.9177	25.91	_____
REPAIR & MAINTENANCE	acre	25.63	1.0000	25.63	_____
INTEREST ON OP. CAP.	acre	8.14	1.0000	8.14	_____

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

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

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

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

Table 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Disk Harrow	32'	MFWD 225	0.061	1.00	Nov		0.06	0.06	0.06	0.05
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Valor SX	oz					2.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
TOTALS							0.52	0.52	0.94	0.28

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

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

Table 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Disk Harrow	32'		1.09	1.50	1.71		0.17	4.47	4.85	9.32
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Spray (Broadcast)	60'		0.50	0.38	0.91		0.05	1.84	1.45	3.29
Glyphosate 3lbs a.e	oz	4.16					0.12	4.28		4.28
Select Max	pt	12.74					0.38	13.12		13.12
Surfactant	pt	1.32					0.04	1.36		1.36
Valor SX	oz	9.02					0.27	9.29		9.29
Soybeans Consultant	acre	6.50					0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.49		0.12	6.36	6.79	13.15
Soybean Seed RR2X	lb	67.00					1.34	68.34		68.34
CruiserMaxx Vibrance	oz	7.60					0.15	7.75		7.75
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.44	22.58		22.58
Gramoxone SL 2.0	oz	9.12					0.18	9.30		9.30
Surfactant	pt	1.32					0.03	1.35		1.35
Spray (Broadcast)	60'		0.50	0.38	0.91		0.04	1.83	1.45	3.28
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Prefix	pt	13.28					0.27	13.55		13.55
Spray (Broadcast)	60'		0.50	0.38	0.91		0.03	1.82	1.45	3.27
Glyphosate 3lbs a.e	oz	4.16					0.07	4.23		4.23
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Miravis Top	oz	19.73					0.26	19.99		19.99
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Acephate 90SP	lb	4.81					0.05	4.86		4.86
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	4.06					0.03	4.09		4.09
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		2.18	4.43	2.37		0.03	9.01	14.76	23.77
Haul Soybeans	bu	14.31					0.05	14.36		14.36
Grain Cart Soybean	700 bu		0.38	0.40	0.59			1.37	1.36	2.73
Contour Flood Irr.	acre	2.25	19.56	15.61	5.76		0.61	43.79	48.85	92.64
TOTALS		320.36	25.91	25.63	15.65	0.00	8.14	395.69	80.96	476.65

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

Table 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, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	512.51
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	7.00	14.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	19.73	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	25.92	0.00	0.00	48.70	4.16	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.81	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.32	0.00	0.00	1.32	0.00	0.33	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.71	0.00	0.00	0.91	0.00	0.00	3.85	2.78	1.63	1.63	0.18	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.09	0.00	0.00	0.50	0.00	0.00	1.70	7.11	6.39	6.39	0.17	2.56
REPAIR & MAINTENANCE	1.50	0.00	0.00	0.38	0.00	0.00	2.93	9.57	3.17	3.17	0.08	4.83
INTEREST ON OP. CAP.	3.01	0.00	0.00	0.86	0.00	0.00	2.82	0.43	0.50	0.24	0.20	0.08
TOTAL DIRECT EXPENSES	78.41	0.00	0.00	29.89	0.00	0.00	143.97	26.30	38.75	23.24	30.39	24.74
NET INCOME	-78.41	0.00	0.00	-29.89	0.00	0.00	-143.97	-26.30	-38.75	-23.24	-30.39	487.77
NET INCOME TO DATE	-78.41	-78.41	-78.41	-108.30	-108.30	-108.30	-252.27	-278.57	-317.32	-340.56	-370.95	116.82

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

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

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

* Lease costs are based on hourly usage costs.

Table 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, 2021

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

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

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

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

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

Table 14.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
Miravis Top	oz	1.44	13.7000	19.73	
HERBICIDES					
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Prefix	pt	6.64	2.0000	13.28	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
Prevathon	oz	1.05	14.0000	14.70	
Bifenthrin	oz	0.94	6.4000	6.02	
IncidentalPestTrt	\$8 acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.1171	1.71	
Harvesters	hour	14.68	0.1021	1.50	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	
DIESEL FUEL					
Tractors	gal	1.53	1.3567	2.08	
Harvesters	gal	1.53	1.3935	2.13	
1/2-mi Pivot Irr.	gal	1.53	16.4057	25.10	
REPAIR & MAINTENANCE					
Implements	acre	3.40	1.0000	3.40	
Tractors	acre	0.85	1.0000	0.85	
Harvesters	acre	4.16	1.0000	4.16	
1/2-mi Pivot Irr.	acre	12.00	1.0000	12.00	
INTEREST ON OP. CAP.	acre	6.54	1.0000	6.54	
TOTAL DIRECT EXPENSES				362.64	
FIXED EXPENSES					
Implements	acre	5.75	1.0000	5.75	
Tractors	acre	5.19	1.0000	5.19	
Harvesters	acre	15.93	1.0000	15.93	
1/2-mi Pivot Irr.	acre	40.89	1.0000	40.89	
TOTAL FIXED EXPENSES				67.76	
TOTAL SPECIFIED EXPENSES				430.40	

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

Table 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, 2021

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

TOTAL INCOME				483.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	27.33	1.0000	27.33	_____
HERBICIDES	acre	48.70	1.0000	48.70	_____
INSECTICIDES	acre	33.53	1.0000	33.53	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	14.68	0.2193	3.21	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL	gal	1.53	19.1560	29.31	_____
REPAIR & MAINTENANCE	acre	20.41	1.0000	20.41	_____
INTEREST ON OP. CAP.	acre	6.54	1.0000	6.54	_____

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

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

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

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

Table 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.21	0.21	0.35	0.18

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

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

Table 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33					0.13	3.46			3.46
Lime (Spread)	ton	15.80					0.63	16.43			16.43
Custom Apply Fert	acre	7.50					0.30	7.80			7.80
Phosphorus (46% P2O5)	cwt	15.06					0.60	15.66			15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59			30.59
Soybeans Consultant	acre	6.50					0.13	6.63			6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.45		0.10	6.30	6.79		13.09
Soybean Seed RR2X	lb	67.00					1.12	68.12			68.12
CruiserMaxx Vibrance	oz	7.60					0.13	7.73			7.73
Inoculant -Soybean	acre	1.55					0.03	1.58			1.58
Boundary	pt	22.14					0.37	22.51			22.51
Gramoxone SL 2.0	oz	9.12					0.15	9.27			9.27
Surfactant	pt	1.32					0.02	1.34			1.34
Spray (Broadcast)	60'		0.50	0.38	0.90		0.02	1.80	1.45		3.25
Glyphosate 3lbs a.e	oz	4.16					0.06	4.22			4.22
Prefix	pt	13.28					0.18	13.46			13.46
App by Air (5 gal)	appl	7.00					0.07	7.07			7.07
Miravis Top	oz	19.73					0.20	19.93			19.93
Surfactant	pt	0.33						0.33			0.33
App by Air (5 gal)	appl	7.00					0.07	7.07			7.07
Acephate 90SP	lb	4.81					0.05	4.86			4.86
App by Air (5 gal)	appl	7.00					0.07	7.07			7.07
Prevathon	oz	14.70					0.15	14.85			14.85
Surfactant	pt	0.33						0.33			0.33
Bifenthrin	oz	6.02					0.06	6.08			6.08
Incidental Pest											
App by Air (5 gal)	appl	7.00					0.05	7.05			7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05			8.05
Header -Soybean	25' Flex		2.13	5.08	2.79		0.03	10.03	17.27		27.30
Haul Soybeans	bu	13.50					0.05	13.55			13.55
Grain Cart Soybean	700 bu		0.38	0.40	0.58			1.36	1.36		2.72
1/2-mi Pivot Irr.	acre		25.10	12.00	0.47		0.54	38.11	40.89		79.00
TOTALS		299.19	29.31	20.41	7.19	0.00	6.54	362.64	67.76		430.40

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 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, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	483.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	19.73	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.26	17.44	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.53	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.66	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.49	0.95	0.04	0.00	3.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	10.54	7.53	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	1.29	0.68	0.00	5.48
INTEREST ON OP. CAP.	2.84	0.00	0.00	0.00	0.00	0.00	0.14	2.22	0.41	0.75	0.10	0.08
TOTAL DIRECT EXPENSES	73.94	0.00	0.00	0.00	0.00	0.00	6.98	135.13	30.63	75.92	15.10	24.94
NET INCOME	-73.94	0.00	0.00	0.00	0.00	0.00	-6.98	-135.13	-30.63	-75.92	-15.10	458.56
NET INCOME TO DATE	-73.94	-73.94	-73.94	-73.94	-73.94	-73.94	-80.92	-216.05	-246.68	-322.60	-337.70	120.86

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

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

* Lease costs are based on hourly usage costs.

Table 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, 2021

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

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

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

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

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

Table 15.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.0000	21.00	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	0.8700	15.06	
Potash (60% K2O)	cwt	22.11	1.3300	29.41	
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	1.6000	7.60	
HERBICIDES					
Boundary	pt	11.07	2.0000	22.14	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Prefix	pt	6.64	2.0000	13.28	
INSECTICIDES					
Acephate 90SP	lb	6.42	0.7500	4.81	
Prevathon	oz	1.05	14.0000	14.70	
Bifenthrin	oz	0.94	6.4000	6.02	
IncidentalPestTrt \$8	acre	8.00	1.0000	8.00	
SEED/PLANTS					
Soybean Seed RR2X	lb	1.34	50.0000	67.00	
ADJUVANTS					
Surfactant	pt	3.30	0.5000	1.65	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.1171	1.71	
Harvesters	hour	14.68	0.1021	1.50	
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	
DIESEL FUEL					
Tractors	gal	1.53	1.3567	2.08	
Harvesters	gal	1.53	1.3935	2.13	
REPAIR & MAINTENANCE					
Implements	acre	3.40	1.0000	3.40	
Tractors	acre	0.85	1.0000	0.85	
Harvesters	acre	4.16	1.0000	4.16	
INTEREST ON OP. CAP.	acre	5.70	1.0000	5.70	
TOTAL DIRECT EXPENSES				290.42	
FIXED EXPENSES					
Implements	acre	5.75	1.0000	5.75	
Tractors	acre	5.19	1.0000	5.19	
Harvesters	acre	15.93	1.0000	15.93	
TOTAL FIXED EXPENSES				26.87	
TOTAL SPECIFIED EXPENSES				317.29	

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

Table 15.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2021

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

TOTAL INCOME				241.75	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	44.47	1.0000	44.47	_____
FUNGICIDES	acre	7.60	1.0000	7.60	_____
HERBICIDES	acre	48.70	1.0000	48.70	_____
INSECTICIDES	acre	33.53	1.0000	33.53	_____
SEED/PLANTS	acre	67.00	1.0000	67.00	_____
ADJUVANTS	acre	1.65	1.0000	1.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	14.68	0.2193	3.21	_____
UNALLOCATED LABOR	hour	14.68	0.1886	2.77	_____
DIESEL FUEL	gal	1.53	2.7503	4.21	_____
REPAIR & MAINTENANCE	acre	8.41	1.0000	8.41	_____
INTEREST ON OP. CAP.	acre	5.70	1.0000	5.70	_____

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

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

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

Table 15.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2021

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

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

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

Table 15.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	15.80					0.63	16.43		16.43
Custom Apply Fert	acre	7.50					0.30	7.80		7.80
Phosphorus (46% P2O5)	cwt	15.06					0.60	15.66		15.66
Potash (60% K2O)	cwt	29.41					1.18	30.59		30.59
Soybeans Consultant	acre	6.50					0.13	6.63		6.63
Plant & Pre-Folding	12R-30		1.20	2.55	2.45		0.10	6.30	6.79	13.09
Soybean Seed RR2X	lb	67.00					1.12	68.12		68.12
CruiserMaxx Vibrance	oz	7.60					0.13	7.73		7.73
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	22.14					0.37	22.51		22.51
Gramoxone SL 2.0	oz	9.12					0.15	9.27		9.27
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		0.50	0.38	0.90		0.02	1.80	1.45	3.25
Glyphosate 3lbs a.e	oz	4.16					0.06	4.22		4.22
Prefix	pt	13.28					0.18	13.46		13.46
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Acephate 90SP	lb	4.81					0.05	4.86		4.86
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Prevathon	oz	14.70					0.15	14.85		14.85
Surfactant	pt	0.33						0.33		0.33
Bifenthrin	oz	6.02					0.06	6.08		6.08
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.05	7.05		7.05
IncidentalPestTrt \$8	acre	8.00					0.05	8.05		8.05
Header -Soybean	25' Flex		2.13	5.08	2.79		0.03	10.03	17.27	27.30
Haul Soybeans	bu	6.75					0.02	6.77		6.77
Grain Cart Soybean	700 bu		0.38	0.40	0.58			1.36	1.36	2.72
TOTALS		265.38	4.21	8.41	6.72	0.00	5.70	290.42	26.87	317.29

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 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, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	241.75
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	7.00	0.00
FERTILIZERS	44.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.26	17.44	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.53	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.33	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.45	0.90	0.00	0.00	3.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.50	0.00	0.00	2.51
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.38	0.00	0.00	5.48
INTEREST ON OP. CAP.	2.84	0.00	0.00	0.00	0.00	0.00	0.13	1.92	0.26	0.40	0.10	0.05
TOTAL DIRECT EXPENSES	73.94	0.00	0.00	0.00	0.00	0.00	6.63	116.85	19.48	40.26	15.10	18.16
NET INCOME	-73.94	0.00	0.00	0.00	0.00	0.00	-6.63	-116.85	-19.48	-40.26	-15.10	223.59
NET INCOME TO DATE	-73.94	-73.94	-73.94	-73.94	-73.94	-73.94	-80.57	-197.42	-216.90	-257.16	-272.26	-48.67

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

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

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

* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2021

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

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

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

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

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

Table 16.A Estimated costs per acre
 Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	
App by Air (3 gal)	appl	5.50	0.2000	1.10	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	1.9570	33.88	
Potash (60% K2O)	cwt	22.11	1.5000	33.17	
Fert 10-34-0	gal	2.80	4.0000	11.20	
Zinc Plus	pt	2.99	2.0000	5.98	
UAN + Sulfur (28%)	gal	1.61	32.1712	51.80	
UAN (32%)	gal	1.34	39.5570	53.01	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Clarity	pt	10.73	0.5000	5.37	
Select Max	pt	12.74	1.0000	12.74	
Atrazine 4L	pt	1.91	4.0000	7.64	
Halex GT	pt	7.13	3.6000	25.67	
INSECTICIDES					
Bifenthrin	oz	0.94	1.2800	1.20	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Corn Seed BtRR	thous	3.99	34.0000	135.66	
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	47.45	0.6660	31.60	
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.4242	6.23	
Harvesters	hour	14.68	0.1009	1.48	
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	14.67	0.4020	5.90	
DIESEL FUEL					
Tractors	gal	1.53	4.7302	7.26	
Harvesters	gal	1.53	1.6890	2.58	
Roll-Out Pipe Irr.	gal	1.53	10.5901	16.20	
REPAIR & MAINTENANCE					
Implements	acre	8.36	1.0000	8.36	
Tractors	acre	2.96	1.0000	2.96	
Harvesters	acre	4.15	1.0000	4.15	
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	12.55	1.0000	12.55	
TOTAL DIRECT EXPENSES				576.11	
FIXED EXPENSES					
Implements	acre	12.52	1.0000	12.52	
Tractors	acre	17.97	1.0000	17.97	
Harvesters	acre	15.90	1.0000	15.90	
Roll-Out Pipe Irr.	acre	51.84	1.0000	51.84	
TOTAL FIXED EXPENSES				98.23	
TOTAL SPECIFIED EXPENSES				674.34	

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 16.B Summary of estimated costs and returns per acre
 Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goa
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.73	220.0000	820.60	_____

TOTAL INCOME				820.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.10	1.0000	8.10	_____
FERTILIZERS	acre	189.04	1.0000	189.04	_____
HERBICIDES	acre	55.58	1.0000	55.58	_____
INSECTICIDES	acre	1.20	1.0000	1.20	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	135.66	1.0000	135.66	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	14.68	0.5252	7.71	_____
UNALLOCATED LABOR	hour	14.67	0.4020	5.90	_____
DIESEL FUEL	gal	1.53	17.0094	26.04	_____
REPAIR & MAINTENANCE	acre	22.63	1.0000	22.63	_____
INTEREST ON OP. CAP.	acre	12.55	1.0000	12.55	_____

TOTAL DIRECT EXPENSES				576.11	_____
RETURNS ABOVE DIRECT EXPENSES				244.49	_____
TOTAL FIXED EXPENSES				98.23	_____

TOTAL SPECIFIED EXPENSES				674.34	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				146.26	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 16.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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.9570				
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 2020 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 16.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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Spin Spreader	5 ton		0.75	0.58	1.56		0.12	3.01	2.40	5.41
Phosphorus (46% P2O5)	cwt	33.88					1.36	35.24		35.24
Potash (60% K2O)	cwt	33.17					1.33	34.50		34.50
Bed/Disk w/roller	12R-30/40		1.11	1.26	1.75		0.16	4.28	4.80	9.08
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Clarity	pt	5.37					0.14	5.51		5.51
Select Max	pt	12.74					0.34	13.08		13.08
Plant & Pre-Folding	12R-38		0.95	2.25	1.97		0.12	5.29	5.79	11.08
Corn Seed BtRR	thous	135.66					3.17	138.83		138.83
Fert 10-34-0	gal	11.20					0.26	11.46		11.46
Zinc Plus	pt	5.98					0.14	6.12		6.12
Custom Apply Fert	acre	7.50					0.15	7.65		7.65
UAN + Sulfur (28%)	gal	51.80					1.04	52.84		52.84
Spray (Broadcast)	60'		0.50	0.38	0.91		0.04	1.83	1.45	3.28
Atrazine 4L	pt	7.64					0.15	7.79		7.79
Halex GT	pt	25.67					0.51	26.18		26.18
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.20					0.02	1.22		1.22
Corn Consultant	acre	6.00					0.10	6.10		6.10
Fert Appl (Liquid)	12R-38		0.92	1.05	1.67		0.06	3.70	3.01	6.71
UAN (32%)	gal	53.01					0.88	53.89		53.89
Header - Corn	8R-38		2.58	5.86	2.81		0.04	11.29	18.39	29.68
Grain Cart Corn	700 bu		0.45	0.48	0.70		0.01	1.64	1.62	3.26
Haul Corn	bu	50.60					0.17	50.77		50.77
Stalk Shredder Flex	20'		1.46	2.99	2.30		0.02	6.77	5.05	11.82
Roll-Out Pipe Irr.	acre	7.92	17.32	7.78	4.69		0.51	38.22	55.72	93.94
TOTALS		496.53	26.04	22.63	18.36	0.00	12.55	576.11	98.23	674.34

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 16.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, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	820.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00
FERTILIZERS	67.05	0.00	0.00	0.00	0.00	17.18	51.80	53.01	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.27	0.00	33.31	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	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	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	135.66	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	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.87	0.00	0.00	0.00	0.00	1.97	0.91	1.90	3.05	0.23	0.62	5.81
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	2.43	0.00	0.00	0.00	0.00	0.95	0.50	0.92	12.45	4.05	0.25	4.49
REPAIR & MAINTENANCE	2.14	0.00	0.00	0.00	0.00	2.25	0.38	1.05	6.28	1.05	0.15	9.33
INTEREST ON OP. CAP.	4.42	0.00	0.00	0.00	0.78	3.69	1.89	1.08	0.39	0.05	0.01	0.24
TOTAL DIRECT EXPENSES	114.84	0.00	0.00	0.00	30.05	161.70	96.29	66.26	30.09	5.38	1.03	70.47
NET INCOME	-114.84	0.00	0.00	0.00	-30.05	-161.70	-96.29	-66.26	-30.09	-5.38	-1.03	750.13
NET INCOME TO DATE	-114.84	-114.84	-114.84	-114.84	-144.89	-306.59	-402.88	-469.14	-499.23	-504.61	-505.64	244.49

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 16.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, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			2.79	2.98	3.17	3.35	3.54	3.73	3.91	4.10	4.28	4.47	4.66
PERCENT	YIELD	UNIT	-----dollars-----										
50	110.00	bu	-243	-222	-201	-181	-160	-140	-119	-99	-78	-58	-37
			-341	-320	-300	-279	-259	-238	-218	-197	-177	-156	-136
60	132.00	bu	-186	-161	-137	-112	-88	-63	-38	-14	10	35	59
			-284	-260	-235	-210	-186	-161	-137	-112	-87	-63	-38
70	154.00	bu	-130	-101	-72	-43	-15	13	42	70	99	128	157
			-228	-199	-170	-142	-113	-84	-55	-27	1	30	58
80	176.00	bu	-73	-40	-7	24	57	90	123	156	188	221	254
			-171	-139	-106	-73	-40	-7	25	57	90	123	156
90	198.00	bu	-17	19	56	93	130	167	204	241	278	315	352
			-115	-78	-41	-4	32	69	106	143	180	216	253
100	220.00	bu	39	80	121	162	203	244	285	326	367	408	449
			-58	-17	23	64	105	146	187	228	269	310	351
110	242.00	bu	95	140	186	231	276	321	366	411	456	502	547
			-2	42	87	132	178	223	268	313	358	403	448
120	264.00	bu	152	201	250	299	349	398	447	496	546	595	644
			54	103	152	201	250	300	349	398	447	497	546
130	286.00	bu	208	262	315	368	422	475	528	582	635	688	742
			110	163	217	270	323	377	430	483	537	590	643
140	308.00	bu	265	322	380	437	494	552	609	667	724	782	839
			166	224	281	339	396	454	511	569	626	683	741
150	330.00	bu	321	383	444	506	567	629	690	752	814	875	937
			223	284	346	408	469	531	592	654	715	777	838

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

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

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

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

Table 17.A Estimated costs per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	
App by Air (3 gal)	appl	5.50	0.2000	1.10	
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	17.31	1.6300	28.22	
Potash (60% K2O)	cwt	22.11	1.2500	27.64	
Fert 10-34-0	gal	2.80	4.0000	11.20	
Zinc Plus	pt	2.99	2.0000	5.98	
UAN + Sulfur (28%)	gal	1.61	19.3063	31.08	
UAN (32%)	gal	1.34	36.7200	49.20	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Clarity	pt	10.73	0.5000	5.37	
Select Max	pt	12.74	1.0000	12.74	
Atrazine 4L	pt	1.91	4.0000	7.64	
Halex GT	pt	7.13	3.6000	25.67	
INSECTICIDES					
Bifenthrin	oz	0.94	1.2800	1.20	
SEED/PLANTS					
Corn Seed BtRR	thous	3.99	28.0000	111.72	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.3457	5.07	
Harvesters	hour	14.68	0.1009	1.48	
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	
UNALLOCATED LABOR	hour	14.67	0.4020	5.90	
DIESEL FUEL					
Tractors	gal	1.53	4.0040	6.14	
Harvesters	gal	1.53	1.3770	2.11	
REPAIR & MAINTENANCE					
Implements	acre	8.17	1.0000	8.17	
Tractors	acre	2.53	1.0000	2.53	
Harvesters	acre	4.11	1.0000	4.11	
INTEREST ON OP. CAP.	acre	10.51	1.0000	10.51	
TOTAL DIRECT EXPENSES				464.69	
FIXED EXPENSES					
Implements	acre	11.28	1.0000	11.28	
Tractors	acre	15.33	1.0000	15.33	
Harvesters	acre	15.74	1.0000	15.74	
TOTAL FIXED EXPENSES				42.35	
TOTAL SPECIFIED EXPENSES				507.04	

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 17.B Summary of estimated costs and returns per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.73	170.0000	634.10	_____

TOTAL INCOME				634.10	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.10	1.0000	8.10	_____
FERTILIZERS	acre	153.32	1.0000	153.32	_____
HERBICIDES	acre	55.58	1.0000	55.58	_____
INSECTICIDES	acre	1.20	1.0000	1.20	_____
SEED/PLANTS	acre	111.72	1.0000	111.72	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
OPERATOR LABOR	hour	14.68	0.4466	6.55	_____
UNALLOCATED LABOR	hour	14.67	0.4020	5.90	_____
DIESEL FUEL	gal	1.53	5.3810	8.25	_____
REPAIR & MAINTENANCE	acre	14.81	1.0000	14.81	_____
INTEREST ON OP. CAP.	acre	10.51	1.0000	10.51	_____

TOTAL DIRECT EXPENSES				464.69	_____
RETURNS ABOVE DIRECT EXPENSES				169.41	_____
TOTAL FIXED EXPENSES				42.35	_____

TOTAL SPECIFIED EXPENSES				507.04	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				127.06	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 17.C Estimated resource use for field operations, per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
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					36.7200				
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 2020 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 17.D Estimated costs for field operations, per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Spin Spreader	5 ton		0.75	0.58	1.56		0.12	3.01	2.40	5.41
Phosphorus (46% P2O5)	cwt	28.22					1.13	29.35		29.35
Potash (60% K2O)	cwt	27.64					1.11	28.75		28.75
Bed/Disk w/roller	12R-30/40		1.11	1.26	1.75		0.16	4.28	4.80	9.08
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Clarity	pt	5.37					0.14	5.51		5.51
Select Max	pt	12.74					0.34	13.08		13.08
Plant & Pre-Folding	12R-38		0.95	2.25	1.97		0.12	5.29	5.79	11.08
Corn Seed BtRR	thous	111.72					2.61	114.33		114.33
Fert 10-34-0	gal	11.20					0.26	11.46		11.46
Zinc Plus	pt	5.98					0.14	6.12		6.12
Custom Apply Fert	acre	7.50					0.15	7.65		7.65
UAN + Sulfur (28%)	gal	31.08					0.62	31.70		31.70
Spray (Broadcast)	60'		0.50	0.38	0.91		0.04	1.83	1.45	3.28
Atrazine 4L	pt	7.64					0.15	7.79		7.79
Halex GT	pt	25.67					0.51	26.18		26.18
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.20					0.02	1.22		1.22
Corn Consultant	acre	6.00					0.10	6.10		6.10
Fert Appl (Liquid)	12R-38		0.92	1.05	1.67		0.06	3.70	3.01	6.71
UAN (32%)	gal	49.20					0.82	50.02		50.02
Header - Corn	8R-38		2.11	5.82	2.81		0.04	10.78	18.23	29.01
Grain Cart Corn	700 bu		0.45	0.48	0.70		0.01	1.64	1.62	3.26
Haul Corn	bu	39.10					0.13	39.23		39.23
Stalk Shredder Flex	20'		1.46	2.99	2.30		0.02	6.77	5.05	11.82
TOTALS		417.45	8.25	14.81	13.67	0.00	10.51	464.69	42.35	507.04

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 17.E Estimated monthly income and expense flows per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	634.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00
FERTILIZERS	55.86	0.00	0.00	0.00	0.00	17.18	31.08	49.20	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.27	0.00	33.31	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	111.72	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.31	0.00	0.00	0.00	0.00	1.97	0.91	1.67	0.00	0.00	0.00	5.81
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.86	0.00	0.00	0.00	0.00	0.95	0.50	0.92	0.00	0.00	0.00	4.02
REPAIR & MAINTENANCE	1.84	0.00	0.00	0.00	0.00	2.25	0.38	1.05	0.00	0.00	0.00	9.29
INTEREST ON OP. CAP.	3.91	0.00	0.00	0.00	0.78	3.13	1.47	1.02	0.00	0.00	0.00	0.20
TOTAL DIRECT EXPENSES	101.71	0.00	0.00	0.00	30.05	137.20	75.15	62.16	0.00	0.00	0.00	58.42
NET INCOME	-101.71	0.00	0.00	0.00	-30.05	-137.20	-75.15	-62.16	0.00	0.00	0.00	575.68
NET INCOME TO DATE	-101.71	-101.71	-101.71	-101.71	-131.76	-268.96	-344.11	-406.27	-406.27	-406.27	-406.27	169.41

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 17.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, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			2.79	2.98	3.17	3.35	3.54	3.73	3.91	4.10	4.28	4.47	4.66
PERCENT	YIELD	UNIT	-----dollars-----										
50	85.00	bu	-207 -249	-191 -233	-175 -217	-159 -202	-143 -186	-128 -170	-112 -154	-96 -138	-80 -122	-64 -106	-48 -91
60	102.00	bu	-163 -206	-144 -186	-125 -167	-106 -148	-87 -129	-68 -110	-49 -91	-30 -72	-11 -53	7 -34	26 -15
70	119.00	bu	-120 -162	-97 -140	-75 -117	-53 -95	-31 -73	-9 -51	13 -29	35 -7	57 15	79 37	101 59
80	136.00	bu	-76 -118	-51 -93	-25 -68	-0 -42	25 -17	50 8	75 33	101 58	126 84	151 109	177 134
90	153.00	bu	-32 -75	-4 -46	24 -18	52 10	81 39	109 67	138 96	166 124	195 153	224 181	252 210
100	170.00	bu	10 -31	42 0	74 31	106 63	137 95	169 127	201 158	232 190	264 222	296 253	327 285
110	187.00	bu	54 12	89 47	124 81	159 116	194 151	228 186	263 221	298 256	333 291	368 326	403 360
120	204.00	bu	98 55	136 93	174 131	212 169	250 207	288 246	326 284	364 322	402 360	440 398	478 436
130	221.00	bu	141 99	183 140	224 181	265 223	306 264	347 305	389 346	430 387	471 429	512 470	553 511
140	238.00	bu	185 143	229 187	274 231	318 276	362 320	407 365	451 409	496 453	540 498	584 542	629 586
150	255.00	bu	229 186	276 234	324 281	371 329	419 376	466 424	514 472	561 519	609 567	657 614	704 662

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2020 input prices.

Table 18.A Estimated costs per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.50	1.2000	6.60	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	1.9570	33.88	_____
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN + Sulfur (28%)	gal	1.61	32.1712	51.80	_____
UAN (32%)	gal	1.34	39.5570	53.01	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Clarity	pt	10.73	0.5000	5.37	_____
Select Max	pt	12.74	1.0000	12.74	_____
Atrazine 4L	pt	1.91	4.0000	7.64	_____
Halex GT	pt	7.13	3.6000	25.67	_____
INSECTICIDES					
Bifenthrin	oz	0.94	1.2800	1.20	_____
Intrepid 2F	oz	1.94	4.0000	7.76	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.03	34.0000	103.02	_____
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	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.6423	9.45	_____
Harvesters	hour	14.68	0.1009	1.48	_____
Self-Propelled	hour	14.68	0.0176	0.26	_____
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	14.68	0.6141	9.02	_____
DIESEL FUEL					
Tractors	gal	1.53	7.2557	11.12	_____
Harvesters	gal	1.53	1.3770	2.11	_____
Self-Propelled	gal	1.53	0.1586	0.24	_____
Roll-Out Pipe Irr.	gal	1.53	10.5901	16.20	_____
REPAIR & MAINTENANCE					
Implements	acre	10.52	1.0000	10.52	_____
Tractors	acre	4.54	1.0000	4.54	_____
Harvesters	acre	4.11	1.0000	4.11	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	12.02	1.0000	12.02	_____
TOTAL DIRECT EXPENSES				553.07	_____
FIXED EXPENSES					
Implements	acre	17.74	1.0000	17.74	_____
Tractors	acre	27.65	1.0000	27.65	_____
Harvesters	acre	15.74	1.0000	15.74	_____
Self-Propelled	acre	1.30	1.0000	1.30	_____
Roll-Out Pipe Irr.	acre	51.84	1.0000	51.84	_____
TOTAL FIXED EXPENSES				114.27	_____
TOTAL SPECIFIED EXPENSES				667.34	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 18.B Summary of estimated costs and returns per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.73	220.0000	820.60	_____

TOTAL INCOME				820.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.60	1.0000	13.60	_____
FERTILIZERS	acre	171.86	1.0000	171.86	_____
HERBICIDES	acre	55.58	1.0000	55.58	_____
INSECTICIDES	acre	8.96	1.0000	8.96	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	103.02	1.0000	103.02	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	14.68	0.7609	11.19	_____
UNALLOCATED LABOR	hour	14.68	0.6141	9.02	_____
DIESEL FUEL	gal	1.53	19.3816	29.67	_____
REPAIR & MAINTENANCE	acre	26.53	1.0000	26.53	_____
INTEREST ON OP. CAP.	acre	12.02	1.0000	12.02	_____

TOTAL DIRECT EXPENSES				553.07	_____
RETURNS ABOVE DIRECT EXPENSES				267.53	_____
TOTAL FIXED EXPENSES				114.27	_____

TOTAL SPECIFIED EXPENSES				667.34	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				153.26	_____

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

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

Table 18.C Estimated resource use for field operations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	42'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
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-Fold.	40'	MFWD 225	0.046	1.00	Mar		0.04	0.04	0.04	0.04
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				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
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							0.76	0.74	1.27	0.61

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 18.D Estimated costs for field operations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Subsoiler	3 shank		1.81	0.96	2.85		0.22	5.84	5.04	10.88
Disk Harrow	42'		0.83	1.73	1.31		0.15	4.02	4.91	8.93
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Spin Spreader	5 ton		0.75	0.58	1.56		0.12	3.01	2.40	5.41
Phosphorus(46% P2O5)	cwt	33.88					1.36	35.24		35.24
Potash (60% K2O)	cwt	33.17					1.33	34.50		34.50
Bed/Disk w/roller	12R-30/40		1.11	1.26	1.75		0.16	4.28	4.80	9.08
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Clarity	pt	5.37					0.14	5.51		5.51
Select Max	pt	12.74					0.34	13.08		13.08
Row Cond./Roll-Fold.	40'		0.83	0.74	1.31		0.07	2.95	3.10	6.05
Plant - Folding	12R-38		0.88	1.91	1.84		0.11	4.74	5.06	9.80
Corn Seed RR2	thous	103.02					2.40	105.42		105.42
Custom Apply Fert	acre	7.50					0.15	7.65		7.65
UAN + Sulfur (28%)	gal	51.80					1.04	52.84		52.84
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.57		0.02	1.03	1.30	2.33
Atrazine 4L	pt	7.64					0.15	7.79		7.79
Halex GT	pt	25.67					0.51	26.18		26.18
Corn Consultant	acre	6.00					0.10	6.10		6.10
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.20					0.02	1.22		1.22
Fert Appl (Liquid)	12R-38		0.92	1.05	1.67		0.06	3.70	3.01	6.71
UAN (32%)	gal	53.01					0.88	53.89		53.89
Cultivate	12R-38		0.96	1.03	1.52		0.06	3.57	4.03	7.60
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Intrepid 2F	oz	7.76					0.10	7.86		7.86
Header - Corn	8R-38		2.11	5.82	2.81		0.04	10.78	18.23	29.01
Grain Cart Corn	700 bu		0.45	0.48	0.70		0.01	1.64	1.62	3.26
Haul Corn	bu	50.60					0.17	50.77		50.77
Stalk Shredder Flex	20'		1.46	2.99	2.30		0.02	6.77	5.05	11.82
Roll-Out Pipe Irr.	acre	7.92	17.32	7.78	4.69		0.51	38.22	55.72	93.94
TOTALS		459.97	29.67	26.53	24.88	0.00	12.02	553.07	114.27	667.34

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 18.E Estimated monthly income and expense flows per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	820.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	5.50	0.00	0.00	0.00
FERTILIZERS	67.05	0.00	0.00	0.00	0.00	0.00	51.80	53.01	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.27	0.00	33.31	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	7.76	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	103.02	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	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	8.03	0.00	0.00	0.00	0.00	3.15	0.57	3.42	3.05	0.23	0.62	5.81
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	5.07	0.00	0.00	0.00	0.00	1.71	0.24	1.88	12.45	4.05	0.25	4.02
REPAIR & MAINTENANCE	4.83	0.00	0.00	0.00	0.00	2.65	0.20	2.08	6.28	1.05	0.15	9.29
INTEREST ON OP. CAP.	4.79	0.00	0.00	0.00	0.78	2.58	1.87	1.14	0.56	0.05	0.01	0.24
TOTAL DIRECT EXPENSES	124.70	0.00	0.00	0.00	30.05	113.11	95.49	69.83	43.52	5.38	1.03	69.96
NET INCOME	-124.70	0.00	0.00	0.00	-30.05	-113.11	-95.49	-69.83	-43.52	-5.38	-1.03	750.64
NET INCOME TO DATE	-124.70	-124.70	-124.70	-124.70	-154.75	-267.86	-363.35	-433.18	-476.70	-482.08	-483.11	267.53

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 18.F Estimated returns for various price/yield combinations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			2.79	2.98	3.17	3.35	3.54	3.73	3.91	4.10	4.28	4.47	4.66
PERCENT	YIELD	UNIT	-----dollars-----										
50	110.00	bu	-219 -334	-199 -313	-178 -293	-158 -272	-137 -252	-117 -231	-96 -211	-76 -190	-55 -170	-35 -149	-14 -129
60	132.00	bu	-163 -277	-138 -253	-114 -228	-89 -203	-65 -179	-40 -154	-15 -130	8 -105	33 -80	58 -56	82 -31
70	154.00	bu	-107 -221	-78 -192	-49 -163	-20 -135	7 -106	36 -77	65 -48	94 -20	122 8	151 37	180 65
80	176.00	bu	-50 -164	-17 -132	15 -99	47 -66	80 -33	113 -0	146 32	179 64	212 97	244 130	277 163
90	198.00	bu	5 -108	42 -71	79 -34	116 2	153 39	190 76	227 113	264 150	301 187	338 223	375 260
100	220.00	bu	62 -51	103 -10	144 30	185 71	226 112	267 153	308 194	349 235	390 276	431 317	472 358
110	242.00	bu	118 4	163 49	209 94	254 139	299 185	344 230	389 275	434 320	479 365	525 410	570 455
120	264.00	bu	175 61	224 110	273 159	323 208	372 257	421 307	470 356	519 405	569 454	618 504	667 553
130	286.00	bu	231 117	285 170	338 224	391 277	445 330	498 384	551 437	605 490	658 544	711 597	765 650
140	308.00	bu	288 173	345 231	403 288	460 346	518 403	575 461	632 518	690 576	747 633	805 690	862 748
150	330.00	bu	344 230	406 291	467 353	529 415	590 476	652 538	713 599	775 661	837 722	898 784	960 845

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2020 input prices.

Table 19.A Estimated costs per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	
App by Air (3 gal)	appl	5.50	1.2000	6.60	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	17.31	1.6300	28.22	
Potash (60% K2O)	cwt	22.11	1.2500	27.64	
UAN + Sulfur (28%)	gal	1.61	19.3063	31.08	
UAN (32%)	gal	1.34	36.7200	49.20	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Clarity	pt	10.73	0.5000	5.37	
Select Max	pt	12.74	1.0000	12.74	
Atrazine 4L	pt	1.91	4.0000	7.64	
Halex GT	pt	7.13	3.6000	25.67	
INSECTICIDES					
Bifenthrin	oz	0.94	1.2804	1.20	
Intrepid 2F	oz	1.94	4.0000	7.76	
SEED/PLANTS					
Corn Seed RR2	thous	3.03	28.0000	84.84	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.4903	7.20	
Harvesters	hour	14.68	0.1009	1.48	
Self-Propelled	hour	14.68	0.0176	0.26	
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	
Self-Propelled	hour	9.06	0.0088	0.08	
UNALLOCATED LABOR	hour	14.67	0.5480	8.04	
DIESEL FUEL					
Tractors	gal	1.53	5.6788	8.69	
Harvesters	gal	1.53	1.3770	2.11	
Self-Propelled	gal	1.53	0.1586	0.24	
REPAIR & MAINTENANCE					
Implements	acre	9.41	1.0000	9.41	
Tractors	acre	3.57	1.0000	3.57	
Harvesters	acre	4.11	1.0000	4.11	
Self-Propelled	acre	0.20	1.0000	0.20	
INTEREST ON OP. CAP.	acre	10.02	1.0000	10.02	
TOTAL DIRECT EXPENSES				443.12	
FIXED EXPENSES					
Implements	acre	14.61	1.0000	14.61	
Tractors	acre	21.75	1.0000	21.75	
Harvesters	acre	15.74	1.0000	15.74	
Self-Propelled	acre	1.30	1.0000	1.30	
TOTAL FIXED EXPENSES				53.40	
TOTAL SPECIFIED EXPENSES				496.52	

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 19.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, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.73	170.0000	634.10	_____

TOTAL INCOME				634.10	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.60	1.0000	13.60	_____
FERTILIZERS	acre	136.14	1.0000	136.14	_____
HERBICIDES	acre	55.58	1.0000	55.58	_____
INSECTICIDES	acre	8.96	1.0000	8.96	_____
SEED/PLANTS	acre	84.84	1.0000	84.84	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
OPERATOR LABOR	hour	14.68	0.6089	8.94	_____
UNALLOCATED LABOR	hour	14.67	0.5480	8.04	_____
DIESEL FUEL	gal	1.53	7.2145	11.04	_____
REPAIR & MAINTENANCE	acre	17.29	1.0000	17.29	_____
INTEREST ON OP. CAP.	acre	10.02	1.0000	10.02	_____

TOTAL DIRECT EXPENSES				443.12	_____
RETURNS ABOVE DIRECT EXPENSES				190.98	_____
TOTAL FIXED EXPENSES				53.40	_____

TOTAL SPECIFIED EXPENSES				496.52	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				137.58	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 19.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, 2021

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	42'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
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)	12R-38	MFWD 225	0.049	1.00	Oct		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	Mar		0.04	0.04	0.04	0.03
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					36.7200				
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							0.60	0.59	0.73	0.54

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 19.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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Subsoiler	3 shank		1.81	0.96	2.85		0.22	5.84	5.04	10.88
Disk Harrow	42'		0.83	1.73	1.31		0.15	4.02	4.91	8.93
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Spin Spreader	5 ton		0.75	0.58	1.56		0.12	3.01	2.40	5.41
Phosphorus (46% P2O5)	cwt	28.22					1.13	29.35		29.35
Potash (60% K2O)	cwt	27.64					1.11	28.75		28.75
Bed/Disk (Hipper)	12R-38		0.87	0.99	1.37		0.13	3.36	3.81	7.17
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
Clarity	pt	5.37					0.14	5.51		5.51
Select Max	pt	12.74					0.34	13.08		13.08
Row Cond Folding	38'		0.72	0.58	1.14		0.06	2.50	2.97	5.47
Plant - Folding	12R-38		0.88	1.91	1.84		0.11	4.74	5.06	9.80
Corn Seed RR2	thous	84.84					1.98	86.82		86.82
Custom Apply Fert	acre	7.50					0.15	7.65		7.65
UAN + Sulfur (28%)	gal	31.08					0.62	31.70		31.70
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.57		0.02	1.03	1.30	2.33
Atrazine 4L	pt	7.64					0.15	7.79		7.79
Halex GT	pt	25.67					0.51	26.18		26.18
Corn Consultant	acre	6.00					0.10	6.10		6.10
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.20					0.02	1.22		1.22
Fert Appl (Liquid)	12R-38		0.92	1.05	1.67		0.06	3.70	3.01	6.71
UAN (32%)	gal	49.20					0.82	50.02		50.02
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Intrepid 2F	oz	7.76					0.10	7.86		7.86
Header - Corn	8R-38		2.11	5.82	2.81		0.04	10.78	18.23	29.01
Grain Cart Corn	700 bu		0.45	0.48	0.70		0.01	1.64	1.62	3.26
Haul Corn	bu	39.10					0.13	39.23		39.23
Stalk Shredder Flex	20'		1.46	2.99	2.30		0.02	6.77	5.05	11.82
TOTALS		386.65	11.04	17.29	18.12	0.00	10.02	443.12	53.40	496.52

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 19.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, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	634.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	5.50	0.00	0.00	0.00
FERTILIZERS	55.86	0.00	0.00	0.00	0.00	0.00	31.08	49.20	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.27	0.00	33.31	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	7.76	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	84.84	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.09	0.00	0.00	0.00	0.00	2.98	0.57	1.67	0.00	0.00	0.00	5.81
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	4.26	0.00	0.00	0.00	0.00	1.60	0.24	0.92	0.00	0.00	0.00	4.02
REPAIR & MAINTENANCE	4.26	0.00	0.00	0.00	0.00	2.49	0.20	1.05	0.00	0.00	0.00	9.29
INTEREST ON OP. CAP.	4.25	0.00	0.00	0.00	0.78	2.15	1.45	1.02	0.17	0.00	0.00	0.20
TOTAL DIRECT EXPENSES	110.65	0.00	0.00	0.00	30.05	94.06	74.35	62.16	13.43	0.00	0.00	58.42
NET INCOME	-110.65	0.00	0.00	0.00	-30.05	-94.06	-74.35	-62.16	-13.43	0.00	0.00	575.68
NET INCOME TO DATE	-110.65	-110.65	-110.65	-110.65	-140.70	-234.76	-309.11	-371.27	-384.70	-384.70	-384.70	190.98

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 19.F Estimated returns for various price/yield combinations, per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			2.79	2.98	3.17	3.35	3.54	3.73	3.91	4.10	4.28	4.47	4.66
PERCENT	YIELD	UNIT	-----dollars-----										
50	85.00	bu	-185	-169	-154	-138	-122	-106	-90	-74	-58	-43	-27
			-239	-223	-207	-191	-175	-159	-144	-128	-112	-96	-80
60	102.00	bu	-142	-123	-104	-85	-65	-46	-27	-8	10	29	48
			-195	-176	-157	-138	-119	-100	-81	-62	-43	-24	-5
70	119.00	bu	-98	-76	-54	-31	-9	12	34	56	79	101	123
			-151	-129	-107	-85	-63	-40	-18	3	25	47	70
80	136.00	bu	-54	-29	-4	21	46	72	97	122	148	173	198
			-108	-82	-57	-32	-6	18	43	69	94	120	145
90	153.00	bu	-11	17	45	74	102	131	160	188	217	245	274
			-64	-36	-7	21	49	78	106	135	163	192	220
100	170.00	bu	32	64	95	127	159	190	222	254	286	317	349
			-20	10	42	74	105	137	169	200	232	264	296
110	187.00	bu	76	110	145	180	215	250	285	320	355	389	424
			22	57	92	127	162	197	231	266	301	336	371
120	204.00	bu	119	157	195	233	271	309	348	386	424	462	500
			66	104	142	180	218	256	294	332	370	408	446
130	221.00	bu	163	204	245	287	328	369	410	451	493	534	575
			109	151	192	233	274	316	357	398	439	480	522
140	238.00	bu	206	251	295	340	384	428	473	517	562	606	650
			153	197	242	286	331	375	419	464	508	553	597
150	255.00	bu	250	298	345	393	440	488	535	583	631	678	726
			197	244	292	339	387	435	482	530	577	625	672

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

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

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

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

Table 20.A Estimated costs per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	
FERTILIZERS					
DAP	cwt	20.99	1.3000	27.29	
Potash (60% K2O)	cwt	22.11	1.0000	22.11	
UAN + Sulfur (28%)	gal	1.61	38.2883	61.64	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Select Max	pt	12.74	1.0000	12.74	
Lexar	pt	7.55	6.0000	45.30	
INSECTICIDES					
Sivanto Prime	oz	2.67	8.0000	21.36	
Karate Z	oz	2.52	1.5000	3.78	
Prevathon	oz	1.05	14.0000	14.70	
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.82	4.5000	17.19	
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	
CROP CONSULTANT					
Sorghum Consultant	acre	6.00	1.0000	6.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.68	0.2915	4.27	
Harvesters	hour	14.68	0.1021	1.50	
Self-Propelled	hour	14.68	0.0661	0.95	
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	
Self-Propelled	hour	9.06	0.0330	0.30	
UNALLOCATED LABOR	hour	14.64	0.4138	6.06	
DIESEL FUEL					
Tractors	gal	1.53	3.3766	5.17	
Harvesters	gal	1.53	1.3935	2.13	
Self-Propelled	gal	1.53	0.8505	1.30	
REPAIR & MAINTENANCE					
Implements	acre	5.46	1.0000	5.46	
Tractors	acre	2.13	1.0000	2.13	
Harvesters	acre	4.16	1.0000	4.16	
Self-Propelled	acre	1.05	1.0000	1.05	
INTEREST ON OP. CAP.	acre	6.65	1.0000	6.65	
TOTAL DIRECT EXPENSES				351.13	
FIXED EXPENSES					
Implements	acre	10.19	1.0000	10.19	
Tractors	acre	12.94	1.0000	12.94	
Harvesters	acre	15.93	1.0000	15.93	
Self-Propelled	acre	6.60	1.0000	6.60	
TOTAL FIXED EXPENSES				45.66	
TOTAL SPECIFIED EXPENSES				396.79	

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 20.B Summary of estimated costs and returns per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	3.55	100.0000	355.00	_____

TOTAL INCOME				355.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_____
FERTILIZERS	acre	111.04	1.0000	111.04	_____
HERBICIDES	acre	66.70	1.0000	66.70	_____
INSECTICIDES	acre	39.84	1.0000	39.84	_____
SEED/PLANTS	acre	17.19	1.0000	17.19	_____
ADJUVANTS	acre	0.99	1.0000	0.99	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1772	1.61	_____
OPERATOR LABOR	hour	14.68	0.4598	6.72	_____
UNALLOCATED LABOR	hour	14.64	0.4138	6.06	_____
DIESEL FUEL	gal	1.53	5.6208	8.60	_____
REPAIR & MAINTENANCE	acre	12.80	1.0000	12.80	_____
INTEREST ON OP. CAP.	acre	6.65	1.0000	6.65	_____

TOTAL DIRECT EXPENSES				351.13	_____
RETURNS ABOVE DIRECT EXPENSES				3.87	_____
TOTAL FIXED EXPENSES				45.66	_____

TOTAL SPECIFIED EXPENSES				396.79	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-41.79	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 20.C Estimated resource use for field operations, per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Disk Harrow	32'	MFWD 225	0.061	1.00	Nov		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.3000				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Apr		0.04	0.04	0.08	0.03
DAP	cwt					1.3000				
Potash (60% K2O)	cwt					1.0000				
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Apr		0.04	0.04	0.04	0.04
Plant - Folding	12R-30	MFWD 225	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Sorghum Concept+ Po	lb					4.5000				
Sprayer 800gal	80' 250hp		0.013	1.00	Apr			0.01	0.01	0.01
Lexar	pt					6.0000				
Sorghum Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					38.2883				
Sprayer 800gal	80' 250hp		0.013	1.00	Jun			0.01	0.01	0.01
Sivanto Prime	oz					4.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Karate Z	oz					1.5000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Prevathon	oz					14.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Sivanto Prime	oz					4.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Sorghum	bu					100.0000				
TOTALS							0.45	0.39	0.63	0.41

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 20.D Estimated costs for field operations, per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Lime (Spread)	ton	31.60					1.26	32.86		32.86
Disk Harrow	32'		1.09	1.50	1.71		0.16	4.46	4.85	9.31
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27		4.27
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Select Max	pt	12.74					0.34	13.08		13.08
Surfactant	pt	0.99					0.03	1.02		1.02
Spin Spreader	5 ton		0.75	0.58	1.56		0.06	2.95	2.40	5.35
DAP	cwt	27.29					0.55	27.84		27.84
Potash (60% K2O)	cwt	22.11					0.44	22.55		22.55
Field Cultivate Fld	32'		0.83	0.85	1.30		0.06	3.04	4.14	7.18
Plant - Folding	12R-30		1.11	2.15	2.32		0.11	5.69	5.90	11.59
Sorghum Concept+ Po	lb	17.19					0.34	17.53		17.53
Sprayer 800gal	80' 250hp		0.26	0.21	0.42		0.02	0.91	1.32	2.23
Lexar	pt	45.30					0.91	46.21		46.21
Sorghum Consultant	acre	6.00					0.10	6.10		6.10
Fert Appl (Liquid)	12R-30		1.39	1.86	2.55		0.10	5.90	4.90	10.80
UAN + Sulfur (28%)	gal	61.64					1.03	62.67		62.67
Sprayer 800gal	80' 250hp		0.26	0.21	0.42		0.01	0.90	1.32	2.22
Sivanto Prime	oz	10.68					0.14	10.82		10.82
Sprayer 800gal	80' 250hp		0.26	0.21	0.42		0.01	0.90	1.32	2.22
Karate Z	oz	3.78					0.04	3.82		3.82
Sprayer 800gal	80' 250hp		0.26	0.21	0.42		0.01	0.90	1.32	2.22
Prevathon	oz	14.70					0.15	14.85		14.85
Sprayer 800gal	80' 250hp		0.26	0.21	0.42		0.01	0.90	1.32	2.22
Sivanto Prime	oz	10.68					0.11	10.79		10.79
Header Wheat/Sorghum	25' Rigid		2.13	4.81	2.85		0.03	9.82	16.87	26.69
Haul Sorghum	bu	25.00					0.08	25.08		25.08
TOTALS		308.69	8.60	12.80	14.39	0.00	6.65	351.13	45.66	396.79

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 20.E Estimated monthly income and expense flows per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	355.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	49.40	61.64	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.40	0.00	45.30	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.68	29.16	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	17.19	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
CUSTOM LIME	31.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	1.71	0.00	0.00	0.00	0.00	5.60	2.55	0.42	1.26	0.00	2.85
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	1.09	0.00	0.00	0.00	0.00	2.95	1.39	0.26	0.78	0.00	2.13
REPAIR & MAINTENANCE	0.00	1.50	0.00	0.00	0.00	0.00	3.79	1.86	0.21	0.63	0.00	4.81
INTEREST ON OP. CAP.	1.39	0.16	0.00	0.00	0.79	0.00	2.49	1.23	0.15	0.33	0.00	0.11
TOTAL DIRECT EXPENSES	36.32	4.46	0.00	0.00	30.18	0.00	126.72	74.67	11.72	32.16	0.00	34.90
NET INCOME	-36.32	-4.46	0.00	0.00	-30.18	0.00	-126.72	-74.67	-11.72	-32.16	0.00	320.10
NET INCOME TO DATE	-36.32	-40.78	-40.78	-40.78	-70.96	-70.96	-197.68	-272.35	-284.07	-316.23	-316.23	3.87

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 20.F Estimated returns for various price/yield combinations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2021

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

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

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

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

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

Table 21.A Estimated costs per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.0000	14.00	_____
App by Air (3 gal)	appl	5.50	1.0000	5.50	_____
FERTILIZERS					
DAP	cwt	20.99	1.0000	20.99	_____
Potash (60% K2O)	cwt	22.11	0.7500	16.58	_____
Fert 41-0-0-4	cwt	18.22	3.0480	55.53	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.75	4.5000	21.38	_____
Prosaro	oz	2.42	8.0000	19.36	_____
HERBICIDES					
Axiom	oz	1.94	10.0000	19.40	_____
Harmony Extra SG	oz	11.06	0.7500	8.30	_____
Axial XL	oz	1.15	16.4000	18.86	_____
INSECTICIDES					
Karate Z	oz	2.52	1.5000	3.78	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.28	90.0000	25.20	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	3.0480	22.86	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
CROP CONSULTANT					
Wheat Consultant	acre	5.50	1.0000	5.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.68	0.2129	3.12	_____
Harvesters	hour	14.68	0.1021	1.50	_____
HAND LABOR					
Implements	hour	9.06	0.1049	0.95	_____
UNALLOCATED LABOR	hour	14.67	0.2521	3.70	_____
DIESEL FUEL					
Tractors	gal	1.53	2.4667	3.78	_____
Harvesters	gal	1.53	1.3935	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	4.09	1.0000	4.09	_____
Tractors	acre	1.56	1.0000	1.56	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	7.30	1.0000	7.30	_____
TOTAL DIRECT EXPENSES				342.67	_____
FIXED EXPENSES					
Implements	acre	8.64	1.0000	8.64	_____
Tractors	acre	9.45	1.0000	9.45	_____
Harvesters	acre	15.93	1.0000	15.93	_____
TOTAL FIXED EXPENSES				34.02	_____
TOTAL SPECIFIED EXPENSES				376.69	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 21.B Summary of estimated costs and returns per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	5.75	70.0000	402.50	_____

TOTAL INCOME				402.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	93.11	1.0000	93.11	_____
FUNGICIDES	acre	40.74	1.0000	40.74	_____
HERBICIDES	acre	46.56	1.0000	46.56	_____
INSECTICIDES	acre	3.78	1.0000	3.78	_____
SEED/PLANTS	acre	25.20	1.0000	25.20	_____
CUSTOM FERTILIZE	acre	22.86	1.0000	22.86	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	5.50	1.0000	5.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1049	0.95	_____
OPERATOR LABOR	hour	14.68	0.3151	4.62	_____
UNALLOCATED LABOR	hour	14.67	0.2521	3.70	_____
DIESEL FUEL	gal	1.53	3.8602	5.91	_____
REPAIR & MAINTENANCE	acre	9.81	1.0000	9.81	_____
INTEREST ON OP. CAP.	acre	7.30	1.0000	7.30	_____

TOTAL DIRECT EXPENSES				342.67	_____
RETURNS ABOVE DIRECT EXPENSES				59.83	_____
TOTAL FIXED EXPENSES				34.02	_____

TOTAL SPECIFIED EXPENSES				376.69	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				25.81	_____

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 21.C Estimated resource use for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Sep	0.3330				
Lime (Spread)	ton			0.33	Sep	0.6660				
Disk Harrow	32'	MFWD 225	0.061	1.00	Sep		0.06	0.06	0.06	0.04
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Sep		0.04	0.04	0.08	0.03
DAP	cwt					1.0000				
Potash (60% K2O)	cwt					0.7500				
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Sep		0.04	0.04	0.04	0.03
Grain Drill	30'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.12	0.05
Wheat Seed Private	lb					90.0000				
CruiserMaxx Vibrance	oz					4.5000				
Wheat Consultant	acre			1.00	Oct	1.0000				
App by Air (5 gal)	appl			1.00	Nov	1.0000				
Axiom	oz					10.0000				
App by Air (3 gal)	appl			1.00	Feb	1.0000				
Karate Z	oz					1.5000				
Harmony Extra SG	oz					0.7500				
Axial XL	oz					16.4000				
App Fert by Air	cwt			1.00	Feb	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App Fert by Air	cwt			1.00	Mar	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Prosaro	oz					8.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Jun		0.10	0.10	0.10	0.08
Haul Wheat	bu					70.0000				
TOTALS							0.31	0.31	0.42	0.25

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 21.D Estimated costs for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.11	3.44		3.44
Lime (Spread)	ton	31.60					1.05	32.65		32.65
Disk Harrow	32'		1.09	1.50	1.62		0.14	4.35	4.85	9.20
Spin Spreader	5 ton		0.75	0.58	1.49		0.09	2.91	2.40	5.31
DAP	cwt	20.99					0.70	21.69		21.69
Potash (60% K2O)	cwt	16.58					0.55	17.13		17.13
Field Cultivate Fld	32'		0.83	0.85	1.23		0.10	3.01	4.14	7.15
Grain Drill	30'		1.11	2.07	2.23		0.16	5.57	5.76	11.33
Wheat Seed Private	lb	25.20					0.76	25.96		25.96
CruiserMaxx Vibrance	oz	21.38					0.64	22.02		22.02
Wheat Consultant	acre	5.50					0.17	5.67		5.67
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Axiom	oz	19.40					0.52	19.92		19.92
App by Air (3 gal)	appl	5.50					0.09	5.59		5.59
Karate Z	oz	3.78					0.06	3.84		3.84
Harmony Extra SG	oz	8.30					0.14	8.44		8.44
Axial XL	oz	18.86					0.31	19.17		19.17
App Fert by Air	cwt	11.43					0.19	11.62		11.62
Fert 41-0-0-4	cwt	27.77					0.46	28.23		28.23
App Fert by Air	cwt	11.43					0.15	11.58		11.58
Fert 41-0-0-4	cwt	27.77					0.37	28.14		28.14
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Prosaro	oz	19.36					0.19	19.55		19.55
Header Wheat/Sorghum	25' Rigid		2.13	4.81	2.70		0.03	9.67	16.87	26.54
Haul Wheat	bu	18.20					0.06	18.26		18.26
TOTALS		310.38	5.91	9.81	9.27	0.00	7.30	342.67	34.02	376.69

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 21.E Estimated monthly income and expense flows per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2021

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

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 21.F Estimated returns for various price/yield combinations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2021

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

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

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

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

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

Table 22.A Estimated costs per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Regiment	oz	43.56	0.5000	21.78	
Facet L	pt	14.57	2.6900	39.19	
Permit	oz	21.99	0.7500	16.49	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Conv.	lb	0.32	75.0000	24.00	
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	
Rice Seed Cv(Levees)	lb	0.32	13.6000	4.35	
ADJUVANTS					
Class Act NG	pt	1.75	0.5000	0.88	
MSO	pt	2.40	1.5000	3.60	
Dyne-A-Pak	pt	5.16	0.5000	2.58	
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.5475	8.03	
Harvesters	hour	14.68	0.2030	2.98	
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	14.68	0.5633	8.27	
DIESEL FUEL					
Tractors	gal	1.53	5.9886	9.16	
Harvesters	gal	1.53	3.3975	5.20	
Flood Irr.	gal	1.53	26.8827	41.14	
REPAIR & MAINTENANCE					
Implements	acre	8.97	1.0000	8.97	
Tractors	acre	3.69	1.0000	3.69	
Harvesters	acre	8.36	1.0000	8.36	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.					
	acre	10.63	1.0000	10.63	
TOTAL DIRECT EXPENSES				755.20	
FIXED EXPENSES					
Implements	acre	18.64	1.0000	18.64	
Tractors	acre	22.58	1.0000	22.58	
Harvesters	acre	31.99	1.0000	31.99	
Flood Irr.	acre	42.08	1.0000	42.08	
TOTAL FIXED EXPENSES				115.29	
TOTAL SPECIFIED EXPENSES				870.49	

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

Table 22.B Summary of estimated costs and returns per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	160.0000	816.00	_____

TOTAL INCOME				816.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	139.56	1.0000	139.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	8.53	1.0000	8.53	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.7506	11.01	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	14.68	0.5633	8.27	_____
DIESEL FUEL	gal	1.53	36.2688	55.50	_____
REPAIR & MAINTENANCE	acre	35.33	1.0000	35.33	_____
INTEREST ON OP. CAP.	acre	10.63	1.0000	10.63	_____

TOTAL DIRECT EXPENSES				755.20	_____
RETURNS ABOVE DIRECT EXPENSES				60.80	_____
TOTAL FIXED EXPENSES				115.29	_____

TOTAL SPECIFIED EXPENSES				870.49	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-54.49	_____

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

Fertilization decisions should be based on soil tests.

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

Table 22.C Estimated resource use for field operations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Sep	0.3330				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 input prices.

Fertilization decisions should be based on soil tests.

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

Table 22.D Estimated costs for field operations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.01	3.34		3.34
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Conv.	lb	24.00					0.48	24.48		24.48
Rice Seed Trt/Insect	lbseed	21.75					0.44	22.19		22.19
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
Class Act NG	pt	0.88					0.02	0.90		0.90
MSO	pt	1.20					0.02	1.22		1.22
Seed Levees										
Rice Seed Cv(Levees)	lb	4.35					0.09	4.44		4.44
Rice Seed Trt/Insect	lbseed	3.94					0.08	4.02		4.02
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Regiment	oz	21.78					0.36	22.14		22.14
Dyne-A-Pak	pt	2.58					0.04	2.62		2.62
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
Rice Management										
RICE MGT. LABOR	hour				2.72		0.05	2.77		2.77
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Facet L	pt	39.19					0.65	39.84		39.84
Permit	oz	16.49					0.27	16.76		16.76
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				4.53		0.06	4.59		4.59
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				4.53		0.05	4.58		4.58
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		5.20	11.22	5.66		0.15	22.23	36.30	58.53
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.37	56.37		56.37
Dry Rice	bu	64.00					0.43	64.43		64.43
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	4.50	42.82	15.12	33.79		1.47	97.70	46.79	144.49
TOTALS		585.93	55.50	35.33	67.81	0.00	10.63	755.20	115.29	870.49

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

Fertilization decisions should be based on soil tests.

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

Table 22.E Estimated monthly income and expense flows per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	816.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	34.41	77.46	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.08	3.72	2.40	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	16.10	9.52	11.33	11.33	11.63	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.81	11.22	11.22	11.22	6.01	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.10	8.20	2.29	2.29	11.74	3.45
INTEREST ON OP. CAP.	0.33	0.00	0.00	0.00	0.48	0.00	2.68	3.94	1.18	0.98	1.00	0.04
TOTAL DIRECT EXPENSES	8.61	0.00	0.00	0.00	18.22	0.00	136.72	239.79	89.73	98.03	150.38	13.72
NET INCOME	-8.61	0.00	0.00	0.00	-18.22	0.00	-136.72	-239.79	-89.73	-98.03	665.62	-13.72
NET INCOME TO DATE	-8.61	-8.61	-8.61	-8.61	-26.83	-26.83	-163.55	-403.34	-493.07	-591.10	74.52	60.80

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

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs

Table 22.F Estimated returns for various price/yield combinations, per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	80.00	bu	-388	-368	-348	-327	-307	-286	-266	-246	-225	-205	-184
			-504	-483	-463	-442	-422	-402	-381	-361	-340	-320	-300
60	96.00	bu	-339	-315	-290	-266	-241	-217	-192	-168	-143	-119	-94
			-454	-430	-406	-381	-357	-332	-308	-283	-259	-234	-210
70	112.00	bu	-290	-262	-233	-204	-176	-147	-119	-90	-62	-33	-4
			-405	-377	-348	-320	-291	-263	-234	-205	-177	-148	-120
80	128.00	bu	-241	-208	-176	-143	-110	-78	-45	-12	19	52	84
			-356	-324	-291	-258	-226	-193	-160	-128	-95	-62	-30
90	144.00	bu	-192	-155	-118	-82	-45	-8	28	64	101	138	174
			-307	-270	-234	-197	-160	-124	-87	-50	-13	22	59
100	160.00	bu	-143	-102	-61	-20	20	60	101	142	183	224	264
			-258	-217	-176	-136	-95	-54	-13	27	67	108	149
110	176.00	bu	-94	-49	-4	40	85	130	175	220	264	309	354
			-209	-164	-119	-74	-29	15	59	104	149	194	239
120	192.00	bu	-44	4	52	101	150	199	248	297	346	395	444
			-160	-111	-62	-13	35	84	133	182	231	280	329
130	208.00	bu	4	57	110	163	216	269	322	375	428	481	534
			-111	-58	-5	47	101	154	207	260	313	366	419
140	224.00	bu	53	110	167	224	281	338	396	453	510	567	624
			-62	-4	52	109	166	223	280	337	394	452	509
150	240.00	bu	102	163	224	286	347	408	469	530	592	653	714
			-12	48	109	170	231	293	354	415	476	537	599

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

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

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

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

Table 23.A Estimated costs per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Regiment	oz	43.56	0.5000	21.78	
Facet L	pt	14.57	2.6900	39.19	
Permit	oz	21.99	0.7500	16.49	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Conv.	lb	0.32	75.0000	24.00	
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	
Rice Seed Cv (Levees)	lb	0.32	13.6000	4.35	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Dyne-A-Pak	pt	5.16	0.5000	2.58	
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.4999	7.33	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.5719	8.51	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	21.9949	33.64	
REPAIR & MAINTENANCE					
Implements	acre	8.50	1.0000	8.50	
Tractors	acre	3.45	1.0000	3.45	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	10.32	1.0000	10.32	
TOTAL DIRECT EXPENSES				722.83	
FIXED EXPENSES					
Implements	acre	17.65	1.0000	17.65	
Tractors	acre	21.12	1.0000	21.12	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.81	1.0000	64.81	
TOTAL FIXED EXPENSES				131.30	
TOTAL SPECIFIED EXPENSES				854.13	

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

Table 23.B Summary of estimated costs and returns per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	160.0000	816.00	_____

TOTAL INCOME				816.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	139.56	1.0000	139.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	8.53	1.0000	8.53	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.6759	9.91	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	30.5114	46.66	_____
REPAIR & MAINTENANCE	acre	33.50	1.0000	33.50	_____
INTEREST ON OP. CAP.	acre	10.32	1.0000	10.32	_____

TOTAL DIRECT EXPENSES				722.83	_____
RETURNS ABOVE DIRECT EXPENSES				93.17	_____
TOTAL FIXED EXPENSES				131.30	_____

TOTAL SPECIFIED EXPENSES				854.13	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-38.13	_____

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

Fertilization decisions should be based on soil tests.

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

Table 23.C Estimated resource use for field operations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 input prices.

Fertilization decisions should be based on soil tests.

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

Table 23.D Estimated costs for field operations, per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Conv.	lb	24.00					0.48	24.48		24.48
Rice Seed Trt/Insect	lbseed	21.75					0.44	22.19		22.19
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed Cv(Levees)	lb	4.35					0.09	4.44		4.44
Rice Seed Trt/Insect	lbseed	3.94					0.08	4.02		4.02
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Regiment	oz	21.78					0.36	22.14		22.14
Dyne-A-Pak	pt	2.58					0.04	2.62		2.62
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Facet L	pt	39.19					0.65	39.84		39.84
Permit	oz	16.49					0.27	16.76		16.76
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.37	56.37		56.37
Dry Rice	bu	64.00					0.43	64.43		64.43
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	2.25	34.67	14.79	22.65		1.16	75.52	67.65	143.17
TOTALS		583.68	46.66	33.50	48.67	0.00	10.32	722.83	131.30	854.13

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

Fertilization decisions should be based on soil tests.

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

Table 23.E Estimated monthly income and expense flows per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	816.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	34.41	77.46	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.08	3.72	2.40	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	12.07	5.44	6.34	6.34	10.58	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.45	8.72	8.72	8.72	5.03	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.25	8.09	2.18	2.18	10.09	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	2.56	3.83	1.08	0.90	0.98	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	130.11	232.99	82.03	90.35	146.68	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-130.11	-232.99	-82.03	-90.35	669.32	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-160.40	-393.39	-475.42	-565.77	103.55	93.17

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 23.F Estimated returns for various price/yield combinations, per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-356	-336	-315	-295	-274	-254	-234	-213	-193	-172	-152
			-487	-467	-446	-426	-406	-385	-365	-344	-324	-304	-283
60	96.00	bu	-307	-282	-258	-233	-209	-184	-160	-135	-111	-86	-62
			-438	-414	-389	-365	-340	-316	-291	-267	-242	-218	-193
70	112.00	bu	-258	-229	-201	-172	-143	-115	-86	-58	-29	-1	27
			-389	-360	-332	-303	-275	-246	-218	-189	-161	-132	-103
80	128.00	bu	-209	-176	-143	-111	-78	-45	-13	19	52	84	117
			-340	-307	-275	-242	-209	-177	-144	-111	-79	-46	-13
90	144.00	bu	-159	-123	-86	-49	-13	23	60	97	133	170	207
			-291	-254	-217	-181	-144	-107	-70	-34	2	39	75
100	160.00	bu	-110	-70	-29	11	52	93	133	174	215	256	297
			-242	-201	-160	-119	-78	-38	2	43	84	125	165
110	176.00	bu	-61	-16	28	72	117	162	207	252	297	342	387
			-193	-148	-103	-58	-13	31	76	121	166	210	255
120	192.00	bu	-12	36	85	134	183	232	281	330	379	428	477
			-143	-94	-45	2	51	100	149	198	247	296	345
130	208.00	bu	36	89	142	195	248	301	354	407	460	513	566
			-94	-41	11	64	117	170	223	276	329	382	435
140	224.00	bu	85	142	199	257	314	371	428	485	542	599	656
			-45	11	68	125	182	239	297	354	411	468	525
150	240.00	bu	134	195	257	318	379	440	501	563	624	685	746
			3	64	125	187	248	309	370	431	493	554	615

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

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

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

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

Table 24.A Estimated costs per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Regiment	oz	43.56	0.5000	21.78	
Facet L	pt	14.57	2.6900	39.19	
Permit	oz	21.99	0.7500	16.49	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Seed Conv.	lb	0.32	75.0000	24.00	
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	
Rice Seed Cv(Levees)	lb	0.32	13.6000	4.35	
ADJUVANTS					
Class Act NG	pt	1.75	0.5000	0.88	
MSO	pt	2.40	1.5000	3.60	
Dyne-A-Pak	pt	5.16	0.5000	2.58	
Crop Oil Conc.(Pet.)	pt	2.86	0.5000	1.43	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.5281	7.74	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.8180	8.89	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	18.7364	28.67	
REPAIR & MAINTENANCE					
Implements	acre	8.58	1.0000	8.58	
Tractors	acre	3.59	1.0000	3.59	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	10.24	1.0000	10.24	
TOTAL DIRECT EXPENSES				715.65	
FIXED EXPENSES					
Implements	acre	18.29	1.0000	18.29	
Tractors	acre	21.98	1.0000	21.98	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.48	1.0000	64.48	
TOTAL FIXED EXPENSES				132.47	
TOTAL SPECIFIED EXPENSES				848.12	

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

Fertilization decisions should be based on soil tests.

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

Table 24.B Summary of estimated costs and returns per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	160.0000	816.00	_____

TOTAL INCOME				816.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	139.56	1.0000	139.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	8.82	1.0000	8.82	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.7041	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	27.4990	42.07	_____
REPAIR & MAINTENANCE	acre	33.37	1.0000	33.37	_____
INTEREST ON OP. CAP.	acre	10.24	1.0000	10.24	_____

TOTAL DIRECT EXPENSES				715.65	_____
RETURNS ABOVE DIRECT EXPENSES				100.35	_____
TOTAL FIXED EXPENSES				132.47	_____

TOTAL SPECIFIED EXPENSES				848.12	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-32.12	_____

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

Fertilization decisions should be based on soil tests.

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

Table 24.C Estimated resource use for field operations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 input prices.

Fertilization decisions should be based on soil tests.

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

Table 24.D Estimated costs for field operations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Conv.	lb	24.00					0.48	24.48		24.48
Rice Seed Trt/Insect	lbseed	21.75					0.44	22.19		22.19
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
Class Act NG	pt	0.88					0.02	0.90		0.90
MSO	pt	1.20					0.02	1.22		1.22
Seed Levees										
Rice Seed Cv(Levees)	lb	4.35					0.09	4.44		4.44
Rice Seed Trt/Insect	lbseed	3.94					0.08	4.02		4.02
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Regiment	oz	21.78					0.36	22.14		22.14
Dyne-A-Pak	pt	2.58					0.04	2.62		2.62
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Facet L	pt	39.19					0.65	39.84		39.84
Permit	oz	16.49					0.27	16.76		16.76
Crop Oil Conc.(Pet.)	pt	1.43					0.02	1.45		1.45
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.37	56.37		56.37
Dry Rice	bu	64.00					0.43	64.43		64.43
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	10.17	30.08	14.66	12.06		1.08	68.05	68.82	136.87
TOTALS		591.89	42.07	33.37	38.08	0.00	10.24	715.65	132.47	848.12

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

Table 24.E Estimated monthly income and expense flows per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	816.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	34.41	77.46	16.95	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	7.29	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.08	4.01	2.40	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	9.90	2.72	3.62	3.62	10.32	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	9.50	7.48	7.48	7.48	5.11	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.31	8.01	2.10	2.10	10.14	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	2.66	3.76	1.02	0.86	0.97	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	135.07	229.17	77.93	86.27	146.54	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-135.07	-229.17	-77.93	-86.27	669.46	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-165.36	-394.53	-472.46	-558.73	110.73	100.35

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 24.F Estimated returns for various price/yield combinations, per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-349 -481	-328 -461	-308 -440	-288 -420	-267 -400	-247 -379	-226 -359	-206 -338	-186 -318	-165 -298	-145 -277
60	96.00	bu	-300 -432	-275 -408	-251 -383	-226 -359	-202 -334	-177 -310	-153 -285	-128 -261	-104 -236	-79 -212	-55 -187
70	112.00	bu	-251 -383	-222 -354	-193 -326	-165 -297	-136 -269	-108 -240	-79 -212	-51 -183	-22 -155	6 -126	34 -97
80	128.00	bu	-201 -334	-169 -301	-136 -269	-103 -236	-71 -203	-38 -171	-6 -138	26 -105	59 -73	91 -40	124 -7
90	144.00	bu	-152 -285	-116 -248	-79 -211	-42 -175	-5 -138	30 -101	67 -64	104 -28	140 8	177 45	214 81
100	160.00	bu	-103 -236	-62 -195	-22 -154	18 -113	59 -72	100 -32	141 8	181 49	222 90	263 131	304 171
110	176.00	bu	-54 -187	-9 -142	35 -97	80 -52	124 -7	169 37	214 82	259 127	304 172	349 216	394 261
120	192.00	bu	-5 -137	43 -88	92 -39	141 9	190 57	239 106	288 155	337 204	386 253	435 302	484 351
130	208.00	bu	43 -88	96 -35	149 17	202 70	255 123	308 176	361 229	414 282	468 335	521 388	574 441
140	224.00	bu	92 -39	149 17	207 74	264 131	321 188	378 245	435 303	492 360	549 417	606 474	664 531
150	240.00	bu	141 9	203 70	264 131	325 193	386 254	447 315	509 376	570 437	631 499	692 560	753 621

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 2020 input prices.

Table 25.A Estimated costs per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Regiment	oz	43.56	0.5000	21.78	
Facet L	pt	14.57	2.6900	39.19	
Permit	oz	21.99	0.7500	16.49	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Conv.	lb	0.32	75.0000	24.00	
Rice Seed Trt/Insect	lbseed	0.29	75.0000	21.75	
ADJUVANTS					
Class Act NG	pt	1.75	0.5000	0.88	
MSO	pt	2.40	1.5000	3.60	
Dyne-A-Pak	pt	5.16	0.5000	2.58	
Crop Oil Conc. (Pet.)	pt	2.86	0.5000	1.43	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.4228	6.20	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	4.8970	7.48	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	15.4779	23.68	
REPAIR & MAINTENANCE					
Implements	acre	8.40	1.0000	8.40	
Tractors	acre	3.07	1.0000	3.07	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	9.67	1.0000	9.67	
TOTAL DIRECT EXPENSES				684.83	
FIXED EXPENSES					
Implements	acre	17.16	1.0000	17.16	
Tractors	acre	18.77	1.0000	18.77	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.16	1.0000	64.16	
TOTAL FIXED EXPENSES				127.81	
TOTAL SPECIFIED EXPENSES				812.64	

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

Fertilization decisions should be based on soil tests.

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

Table 25.B Summary of estimated costs and returns per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	160.0000	816.00	_____

TOTAL INCOME				816.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	139.56	1.0000	139.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	45.75	1.0000	45.75	_____
ADJUVANTS	acre	8.82	1.0000	8.82	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.5988	8.78	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	23.3194	35.67	_____
REPAIR & MAINTENANCE	acre	30.51	1.0000	30.51	_____
INTEREST ON OP. CAP.	acre	9.67	1.0000	9.67	_____

TOTAL DIRECT EXPENSES				684.83	_____
RETURNS ABOVE DIRECT EXPENSES				131.17	_____
TOTAL FIXED EXPENSES				127.81	_____

TOTAL SPECIFIED EXPENSES				812.64	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				3.36	_____

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

Fertilization decisions should be based on soil tests.

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

Table 25.C Estimated resource use for field operations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 input prices.

Fertilization decisions should be based on soil tests.

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

Table 25.D Estimated costs for field operations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Conv.	lb	24.00					0.48	24.48		24.48
Rice Seed Trt/Insect	lbseed	21.75					0.44	22.19		22.19
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
Class Act NG	pt	0.88					0.02	0.90		0.90
MSO	pt	1.20					0.02	1.22		1.22
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Regiment	oz	21.78					0.36	22.14		22.14
Dyne-A-Pak	pt	2.58					0.04	2.62		2.62
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Facet L	pt	39.19					0.65	39.84		39.84
Permit	oz	16.49					0.27	16.76		16.76
Crop Oil Conc.(Pet.)	pt	1.43					0.02	1.45		1.45
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.37	56.37		56.37
Dry Rice	bu	64.00					0.43	64.43		64.43
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre		23.68	11.80	9.53		0.68	45.69	64.16	109.85
TOTALS		573.43	35.67	30.51	35.55	0.00	9.67	684.83	127.81	812.64

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

Fertilization decisions should be based on soil tests.

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

Table 25.E Estimated monthly income and expense flows per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	816.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	34.41	77.46	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	45.75	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.08	4.01	2.40	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	7.01	3.18	4.08	4.08	9.30	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	7.26	6.23	6.23	6.23	4.70	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	4.31	7.46	1.55	1.55	9.93	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	2.16	3.74	1.00	0.84	0.96	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	109.98	227.81	76.57	84.91	144.89	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-109.98	-227.81	-76.57	-84.91	671.11	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-140.27	-368.08	-444.65	-529.56	141.55	131.17

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 25.F Estimated returns for various price/yield combinations, per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	80.00	bu	-318	-298	-277	-257	-236	-216	-196	-175	-155	-134	-114
			-446	-425	-405	-385	-364	-344	-323	-303	-283	-262	-242
60	96.00	bu	-269	-244	-220	-195	-171	-146	-122	-97	-73	-48	-24
			-397	-372	-348	-323	-299	-274	-250	-225	-201	-176	-152
70	112.00	bu	-220	-191	-163	-134	-105	-77	-48	-20	8	36	65
			-348	-319	-290	-262	-233	-205	-176	-148	-119	-90	-62
80	128.00	bu	-171	-138	-105	-73	-40	-7	24	57	90	122	155
			-298	-266	-233	-200	-168	-135	-103	-70	-37	-5	27
90	144.00	bu	-121	-85	-48	-11	24	61	98	135	171	208	245
			-249	-213	-176	-139	-102	-66	-29	7	44	80	117
100	160.00	bu	-72	-32	8	49	90	131	171	212	253	294	335
			-200	-159	-119	-78	-37	3	44	84	125	166	207
110	176.00	bu	-23	21	66	110	155	200	245	290	335	380	425
			-151	-106	-61	-16	28	72	117	162	207	252	297
120	192.00	bu	25	74	123	172	221	270	319	368	417	466	515
			-102	-53	-4	44	93	142	191	240	289	338	387
130	208.00	bu	74	127	180	233	286	339	392	445	498	551	604
			-53	-0	52	105	158	211	264	318	371	424	477
140	224.00	bu	123	180	237	295	352	409	466	523	580	637	694
			-4	52	110	167	224	281	338	395	452	509	567
150	240.00	bu	172	233	295	356	417	478	539	601	662	723	784
			44	106	167	228	289	350	412	473	534	595	656

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

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

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

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

Table 26.A Estimated costs per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	3.3220	65.58	
NBPT	pt	11.06	0.8000	8.85	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Regiment	oz	43.56	0.5000	21.78	
Facet L	pt	14.57	2.6900	39.19	
Permit	oz	21.99	0.7500	16.49	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.19	23.0000	142.37	
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Dyne-A-Pak	pt	5.16	0.5000	2.58	
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	
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	14.68	0.5475	8.03	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.9886	9.16	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	26.8827	41.14	
REPAIR & MAINTENANCE					
Implements	acre	8.59	1.0000	8.59	
Tractors	acre	3.69	1.0000	3.69	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	11.89	1.0000	11.89	
TOTAL DIRECT EXPENSES				784.44	
FIXED EXPENSES					
Implements	acre	18.06	1.0000	18.06	
Tractors	acre	22.58	1.0000	22.58	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	42.08	1.0000	42.08	
TOTAL FIXED EXPENSES				110.44	
TOTAL SPECIFIED EXPENSES				894.88	

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

Table 26.B Summary of estimated costs and returns per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	180.0000	918.00	_____

TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	94.26	1.0000	94.26	_____
HERBICIDES	acre	139.56	1.0000	139.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	151.80	1.0000	151.80	_____
ADJUVANTS	acre	8.20	1.0000	8.20	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
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	14.68	0.7235	10.61	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	35.8158	54.81	_____
REPAIR & MAINTENANCE	acre	33.83	1.0000	33.83	_____
INTEREST ON OP. CAP.	acre	11.89	1.0000	11.89	_____

TOTAL DIRECT EXPENSES				784.44	_____
RETURNS ABOVE DIRECT EXPENSES				133.56	_____
TOTAL FIXED EXPENSES				110.44	_____

TOTAL SPECIFIED EXPENSES				894.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				23.12	_____

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

Fertilization decisions should be based on soil tests.

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

Table 26.C Estimated resource use for field operations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 ZT	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 2020 input prices.

Fertilization decisions should be based on soil tests.

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

Table 26.D Estimated costs for field operations, per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33					0.13	3.46			3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28		14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14		4.57
App by Air (5 gal)	appl	7.00					0.19	7.19			7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41			6.41
2,4-D Amine 4	pt	4.50					0.12	4.62			4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12		14.09
Rice Conv Hyb Trt	lb	142.37					2.85	145.22			145.22
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43		5.29
App by Air (5 gal)	appl	7.00					0.14	7.14			7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24			4.24
Command 3ME	pt	18.17					0.36	18.53			18.53
Sharpen	oz	12.08					0.24	12.32			12.32
MSO	pt	1.20					0.02	1.22			1.22
Class Act NG	pt	0.88					0.02	0.90			0.90
Seed Levees											
Rice Seed CvH(Levee)	lb	8.20					0.16	8.36			8.36
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25			1.25
App Fert by Air	cwt	7.50					0.13	7.63			7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49			9.49
DAP	cwt	10.50					0.18	10.68			10.68
Rice Consultant	acre	8.00					0.13	8.13			8.13
App by Air (5 gal)	appl	7.00					0.12	7.12			7.12
Regiment	oz	21.78					0.36	22.14			22.14
Dyne-A-Pak	pt	2.58					0.04	2.62			2.62
App Fert by Air	cwt	20.02					0.33	20.35			20.35
Urea, Solid (46% N)	cwt	52.71					0.88	53.59			53.59
NBPT	pt	8.85					0.15	9.00			9.00
Rice Management											
RICE MGT. LABOR	hour				0.91		0.02	0.93			0.93
App by Air (5 gal)	appl	7.00					0.12	7.12			7.12
Facet L	pt	39.19					0.65	39.84			39.84
Permit	oz	16.49					0.27	16.76			16.76
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16			1.16
App by Air (5 gal)	appl	3.50					0.05	3.55			3.55
Clincher SF	oz	16.95					0.23	17.18			17.18
MSO	pt	2.40					0.03	2.43			2.43
Rice Management											
RICE MGT. LABOR	hour				1.81		0.02	1.83			1.83
App Fert by Air	cwt	4.89					0.07	4.96			4.96
Urea, Solid (46% N)	cwt	12.87					0.17	13.04			13.04
Rice Management											
RICE MGT. LABOR	hour				1.81		0.02	1.83			1.83
App by Air (3 gal)	appl	8.25					0.08	8.33			8.33
Warrior ZT	oz	7.29					0.07	7.36			7.36
Rice Management											
RICE MGT. LABOR	hour				1.81		0.01	1.82			1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45		50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71		1.42
Handling & Storage											
HAND LABOR	hour				2.27		0.02	2.29			2.29
Haul Rice	bu	63.00					0.42	63.42			63.42
Dry Rice	bu	72.00					0.48	72.48			72.48
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52		21.90
Flood Irr.	acre	4.50	42.82	15.12	33.79		1.47	97.70	46.79		144.49
TOTALS		624.10	54.81	33.83	59.81	0.00	11.89	784.44	110.44		894.88

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

Fertilization decisions should be based on soil tests.

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

Table 26.E Estimated monthly income and expense flows per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.39	12.87	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	34.41	77.46	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	151.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.08	3.72	2.40	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	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	3.68	0.00	0.00	0.00	0.00	0.00	16.10	7.71	8.61	8.61	10.88	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.81	11.22	11.22	11.22	5.32	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.10	8.20	2.29	2.29	10.24	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.62	4.00	0.84	0.38	1.08	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	236.42	243.22	63.57	38.04	162.52	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-236.42	-243.22	-63.57	-38.04	755.48	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-266.71	-509.93	-573.50	-611.54	143.94	133.56

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 26.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-372	-349	-326	-303	-280	-257	-234	-211	-188	-165	-142
			-482	-459	-436	-413	-390	-367	-344	-322	-299	-276	-253
60	108.00	bu	-316	-289	-261	-234	-206	-179	-151	-124	-96	-69	-41
			-427	-399	-372	-344	-317	-289	-262	-234	-207	-179	-152
70	126.00	bu	-261	-229	-197	-165	-133	-101	-68	-36	-4	27	59
			-372	-340	-307	-275	-243	-211	-179	-147	-115	-82	-50
80	144.00	bu	-206	-169	-133	-96	-59	-22	13	50	87	124	160
			-316	-280	-243	-206	-170	-133	-96	-59	-23	13	50
90	162.00	bu	-151	-109	-68	-27	14	55	96	137	179	220	261
			-261	-220	-179	-137	-96	-55	-13	27	68	110	151
100	180.00	bu	-95	-50	-4	41	87	133	179	225	271	317	363
			-206	-160	-114	-68	-22	23	69	114	160	206	252
110	198.00	bu	-40	9	60	110	161	211	262	312	363	413	464
			-151	-100	-50	0	50	101	151	202	252	303	353
120	216.00	bu	14	69	124	179	234	289	345	400	455	510	565
			-95	-40	14	69	124	179	234	289	344	399	454
130	234.00	bu	69	129	189	248	308	368	427	487	547	606	666
			-40	19	78	138	198	257	317	377	436	496	556
140	252.00	bu	125	189	253	317	382	446	510	574	639	703	767
			14	78	143	207	271	335	400	464	528	593	657
150	270.00	bu	180	249	318	386	455	524	593	662	731	800	868
			69	138	207	276	345	414	483	551	620	689	758

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

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

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

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

Table 27.A Estimated costs per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	3.3220	65.58	
NBPT	pt	11.06	0.8000	8.85	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Regiment	oz	43.56	0.5000	21.78	
Facet L	pt	14.57	2.6900	39.19	
Permit	oz	21.99	0.7500	16.49	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.19	23.0000	142.37	
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Dyne-A-Pak	pt	5.16	0.5000	2.58	
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	
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	14.68	0.4999	7.33	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.5719	8.51	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	21.9949	33.64	
REPAIR & MAINTENANCE					
Implements	acre	8.50	1.0000	8.50	
Tractors	acre	3.45	1.0000	3.45	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	11.58	1.0000	11.58	
TOTAL DIRECT EXPENSES				762.26	
FIXED EXPENSES					
Implements	acre	17.65	1.0000	17.65	
Tractors	acre	21.12	1.0000	21.12	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.81	1.0000	64.81	
TOTAL FIXED EXPENSES				131.30	
TOTAL SPECIFIED EXPENSES				893.56	

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

Table 27.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	180.0000	918.00	_____

TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	94.26	1.0000	94.26	_____
HERBICIDES	acre	139.56	1.0000	139.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	151.80	1.0000	151.80	_____
ADJUVANTS	acre	8.20	1.0000	8.20	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
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	14.68	0.6759	9.91	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	30.5114	46.66	_____
REPAIR & MAINTENANCE	acre	33.50	1.0000	33.50	_____
INTEREST ON OP. CAP.	acre	11.58	1.0000	11.58	_____

TOTAL DIRECT EXPENSES				762.26	_____
RETURNS ABOVE DIRECT EXPENSES				155.74	_____
TOTAL FIXED EXPENSES				131.30	_____

TOTAL SPECIFIED EXPENSES				893.56	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				24.44	_____

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

Fertilization decisions should be based on soil tests.

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

Table 27.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 ZT	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 2020 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
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Conv Hyb Trt	lb	142.37					2.85	145.22		145.22
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.16	8.36		8.36
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Regiment	oz	21.78					0.36	22.14		22.14
Dyne-A-Pak	pt	2.58					0.04	2.62		2.62
App Fert by Air	cwt	20.02					0.33	20.35		20.35
Urea, Solid (46% N)	cwt	52.71					0.88	53.59		53.59
NBPT	pt	8.85					0.15	9.00		9.00
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Facet L	pt	39.19					0.65	39.84		39.84
Permit	oz	16.49					0.27	16.76		16.76
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.07	4.96		4.96
Urea, Solid (46% N)	cwt	12.87					0.17	13.04		13.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.42	63.42		63.42
Dry Rice	bu	72.00					0.48	72.48		72.48
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	2.25	34.67	14.79	22.65		1.16	75.52	67.65	143.17
TOTALS		621.85	46.66	33.50	48.67	0.00	11.58	762.26	131.30	893.56

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

Fertilization decisions should be based on soil tests.

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

Table 27.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.39	12.87	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	34.41	77.46	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	151.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.08	3.72	2.40	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	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	3.68	0.00	0.00	0.00	0.00	0.00	12.07	5.44	6.34	6.34	10.58	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.45	8.72	8.72	8.72	5.03	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.25	8.09	2.18	2.18	10.09	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.50	3.92	0.78	0.33	1.08	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	229.81	238.26	58.63	33.11	161.78	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-229.81	-238.26	-58.63	-33.11	756.22	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-260.10	-498.36	-556.99	-590.10	166.12	155.74

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 27.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	90.00	bu	-350 -481	-327 -458	-304 -435	-281 -412	-258 -389	-235 -366	-212 -343	-189 -320	-166 -297	-143 -274	-120 -251
60	108.00	bu	-294 -426	-267 -398	-239 -371	-212 -343	-184 -315	-157 -288	-129 -260	-102 -233	-74 -205	-46 -178	-19 -150
70	126.00	bu	-239 -370	-207 -338	-175 -306	-143 -274	-111 -242	-78 -210	-46 -178	-14 -145	17 -113	49 -81	81 -49
80	144.00	bu	-184 -315	-147 -278	-110 -242	-74 -205	-37 -168	-0 -131	36 -95	72 -58	109 -21	146 14	182 51
90	162.00	bu	-129 -260	-87 -219	-46 -177	-5 -136	36 -95	77 -53	118 -12	160 28	201 70	242 111	284 152
100	180.00	bu	-73 -205	-27 -159	18 -113	63 -67	109 -21	155 24	201 70	247 116	293 162	339 208	385 253
110	198.00	bu	-18 -149	31 -99	82 -48	132 1	183 52	233 102	284 153	334 203	385 254	435 304	486 355
120	216.00	bu	36 -94	91 -39	146 15	202 70	257 125	312 180	367 235	422 291	477 346	532 401	587 456
130	234.00	bu	92 -39	151 20	211 80	271 139	330 199	390 259	450 318	509 378	569 438	629 497	688 557
140	252.00	bu	147 15	211 80	275 144	340 208	404 273	468 337	532 401	597 465	661 530	725 594	789 658
150	270.00	bu	202 71	271 140	340 208	409 277	477 346	546 415	615 484	684 553	753 622	822 690	891 759

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

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

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

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

Table 28.A Estimated costs per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	3.3220	65.58	
NBPT	pt	11.06	0.8000	8.85	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Regiment	oz	43.56	0.5000	21.78	
Facet L	pt	14.57	2.6900	39.19	
Permit	oz	21.99	0.7500	16.49	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.19	23.0000	142.37	
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Dyne-A-Pak	pt	5.16	0.5000	2.58	
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	
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	14.68	0.5281	7.74	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.8180	8.89	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	18.7364	28.67	
REPAIR & MAINTENANCE					
Implements	acre	8.58	1.0000	8.58	
Tractors	acre	3.59	1.0000	3.59	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	11.50	1.0000	11.50	
TOTAL DIRECT EXPENSES				754.79	
FIXED EXPENSES					
Implements	acre	18.29	1.0000	18.29	
Tractors	acre	21.98	1.0000	21.98	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.48	1.0000	64.48	
TOTAL FIXED EXPENSES				132.47	
TOTAL SPECIFIED EXPENSES				887.26	

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

Fertilization decisions should be based on soil tests.

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

Table 28.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	180.0000	918.00	_____

TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	94.26	1.0000	94.26	_____
HERBICIDES	acre	139.56	1.0000	139.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	151.80	1.0000	151.80	_____
ADJUVANTS	acre	8.20	1.0000	8.20	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
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	14.68	0.7041	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	27.4990	42.07	_____
REPAIR & MAINTENANCE	acre	33.37	1.0000	33.37	_____
INTEREST ON OP. CAP.	acre	11.50	1.0000	11.50	_____

TOTAL DIRECT EXPENSES				754.79	_____
RETURNS ABOVE DIRECT EXPENSES				163.21	_____
TOTAL FIXED EXPENSES				132.47	_____

TOTAL SPECIFIED EXPENSES				887.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				30.74	_____

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

Fertilization decisions should be based on soil tests.

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

Table 28.C Estimated resource use for field operations, per acre
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 ZT	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 2020 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
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Conv Hyb Trt	lb	142.37					2.85	145.22		145.22
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.16	8.36		8.36
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Regiment	oz	21.78					0.36	22.14		22.14
Dyne-A-Pak	pt	2.58					0.04	2.62		2.62
App Fert by Air	cwt	20.02					0.33	20.35		20.35
Urea, Solid (46% N)	cwt	52.71					0.88	53.59		53.59
NBPT	pt	8.85					0.15	9.00		9.00
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Facet L	pt	39.19					0.65	39.84		39.84
Permit	oz	16.49					0.27	16.76		16.76
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.07	4.96		4.96
Urea, Solid (46% N)	cwt	12.87					0.17	13.04		13.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.42	63.42		63.42
Dry Rice	bu	72.00					0.48	72.48		72.48
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	10.17	30.08	14.66	12.06		1.08	68.05	68.82	136.87
TOTALS		629.77	42.07	33.37	38.08	0.00	11.50	754.79	132.47	887.26

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

Fertilization decisions should be based on soil tests.

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

Table 28.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.39	12.87	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	34.41	77.46	16.95	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	7.29	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	151.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.08	3.72	2.40	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	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	3.68	0.00	0.00	0.00	0.00	0.00	9.90	2.72	3.62	3.62	10.32	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	9.50	7.48	7.48	7.48	5.11	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.31	8.01	2.10	2.10	10.14	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.60	3.85	0.72	0.29	1.07	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	234.77	234.15	54.53	29.03	161.64	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-234.77	-234.15	-54.53	-29.03	756.36	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-265.06	-499.21	-553.74	-582.77	173.59	163.21

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 28.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	90.00	bu	-342	-319	-296	-273	-250	-227	-204	-181	-158	-136	-113
			-475	-452	-429	-406	-383	-360	-337	-314	-291	-268	-245
60	108.00	bu	-287	-259	-232	-204	-177	-149	-122	-94	-67	-39	-11
			-419	-392	-364	-337	-309	-282	-254	-227	-199	-171	-144
70	126.00	bu	-232	-199	-167	-135	-103	-71	-39	-7	24	57	89
			-364	-332	-300	-268	-236	-203	-171	-139	-107	-75	-43
80	144.00	bu	-176	-140	-103	-66	-29	6	43	80	116	153	190
			-309	-272	-235	-199	-162	-125	-88	-52	-15	21	57
90	162.00	bu	-121	-80	-38	2	43	85	126	167	208	250	291
			-254	-212	-171	-130	-88	-47	-6	35	76	117	159
100	180.00	bu	-66	-20	25	71	117	163	209	255	300	346	392
			-198	-152	-106	-61	-15	30	76	122	168	214	260
110	198.00	bu	-11	39	89	140	190	241	291	342	392	443	493
			-143	-93	-42	7	58	108	159	209	260	310	361
120	216.00	bu	44	99	154	209	264	319	374	429	484	539	595
			-88	-33	21	77	132	187	242	297	352	407	462
130	234.00	bu	99	159	218	278	338	397	457	517	576	636	696
			-32	26	86	146	205	265	325	384	444	504	563
140	252.00	bu	154	219	283	347	411	476	540	604	668	733	797
			22	86	150	215	279	343	407	472	536	600	664
150	270.00	bu	210	278	347	416	485	554	623	691	760	829	898
			77	146	215	284	352	421	490	559	628	697	766

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

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

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

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

Table 29.A Estimated costs per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	3.3220	65.58	
NBPT	pt	11.06	0.8000	8.85	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Regiment	oz	43.56	0.5000	21.78	
Facet L	pt	14.57	2.6900	39.19	
Permit	oz	21.99	0.7500	16.49	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.19	23.0000	142.37	
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Dyne-A-Pak	pt	5.16	0.5000	2.58	
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	
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	14.68	0.4228	6.20	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	4.8970	7.48	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	15.4779	23.68	
REPAIR & MAINTENANCE					
Implements	acre	8.40	1.0000	8.40	
Tractors	acre	3.07	1.0000	3.07	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	11.10	1.0000	11.10	
TOTAL DIRECT EXPENSES				732.43	
FIXED EXPENSES					
Implements	acre	17.16	1.0000	17.16	
Tractors	acre	18.77	1.0000	18.77	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.16	1.0000	64.16	
TOTAL FIXED EXPENSES				127.81	
TOTAL SPECIFIED EXPENSES				860.24	

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

Fertilization decisions should be based on soil tests.

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

Table 29.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	180.0000	918.00	_____

TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	94.26	1.0000	94.26	_____
HERBICIDES	acre	139.56	1.0000	139.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	151.80	1.0000	151.80	_____
ADJUVANTS	acre	8.20	1.0000	8.20	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
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	14.68	0.5988	8.78	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	23.3194	35.67	_____
REPAIR & MAINTENANCE	acre	30.51	1.0000	30.51	_____
INTEREST ON OP. CAP.	acre	11.10	1.0000	11.10	_____

TOTAL DIRECT EXPENSES				732.43	_____
RETURNS ABOVE DIRECT EXPENSES				185.57	_____
TOTAL FIXED EXPENSES				127.81	_____

TOTAL SPECIFIED EXPENSES				860.24	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				57.76	_____

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

Table 29.C Estimated resource use for field operations, per acre
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 ZT	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 2020 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
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33					0.13	3.46			3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28		14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14		4.57
App by Air (5 gal)	appl	7.00					0.19	7.19			7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41			6.41
2,4-D Amine 4	pt	4.50					0.12	4.62			4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12		14.09
Rice Conv Hyb Trt	lb	142.37					2.85	145.22			145.22
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43		5.29
App by Air (5 gal)	appl	7.00					0.14	7.14			7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24			4.24
Command 3ME	pt	18.17					0.36	18.53			18.53
Sharpen	oz	12.08					0.24	12.32			12.32
MSO	pt	1.20					0.02	1.22			1.22
Class Act NG	pt	0.88					0.02	0.90			0.90
Seed Levees											
Rice Seed CvH(Levee)	lb	8.20					0.16	8.36			8.36
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25			1.25
App Fert by Air	cwt	7.50					0.13	7.63			7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49			9.49
DAP	cwt	10.50					0.18	10.68			10.68
Rice Consultant	acre	8.00					0.13	8.13			8.13
App by Air (5 gal)	appl	7.00					0.12	7.12			7.12
Regiment	oz	21.78					0.36	22.14			22.14
Dyne-A-Pak	pt	2.58					0.04	2.62			2.62
App Fert by Air	cwt	20.02					0.33	20.35			20.35
Urea, Solid (46% N)	cwt	52.71					0.88	53.59			53.59
NBPT	pt	8.85					0.15	9.00			9.00
Rice Management											
RICE MGT. LABOR	hour				0.91		0.02	0.93			0.93
App by Air (5 gal)	appl	7.00					0.12	7.12			7.12
Facet L	pt	39.19					0.65	39.84			39.84
Permit	oz	16.49					0.27	16.76			16.76
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16			1.16
App by Air (5 gal)	appl	3.50					0.05	3.55			3.55
Clincher SF	oz	16.95					0.23	17.18			17.18
MSO	pt	2.40					0.03	2.43			2.43
Rice Management											
RICE MGT. LABOR	hour				1.81		0.02	1.83			1.83
App Fert by Air	cwt	4.89					0.07	4.96			4.96
Urea, Solid (46% N)	cwt	12.87					0.17	13.04			13.04
Rice Management											
RICE MGT. LABOR	hour				1.81		0.02	1.83			1.83
App by Air (3 gal)	appl	8.25					0.08	8.33			8.33
Warrior ZT	oz	7.29					0.07	7.36			7.36
Rice Management											
RICE MGT. LABOR	hour				1.81		0.01	1.82			1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45		50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71		1.42
Handling & Storage											
HAND LABOR	hour				2.27		0.02	2.29			2.29
Haul Rice	bu	63.00					0.42	63.42			63.42
Dry Rice	bu	72.00					0.48	72.48			72.48
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52		21.90
Flood Irr.	acre		23.68	11.80	9.53		0.68	45.69	64.16		109.85
TOTALS		619.60	35.67	30.51	35.55	0.00	11.10	732.43	127.81		860.24

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

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

Table 29.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.39	12.87	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	34.41	77.46	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	151.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	2.08	3.72	2.40	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	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	3.68	0.00	0.00	0.00	0.00	0.00	7.01	3.18	4.08	4.08	9.30	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	7.26	6.23	6.23	6.23	4.70	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	4.31	7.46	1.55	1.55	9.93	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.27	3.83	0.70	0.27	1.06	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	218.14	232.79	53.17	27.67	159.99	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-218.14	-232.79	-53.17	-27.67	758.01	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-248.43	-481.22	-534.39	-562.06	195.95	185.57

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 29.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
			-----dollars-----										
PERCENT	YIELD	UNIT											
50	90.00	bu	-320	-297	-274	-251	-228	-205	-182	-159	-136	-113	-90
			-448	-425	-402	-379	-356	-333	-310	-287	-264	-241	-218
60	108.00	bu	-264	-237	-209	-182	-154	-127	-99	-72	-44	-17	10
			-392	-365	-337	-310	-282	-255	-227	-200	-172	-144	-117
70	126.00	bu	-209	-177	-145	-113	-81	-49	-16	15	47	79	111
			-337	-305	-273	-241	-209	-176	-144	-112	-80	-48	-16
80	144.00	bu	-154	-117	-81	-44	-7	29	65	102	139	176	212
			-282	-245	-208	-172	-135	-98	-61	-25	11	48	84
90	162.00	bu	-99	-57	-16	24	66	107	148	189	231	272	313
			-227	-185	-144	-103	-61	-20	20	62	103	144	186
100	180.00	bu	-43	1	47	93	139	185	231	277	323	369	415
			-171	-125	-79	-34	11	57	103	149	195	241	287
110	198.00	bu	11	61	112	162	213	263	314	364	415	465	516
			-116	-65	-15	34	85	135	186	236	287	337	388
120	216.00	bu	66	121	176	231	286	341	397	452	507	562	617
			-61	-6	48	104	159	214	269	324	379	434	489
130	234.00	bu	121	181	241	300	360	420	479	539	599	658	718
			-5	53	113	173	232	292	352	411	471	531	590
140	252.00	bu	177	241	305	369	434	498	562	626	691	755	819
			49	113	177	242	306	370	434	499	563	627	691
150	270.00	bu	232	301	370	438	507	576	645	714	783	852	920
			104	173	242	311	379	448	517	586	655	724	793

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

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

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

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

Table 30.A Estimated costs per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Clearpath	oz	3.76	9.6000	36.10	
Newpath	oz	3.83	6.0000	22.98	
Aim	oz	5.67	1.5000	8.50	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Clearfield	lb	0.96	65.0000	62.40	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
Rice Seed CF(Levees)	lb	0.96	12.0000	11.52	
ADJUVANTS					
Class Act NG	pt	1.75	0.5000	0.88	
MSO	pt	2.40	1.5000	3.60	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.5475	8.03	
Harvesters	hour	14.68	0.2030	2.98	
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	14.68	0.5633	8.27	
DIESEL FUEL					
Tractors	gal	1.53	5.9886	9.16	
Harvesters	gal	1.53	3.3975	5.20	
Flood Irr.	gal	1.53	26.8827	41.14	
REPAIR & MAINTENANCE					
Implements	acre	8.97	1.0000	8.97	
Tractors	acre	3.69	1.0000	3.69	
Harvesters	acre	8.36	1.0000	8.36	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	11.75	1.0000	11.75	
TOTAL DIRECT EXPENSES				798.37	
FIXED EXPENSES					
Implements	acre	18.64	1.0000	18.64	
Tractors	acre	22.58	1.0000	22.58	
Harvesters	acre	31.99	1.0000	31.99	
Flood Irr.	acre	42.08	1.0000	42.08	
TOTAL FIXED EXPENSES				115.29	
TOTAL SPECIFIED EXPENSES				913.66	

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

Table 30.B Summary of estimated costs and returns per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	160.0000	816.00	_____

TOTAL INCOME				816.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	129.68	1.0000	129.68	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	96.25	1.0000	96.25	_____
ADJUVANTS	acre	16.25	1.0000	16.25	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.7506	11.01	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	14.68	0.5633	8.27	_____
DIESEL FUEL	gal	1.53	36.2688	55.50	_____
REPAIR & MAINTENANCE	acre	35.33	1.0000	35.33	_____
INTEREST ON OP. CAP.	acre	11.75	1.0000	11.75	_____

TOTAL DIRECT EXPENSES				798.37	_____
RETURNS ABOVE DIRECT EXPENSES				17.63	_____
TOTAL FIXED EXPENSES				115.29	_____

TOTAL SPECIFIED EXPENSES				913.66	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-97.66	_____

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

Fertilization decisions should be based on soil tests.

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

Table 30.C Estimated resource use for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 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	oz					9.6000				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 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
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Clearfield	lb	62.40					1.25	63.65		63.65
Rice Seed Trt/Insect	lbseed	18.85					0.38	19.23		19.23
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
Class Act NG	pt	0.88					0.02	0.90		0.90
MSO	pt	1.20					0.02	1.22		1.22
Seed Levees										
Rice Seed CF(Levees)	lb	11.52					0.23	11.75		11.75
Rice Seed Trt/Insect	lbseed	3.48					0.07	3.55		3.55
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Clearpath	oz	36.10					0.72	36.82		36.82
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Newpath	oz	22.98					0.38	23.36		23.36
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Aim	oz	8.50					0.14	8.64		8.64
Rice Management										
RICE MGT. LABOR	hour				2.72		0.05	2.77		2.77
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				4.53		0.06	4.59		4.59
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				4.53		0.05	4.58		4.58
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		5.20	11.22	5.66		0.15	22.23	36.30	58.53
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.37	56.37		56.37
Dry Rice	bu	64.00					0.43	64.43		64.43
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	4.50	42.82	15.12	33.79		1.47	97.70	46.79	144.49
TOTALS		627.98	55.50	35.33	67.81	0.00	11.75	798.37	115.29	913.66

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

Fertilization decisions should be based on soil tests.

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

Table 30.E Estimated monthly income and expense flows per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	816.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	70.51	31.48	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	96.25	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	2.40	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	16.10	9.52	11.33	11.33	11.63	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.81	11.22	11.22	11.22	6.01	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.10	8.20	2.29	2.29	11.74	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.49	3.13	1.18	0.98	1.00	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	229.56	190.00	89.73	98.03	150.38	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-229.56	-190.00	-89.73	-98.03	665.62	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-259.85	-449.85	-539.58	-637.61	28.01	17.63

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 30.F Estimated returns for various price/yield combinations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	80.00	bu	-431	-411	-391	-370	-350	-329	-309	-289	-268	-248	-227
			-547	-526	-506	-486	-465	-445	-424	-404	-384	-363	-343
60	96.00	bu	-382	-358	-333	-309	-284	-260	-235	-211	-187	-162	-138
			-498	-473	-449	-424	-400	-375	-351	-326	-302	-277	-253
70	112.00	bu	-333	-305	-276	-248	-219	-190	-162	-133	-105	-76	-48
			-449	-420	-391	-363	-334	-306	-277	-249	-220	-191	-163
80	128.00	bu	-284	-251	-219	-186	-154	-121	-88	-56	-23	9	41
			-399	-367	-334	-301	-269	-236	-204	-171	-138	-106	-73
90	144.00	bu	-235	-198	-162	-125	-88	-51	-15	21	58	94	131
			-350	-314	-277	-240	-203	-167	-130	-93	-57	-20	16
100	160.00	bu	-186	-145	-104	-63	-23	17	58	99	140	180	221
			-301	-260	-220	-179	-138	-97	-56	-16	24	65	106
110	176.00	bu	-137	-92	-47	-2	42	87	132	176	221	266	311
			-252	-207	-162	-117	-73	-28	16	61	106	151	196
120	192.00	bu	-88	-39	9	58	107	156	205	254	303	352	401
			-203	-154	-105	-56	-7	41	90	139	188	237	286
130	208.00	bu	-39	14	67	120	173	226	279	332	385	438	491
			-154	-101	-48	4	57	110	163	216	270	323	376
140	224.00	bu	10	67	124	181	238	295	352	409	467	524	581
			-105	-48	9	66	123	180	237	294	351	408	466
150	240.00	bu	59	120	181	242	304	365	426	487	548	610	671
			-56	5	66	127	188	249	311	372	433	494	555

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

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

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

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

Table 31.A Estimated costs per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Clearpath	oz	3.76	9.6000	36.10	
Newpath	oz	3.83	6.0000	22.98	
Aim	oz	5.67	1.5000	8.50	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Clearfield	lb	0.96	65.0000	62.40	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
Rice Seed CF (Levees)	lb	0.96	12.0000	11.52	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.4999	7.33	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.5719	8.51	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	21.9949	33.64	
REPAIR & MAINTENANCE					
Implements	acre	8.50	1.0000	8.50	
Tractors	acre	3.45	1.0000	3.45	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	11.32	1.0000	11.32	
TOTAL DIRECT EXPENSES				765.88	
FIXED EXPENSES					
Implements	acre	17.65	1.0000	17.65	
Tractors	acre	21.12	1.0000	21.12	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.81	1.0000	64.81	
TOTAL FIXED EXPENSES				131.30	
TOTAL SPECIFIED EXPENSES				897.18	

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

Fertilization decisions should be based on soil tests.

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

Table 31.B Summary of estimated costs and returns per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	160.0000	816.00	_____

TOTAL INCOME				816.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	129.68	1.0000	129.68	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	96.25	1.0000	96.25	_____
ADJUVANTS	acre	16.25	1.0000	16.25	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.6759	9.91	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	30.5114	46.66	_____
REPAIR & MAINTENANCE	acre	33.50	1.0000	33.50	_____
INTEREST ON OP. CAP.	acre	11.32	1.0000	11.32	_____

TOTAL DIRECT EXPENSES				765.88	_____
RETURNS ABOVE DIRECT EXPENSES				50.12	_____
TOTAL FIXED EXPENSES				131.30	_____

TOTAL SPECIFIED EXPENSES				897.18	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-81.18	_____

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

Fertilization decisions should be based on soil tests.

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

Table 31.C Estimated resource use for field operations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 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	oz					9.6000				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 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
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33					0.13	3.46			3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28		14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14		4.57
App by Air (5 gal)	appl	7.00					0.19	7.19			7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41			6.41
2,4-D Amine 4	pt	4.50					0.12	4.62			4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12		14.09
Rice Seed Clearfield	lb	62.40					1.25	63.65			63.65
Rice Seed Trt/Insect	lbseed	18.85					0.38	19.23			19.23
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43		5.29
App by Air (5 gal)	appl	7.00					0.14	7.14			7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24			4.24
Command 3ME	pt	18.17					0.36	18.53			18.53
Sharpen	oz	12.08					0.24	12.32			12.32
MSO	pt	1.20					0.02	1.22			1.22
Class Act NG	pt	0.88					0.02	0.90			0.90
Seed Levees											
Rice Seed CF(Levees)	lb	11.52					0.23	11.75			11.75
Rice Seed Trt/Insect	lbseed	3.48					0.07	3.55			3.55
App by Air (5 gal)	appl	7.00					0.14	7.14			7.14
Clearpath	oz	36.10					0.72	36.82			36.82
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83			5.83
App Fert by Air	cwt	7.50					0.13	7.63			7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49			9.49
DAP	cwt	10.50					0.18	10.68			10.68
Rice Consultant	acre	8.00					0.13	8.13			8.13
App Fert by Air	cwt	18.75					0.31	19.06			19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17			50.17
NBPT	pt	8.30					0.14	8.44			8.44
App by Air (10 gal)	appl	9.00					0.15	9.15			9.15
Newpath	oz	22.98					0.38	23.36			23.36
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82			5.82
Aim	oz	8.50					0.14	8.64			8.64
Rice Management											
RICE MGT. LABOR	hour				0.91		0.02	0.93			0.93
App by Air (5 gal)	appl	3.50					0.05	3.55			3.55
Clincher SF	oz	16.95					0.23	17.18			17.18
MSO	pt	2.40					0.03	2.43			2.43
Rice Management											
RICE MGT. LABOR	hour				1.81		0.02	1.83			1.83
App Fert by Air	cwt	11.25					0.15	11.40			11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00			30.00
Rice Management											
RICE MGT. LABOR	hour				1.81		0.02	1.83			1.83
App by Air (5 gal)	appl	7.00					0.07	7.07			7.07
Flint Extra	oz	41.74					0.42	42.16			42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68			7.68
Surfactant	pt	0.33						0.33			0.33
App by Air (3 gal)	appl	8.25					0.08	8.33			8.33
Warrior ZT	oz	7.29					0.07	7.36			7.36
Rice Management											
RICE MGT. LABOR	hour				1.81		0.01	1.82			1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45		50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71		1.42
Handling & Storage											
HAND LABOR	hour				2.27		0.02	2.29			2.29
Haul Rice	bu	56.00					0.37	56.37			56.37
Dry Rice	bu	64.00					0.43	64.43			64.43
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52		21.90
Flood Irr.	acre	2.25	34.67	14.79	22.65		1.16	75.52	67.65		143.17
TOTALS		625.73	46.66	33.50	48.67	0.00	11.32	765.88	131.30		897.18

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

Fertilization decisions should be based on soil tests.

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

Table 31.E Estimated monthly income and expense flows per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	816.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	70.51	31.48	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	96.25	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	2.40	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	12.07	5.44	6.34	6.34	10.58	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.45	8.72	8.72	8.72	5.03	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.25	8.09	2.18	2.18	10.09	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.37	3.02	1.08	0.90	0.98	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	222.95	183.20	82.03	90.35	146.68	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-222.95	-183.20	-82.03	-90.35	669.32	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-253.24	-436.44	-518.47	-608.82	60.50	50.12

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 31.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-399	-379	-358	-338	-317	-297	-277	-256	-236	-215	-195
			-530	-510	-489	-469	-449	-428	-408	-387	-367	-347	-326
60	96.00	bu	-350	-325	-301	-276	-252	-227	-203	-179	-154	-130	-105
			-481	-457	-432	-408	-383	-359	-334	-310	-285	-261	-236
70	112.00	bu	-301	-272	-244	-215	-187	-158	-129	-101	-72	-44	-15
			-432	-403	-375	-346	-318	-289	-261	-232	-204	-175	-146
80	128.00	bu	-252	-219	-186	-154	-121	-88	-56	-23	9	41	74
			-383	-350	-318	-285	-252	-220	-187	-154	-122	-89	-57
90	144.00	bu	-203	-166	-129	-92	-56	-19	17	54	90	127	164
			-334	-297	-260	-224	-187	-150	-113	-77	-40	-3	32
100	160.00	bu	-153	-113	-72	-31	9	50	90	131	172	213	254
			-285	-244	-203	-162	-121	-81	-40	0	41	82	122
110	176.00	bu	-104	-59	-15	29	74	119	164	209	254	299	344
			-236	-191	-146	-101	-56	-11	33	78	122	167	212
120	192.00	bu	-55	-6	42	91	140	189	238	287	336	385	433
			-186	-137	-89	-40	8	57	106	155	204	253	302
130	208.00	bu	-6	46	99	152	205	258	311	364	417	470	523
			-137	-84	-31	21	74	127	180	233	286	339	392
140	224.00	bu	42	99	156	213	271	328	385	442	499	556	613
			-88	-31	25	82	139	196	254	311	368	425	482
150	240.00	bu	91	152	214	275	336	397	458	520	581	642	703
			-39	21	82	144	205	266	327	388	450	511	572

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

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

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

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

Table 32.A Estimated costs per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Clearpath	oz	3.76	9.6000	36.10	
Newpath	oz	3.83	6.0000	22.98	
Aim	oz	5.67	1.5000	8.50	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Seed Clearfield	lb	0.96	65.0000	62.40	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
Rice Seed CF(Levees)	lb	0.96	12.0000	11.52	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.5281	7.74	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.8180	8.89	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	18.7364	28.67	
REPAIR & MAINTENANCE					
Implements	acre	8.58	1.0000	8.58	
Tractors	acre	3.59	1.0000	3.59	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	11.24	1.0000	11.24	
TOTAL DIRECT EXPENSES				758.41	
FIXED EXPENSES					
Implements	acre	18.29	1.0000	18.29	
Tractors	acre	21.98	1.0000	21.98	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.48	1.0000	64.48	
TOTAL FIXED EXPENSES				132.47	
TOTAL SPECIFIED EXPENSES				890.88	

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

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

Table 32.B Summary of estimated costs and returns per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	160.0000	816.00	_____

TOTAL INCOME				816.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	129.68	1.0000	129.68	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	96.25	1.0000	96.25	_____
ADJUVANTS	acre	16.25	1.0000	16.25	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.7041	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	27.4990	42.07	_____
REPAIR & MAINTENANCE	acre	33.37	1.0000	33.37	_____
INTEREST ON OP. CAP.	acre	11.24	1.0000	11.24	_____

TOTAL DIRECT EXPENSES				758.41	_____
RETURNS ABOVE DIRECT EXPENSES				57.59	_____
TOTAL FIXED EXPENSES				132.47	_____

TOTAL SPECIFIED EXPENSES				890.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-74.88	_____

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

Fertilization decisions should be based on soil tests.

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

Table 32.C Estimated resource use for field operations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 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	oz					9.6000				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 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
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Clearfield	lb	62.40					1.25	63.65		63.65
Rice Seed Trt/Insect	lbseed	18.85					0.38	19.23		19.23
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed CF(Levees)	lb	11.52					0.23	11.75		11.75
Rice Seed Trt/Insect	lbseed	3.48					0.07	3.55		3.55
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Clearpath	oz	36.10					0.72	36.82		36.82
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Newpath	oz	22.98					0.38	23.36		23.36
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Aim	oz	8.50					0.14	8.64		8.64
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.37	56.37		56.37
Dry Rice	bu	64.00					0.43	64.43		64.43
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	10.17	30.08	14.66	12.06		1.08	68.05	68.82	136.87
TOTALS		633.65	42.07	33.37	38.08	0.00	11.24	758.41	132.47	890.88

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

Fertilization decisions should be based on soil tests.

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

Table 32.E Estimated monthly income and expense flows per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	816.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	70.51	31.48	16.95	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	7.29	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	96.25	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	2.40	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	9.90	2.72	3.62	3.62	10.32	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	9.50	7.48	7.48	7.48	5.11	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.31	8.01	2.10	2.10	10.14	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.47	2.95	1.02	0.86	0.97	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	227.91	179.09	77.93	86.27	146.54	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-227.91	-179.09	-77.93	-86.27	669.46	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-258.20	-437.29	-515.22	-601.49	67.97	57.59

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 32.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-392	-371	-351	-330	-310	-290	-269	-249	-228	-208	-188
			-524	-504	-483	-463	-442	-422	-402	-381	-361	-340	-320
60	96.00	bu	-342	-318	-293	-269	-244	-220	-196	-171	-147	-122	-98
			-475	-450	-426	-401	-377	-352	-328	-304	-279	-255	-230
70	112.00	bu	-293	-265	-236	-208	-179	-150	-122	-93	-65	-36	-8
			-426	-397	-369	-340	-312	-283	-254	-226	-197	-169	-140
80	128.00	bu	-244	-212	-179	-146	-114	-81	-48	-16	16	49	81
			-377	-344	-311	-279	-246	-213	-181	-148	-116	-83	-50
90	144.00	bu	-195	-158	-122	-85	-48	-11	24	61	98	134	171
			-328	-291	-254	-217	-181	-144	-107	-70	-34	2	39
100	160.00	bu	-146	-105	-64	-24	16	57	98	139	179	220	261
			-278	-238	-197	-156	-115	-74	-34	6	47	88	129
110	176.00	bu	-97	-52	-7	37	82	127	171	216	261	306	351
			-229	-184	-140	-95	-50	-5	39	84	129	174	219
120	192.00	bu	-48	0	49	98	147	196	245	294	343	392	441
			-180	-131	-82	-33	15	64	113	162	211	260	308
130	208.00	bu	0	53	107	160	213	266	319	372	425	478	531
			-131	-78	-25	27	80	133	186	239	292	345	398
140	224.00	bu	50	107	164	221	278	335	392	449	507	564	621
			-82	-25	31	88	146	203	260	317	374	431	488
150	240.00	bu	99	160	221	282	343	405	466	527	588	649	711
			-33	27	89	150	211	272	333	395	456	517	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 2020 input prices.

Table 33.A Estimated costs per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Clearpath	oz	3.76	9.6000	36.10	
Newpath	oz	3.83	6.0000	22.98	
Aim	oz	5.67	1.5000	8.50	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Clearfield	lb	0.96	65.0000	62.40	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
Rice Seed CF (Levees)	lb	0.96	12.0000	11.52	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.4228	6.20	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	4.8970	7.48	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	15.4779	23.68	
REPAIR & MAINTENANCE					
Implements	acre	8.40	1.0000	8.40	
Tractors	acre	3.07	1.0000	3.07	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	10.84	1.0000	10.84	
TOTAL DIRECT EXPENSES				736.05	
FIXED EXPENSES					
Implements	acre	17.16	1.0000	17.16	
Tractors	acre	18.77	1.0000	18.77	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.16	1.0000	64.16	
TOTAL FIXED EXPENSES				127.81	
TOTAL SPECIFIED EXPENSES				863.86	

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

Fertilization decisions should be based on soil tests.

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

Table 33.B Summary of estimated costs and returns per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	160.0000	816.00	_____

TOTAL INCOME				816.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	129.68	1.0000	129.68	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	96.25	1.0000	96.25	_____
ADJUVANTS	acre	16.25	1.0000	16.25	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.5988	8.78	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	23.3194	35.67	_____
REPAIR & MAINTENANCE	acre	30.51	1.0000	30.51	_____
INTEREST ON OP. CAP.	acre	10.84	1.0000	10.84	_____

TOTAL DIRECT EXPENSES				736.05	_____
RETURNS ABOVE DIRECT EXPENSES				79.95	_____
TOTAL FIXED EXPENSES				127.81	_____

TOTAL SPECIFIED EXPENSES				863.86	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-47.86	_____

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

Fertilization decisions should be based on soil tests.

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

Table 33.C Estimated resource use for field operations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 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	oz					9.6000				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 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
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Clearfield	lb	62.40					1.25	63.65		63.65
Rice Seed Trt/Insect	lbseed	18.85					0.38	19.23		19.23
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed CF(Levees)	lb	11.52					0.23	11.75		11.75
Rice Seed Trt/Insect	lbseed	3.48					0.07	3.55		3.55
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Clearpath	oz	36.10					0.72	36.82		36.82
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Newpath	oz	22.98					0.38	23.36		23.36
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Aim	oz	8.50					0.14	8.64		8.64
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.37	56.37		56.37
Dry Rice	bu	64.00					0.43	64.43		64.43
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre		23.68	11.80	9.53		0.68	45.69	64.16	109.85
TOTALS		623.48	35.67	30.51	35.55	0.00	10.84	736.05	127.81	863.86

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

Fertilization decisions should be based on soil tests.

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

Table 33.E Estimated monthly income and expense flows per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	816.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	70.51	31.48	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	96.25	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	2.40	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	7.01	3.18	4.08	4.08	9.30	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	7.26	6.23	6.23	6.23	4.70	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	4.31	7.46	1.55	1.55	9.93	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.14	2.93	1.00	0.84	0.96	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	211.28	177.73	76.57	84.91	144.89	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-211.28	-177.73	-76.57	-84.91	671.11	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-241.57	-419.30	-495.87	-580.78	90.33	79.95

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 33.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-369	-349	-328	-308	-288	-267	-247	-226	-206	-186	-165
			-497	-477	-456	-436	-415	-395	-375	-354	-334	-313	-293
60	96.00	bu	-320	-296	-271	-247	-222	-198	-173	-149	-124	-100	-75
			-448	-423	-399	-374	-350	-325	-301	-276	-252	-228	-203
70	112.00	bu	-271	-242	-214	-185	-157	-128	-100	-71	-42	-14	14
			-399	-370	-342	-313	-284	-256	-227	-199	-170	-142	-113
80	128.00	bu	-222	-189	-157	-124	-91	-59	-26	6	38	71	104
			-350	-317	-284	-252	-219	-186	-154	-121	-88	-56	-23
90	144.00	bu	-173	-136	-99	-63	-26	10	47	83	120	157	194
			-300	-264	-227	-190	-154	-117	-80	-43	-7	29	66
100	160.00	bu	-124	-83	-42	-1	39	79	120	161	202	243	283
			-251	-211	-170	-129	-88	-47	-7	33	74	115	156
110	176.00	bu	-74	-30	14	59	104	149	194	239	284	328	373
			-202	-157	-112	-68	-23	21	66	111	156	201	246
120	192.00	bu	-25	23	72	121	170	218	267	316	365	414	463
			-153	-104	-55	-6	42	91	140	189	238	287	335
130	208.00	bu	23	76	129	182	235	288	341	394	447	500	553
			-104	-51	1	54	107	160	213	266	319	372	425
140	224.00	bu	72	129	186	243	300	358	415	472	529	586	643
			-55	1	58	115	173	230	287	344	401	458	515
150	240.00	bu	121	182	243	305	366	427	488	549	611	672	733
			-6	54	116	177	238	299	360	422	483	544	605

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

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

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

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

Table 34.A Estimated costs per acre
Fullpage hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	3.3220	65.58	
NBPT	pt	11.06	0.8000	8.85	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Preface	oz	4.05	11.0000	44.55	
Facet L	pt	14.57	2.0000	29.14	
Aim	oz	5.67	1.5000	8.50	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	6.97	23.0000	160.31	
Rice Seed FPH (Levee)	lb	2.67	4.2500	11.35	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	
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	14.68	0.5475	8.03	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.9886	9.16	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	26.8827	41.14	
REPAIR & MAINTENANCE					
Implements	acre	8.59	1.0000	8.59	
Tractors	acre	3.69	1.0000	3.69	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	12.78	1.0000	12.78	
TOTAL DIRECT EXPENSES				820.87	
FIXED EXPENSES					
Implements	acre	18.06	1.0000	18.06	
Tractors	acre	22.58	1.0000	22.58	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	42.08	1.0000	42.08	
TOTAL FIXED EXPENSES				110.44	
TOTAL SPECIFIED EXPENSES				931.31	

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

Fertilization decisions should be based on soil tests.

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

Table 34.B Summary of estimated costs and returns per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	180.0000	918.00	_____

TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	94.26	1.0000	94.26	_____
HERBICIDES	acre	144.29	1.0000	144.29	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	172.89	1.0000	172.89	_____
ADJUVANTS	acre	15.92	1.0000	15.92	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
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	14.68	0.7235	10.61	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	35.8158	54.81	_____
REPAIR & MAINTENANCE	acre	33.83	1.0000	33.83	_____
INTEREST ON OP. CAP.	acre	12.78	1.0000	12.78	_____

TOTAL DIRECT EXPENSES				820.87	_____
RETURNS ABOVE DIRECT EXPENSES				97.13	_____
TOTAL FIXED EXPENSES				110.44	_____

TOTAL SPECIFIED EXPENSES				931.31	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-13.31	_____

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

Fertilization decisions should be based on soil tests.

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

Table 34.C Estimated resource use for field operations, per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 Fullpage Hyb Tr	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 FPH (Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Preface	oz					5.0000				
Facet L	pt					2.0000				
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				
Preface	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 ZT	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 2020 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
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Fullpage Hyb Tr	lb	160.31					3.21	163.52		163.52
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed FPH(Levee)	lb	11.35					0.23	11.58		11.58
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Preface	oz	20.25					0.41	20.66		20.66
Facet L	pt	29.14					0.58	29.72		29.72
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	20.02					0.33	20.35		20.35
Urea, Solid (46% N)	cwt	52.71					0.88	53.59		53.59
NBPT	pt	8.85					0.15	9.00		9.00
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Preface	oz	24.30					0.41	24.71		24.71
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Aim	oz	8.50					0.14	8.64		8.64
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.07	4.96		4.96
Urea, Solid (46% N)	cwt	12.87					0.17	13.04		13.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.42	63.42		63.42
Dry Rice	bu	72.00					0.48	72.48		72.48
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	4.50	42.82	15.12	33.79		1.47	97.70	46.79	144.49
TOTALS		659.64	54.81	33.83	59.81	0.00	12.78	820.87	110.44	931.31

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

Fertilization decisions should be based on soil tests.

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

Table 34.E Estimated monthly income and expense flows per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.39	12.87	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	83.80	32.80	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	172.89	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	2.40	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	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	3.68	0.00	0.00	0.00	0.00	0.00	16.10	7.71	8.61	8.61	10.88	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.81	11.22	11.22	11.22	5.32	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.10	8.20	2.29	2.29	10.24	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	6.29	3.22	0.84	0.38	1.08	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	321.29	194.78	63.57	38.04	162.52	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-321.29	-194.78	-63.57	-38.04	755.48	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-351.58	-546.36	-609.93	-647.97	107.51	97.13

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 34.F Estimated returns for various price/yield combinations, per acre
Fullpage hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	90.00	bu	-408	-385	-362	-339	-316	-293	-270	-248	-225	-202	-179
			-519	-496	-473	-450	-427	-404	-381	-358	-335	-312	-289
60	108.00	bu	-353	-325	-298	-270	-243	-215	-188	-160	-133	-105	-78
			-463	-436	-408	-381	-353	-326	-298	-271	-243	-215	-188
70	126.00	bu	-298	-266	-233	-201	-169	-137	-105	-73	-41	-8	23
			-408	-376	-344	-312	-280	-247	-215	-183	-151	-119	-87
80	144.00	bu	-242	-206	-169	-132	-96	-59	-22	14	50	87	124
			-353	-316	-279	-243	-206	-169	-133	-96	-59	-22	13
90	162.00	bu	-187	-146	-105	-63	-22	18	60	101	142	184	225
			-298	-256	-215	-174	-132	-91	-50	-8	32	73	115
100	180.00	bu	-132	-86	-40	5	51	97	143	188	234	280	326
			-242	-196	-151	-105	-59	-13	32	78	124	170	216
110	198.00	bu	-77	-26	23	74	124	175	225	276	326	377	427
			-187	-137	-86	-36	14	64	115	165	216	266	317
120	216.00	bu	-21	33	88	143	198	253	308	363	418	473	528
			-132	-77	-22	32	88	143	198	253	308	363	418
130	234.00	bu	33	93	152	212	272	331	391	451	510	570	630
			-77	-17	42	101	161	221	280	340	400	460	519
140	252.00	bu	88	152	217	281	345	409	474	538	602	667	731
			-21	42	106	171	235	299	363	428	492	556	620
150	270.00	bu	143	212	281	350	419	488	557	625	694	763	832
			33	102	171	240	308	377	446	515	584	653	721

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

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

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

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

Table 35.A Estimated costs per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	3.3220	65.58	
NBPT	pt	11.06	0.8000	8.85	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Preface	oz	4.05	11.0000	44.55	
Facet L	pt	14.57	2.0000	29.14	
Aim	oz	5.67	1.5000	8.50	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	6.97	23.0000	160.31	
Rice Seed FPH (Levee)	lb	2.67	4.2500	11.35	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	
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	14.68	0.4999	7.33	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.5719	8.51	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	21.9949	33.64	
REPAIR & MAINTENANCE					
Implements	acre	8.50	1.0000	8.50	
Tractors	acre	3.45	1.0000	3.45	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	12.47	1.0000	12.47	
TOTAL DIRECT EXPENSES				798.69	
FIXED EXPENSES					
Implements	acre	17.65	1.0000	17.65	
Tractors	acre	21.12	1.0000	21.12	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.81	1.0000	64.81	
TOTAL FIXED EXPENSES				131.30	
TOTAL SPECIFIED EXPENSES				929.99	

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

Table 35.B Summary of estimated costs and returns per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	180.0000	918.00	_____

TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	94.26	1.0000	94.26	_____
HERBICIDES	acre	144.29	1.0000	144.29	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	172.89	1.0000	172.89	_____
ADJUVANTS	acre	15.92	1.0000	15.92	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
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	14.68	0.6759	9.91	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	30.5114	46.66	_____
REPAIR & MAINTENANCE	acre	33.50	1.0000	33.50	_____
INTEREST ON OP. CAP.	acre	12.47	1.0000	12.47	_____

TOTAL DIRECT EXPENSES				798.69	_____
RETURNS ABOVE DIRECT EXPENSES				119.31	_____
TOTAL FIXED EXPENSES				131.30	_____

TOTAL SPECIFIED EXPENSES				929.99	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-11.99	_____

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

Fertilization decisions should be based on soil tests.

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

Table 35.C Estimated resource use for field operations, per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 Fullpage Hyb Tr	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 FPH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Preface	oz					5.0000				
Facet L	pt					2.0000				
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				
Preface	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 ZT	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 2020 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
Fullpage hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Fullpage Hyb Tr	lb	160.31					3.21	163.52		163.52
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed FPH(Levee)	lb	11.35					0.23	11.58		11.58
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Preface	oz	20.25					0.41	20.66		20.66
Facet L	pt	29.14					0.58	29.72		29.72
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	20.02					0.33	20.35		20.35
Urea, Solid (46% N)	cwt	52.71					0.88	53.59		53.59
NBPT	pt	8.85					0.15	9.00		9.00
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Preface	oz	24.30					0.41	24.71		24.71
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Aim	oz	8.50					0.14	8.64		8.64
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.07	4.96		4.96
Urea, Solid (46% N)	cwt	12.87					0.17	13.04		13.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.42	63.42		63.42
Dry Rice	bu	72.00					0.48	72.48		72.48
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	2.25	34.67	14.79	22.65		1.16	75.52	67.65	143.17
TOTALS		657.39	46.66	33.50	48.67	0.00	12.47	798.69	131.30	929.99

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

Fertilization decisions should be based on soil tests.

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

Table 35.E Estimated monthly income and expense flows per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.39	12.87	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	83.80	32.80	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	172.89	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	2.40	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	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	3.68	0.00	0.00	0.00	0.00	0.00	12.07	5.44	6.34	6.34	10.58	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.45	8.72	8.72	8.72	5.03	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.25	8.09	2.18	2.18	10.09	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	6.17	3.14	0.78	0.33	1.08	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	314.68	189.82	58.63	33.11	161.78	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-314.68	-189.82	-58.63	-33.11	756.22	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-344.97	-534.79	-593.42	-626.53	129.69	119.31

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 35.F Estimated returns for various price/yield combinations, per acre
Fullpage hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-386	-363	-340	-317	-294	-271	-248	-225	-202	-179	-156
			-517	-494	-471	-448	-425	-403	-380	-357	-334	-311	-288
60	108.00	bu	-331	-303	-276	-248	-221	-193	-165	-138	-110	-83	-55
			-462	-434	-407	-379	-352	-324	-297	-269	-242	-214	-187
70	126.00	bu	-275	-243	-211	-179	-147	-115	-83	-51	-18	13	45
			-407	-375	-343	-310	-278	-246	-214	-182	-150	-118	-85
80	144.00	bu	-220	-183	-147	-110	-73	-37	-0	36	73	109	146
			-352	-315	-278	-241	-205	-168	-131	-94	-58	-21	15
90	162.00	bu	-165	-124	-82	-41	-0	41	82	123	165	206	247
			-296	-255	-214	-172	-131	-90	-48	-7	33	75	116
100	180.00	bu	-110	-64	-18	27	73	119	165	211	257	302	348
			-241	-195	-149	-103	-57	-11	33	79	125	171	217
110	198.00	bu	-54	-4	46	96	147	197	248	298	348	399	449
			-186	-135	-85	-34	15	66	116	167	217	268	318
120	216.00	bu	0	55	110	165	220	275	330	385	440	496	551
			-130	-75	-20	34	89	144	199	254	309	364	419
130	234.00	bu	55	115	174	234	294	353	413	473	532	592	652
			-75	-16	43	103	162	222	282	341	401	461	520
140	252.00	bu	110	175	239	303	367	432	496	560	624	689	753
			-20	43	108	172	236	300	365	429	493	557	622
150	270.00	bu	166	234	303	372	441	510	579	648	716	785	854
			34	103	172	241	310	379	447	516	585	654	723

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

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

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

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

Table 36.A Estimated costs per acre
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	3.3220	65.58	
NBPT	pt	11.06	0.8000	8.85	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Preface	oz	4.05	11.0000	44.55	
Facet L	pt	14.57	2.0000	29.14	
Aim	oz	5.67	1.5000	8.50	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	6.97	23.0000	160.31	
Rice Seed FPH (Levee)	lb	2.67	4.2500	11.35	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	
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	14.68	0.5281	7.74	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.8180	8.89	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	18.7364	28.67	
REPAIR & MAINTENANCE					
Implements	acre	8.58	1.0000	8.58	
Tractors	acre	3.59	1.0000	3.59	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	12.39	1.0000	12.39	
TOTAL DIRECT EXPENSES				791.22	
FIXED EXPENSES					
Implements	acre	18.29	1.0000	18.29	
Tractors	acre	21.98	1.0000	21.98	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.48	1.0000	64.48	
TOTAL FIXED EXPENSES				132.47	
TOTAL SPECIFIED EXPENSES				923.69	

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

Fertilization decisions should be based on soil tests.

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

Table 36.B Summary of estimated costs and returns per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	180.0000	918.00	_____

TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	94.26	1.0000	94.26	_____
HERBICIDES	acre	144.29	1.0000	144.29	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	172.89	1.0000	172.89	_____
ADJUVANTS	acre	15.92	1.0000	15.92	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
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	14.68	0.7041	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	27.4990	42.07	_____
REPAIR & MAINTENANCE	acre	33.37	1.0000	33.37	_____
INTEREST ON OP. CAP.	acre	12.39	1.0000	12.39	_____

TOTAL DIRECT EXPENSES				791.22	_____
RETURNS ABOVE DIRECT EXPENSES				126.78	_____
TOTAL FIXED EXPENSES				132.47	_____

TOTAL SPECIFIED EXPENSES				923.69	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-5.69	_____

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

Fertilization decisions should be based on soil tests.

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

Table 36.C Estimated resource use for field operations, per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 Fullpage Hyb Tr	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 FPH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Preface	oz					5.0000				
Facet L	pt					2.0000				
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				
Preface	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 ZT	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 2020 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
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Fullpage Hyb Tr	lb	160.31					3.21	163.52		163.52
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed FPH(Levee)	lb	11.35					0.23	11.58		11.58
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Preface	oz	20.25					0.41	20.66		20.66
Facet L	pt	29.14					0.58	29.72		29.72
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	20.02					0.33	20.35		20.35
Urea, Solid (46% N)	cwt	52.71					0.88	53.59		53.59
NBPT	pt	8.85					0.15	9.00		9.00
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Preface	oz	24.30					0.41	24.71		24.71
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Aim	oz	8.50					0.14	8.64		8.64
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.07	4.96		4.96
Urea, Solid (46% N)	cwt	12.87					0.17	13.04		13.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.42	63.42		63.42
Dry Rice	bu	72.00					0.48	72.48		72.48
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	10.17	30.08	14.66	12.06		1.08	68.05	68.82	136.87
TOTALS		665.31	42.07	33.37	38.08	0.00	12.39	791.22	132.47	923.69

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

Fertilization decisions should be based on soil tests.

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

Table 36.E Estimated monthly income and expense flows per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.39	12.87	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	83.80	32.80	16.95	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	7.29	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	172.89	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	2.40	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	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	3.68	0.00	0.00	0.00	0.00	0.00	9.90	2.72	3.62	3.62	10.32	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	9.50	7.48	7.48	7.48	5.11	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.31	8.01	2.10	2.10	10.14	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	6.27	3.07	0.72	0.29	1.07	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	319.64	185.71	54.53	29.03	161.64	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-319.64	-185.71	-54.53	-29.03	756.36	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-349.93	-535.64	-590.17	-619.20	137.16	126.78

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 36.F Estimated returns for various price/yield combinations, per acre
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	90.00	bu	-379	-356	-333	-310	-287	-264	-241	-218	-195	-172	-149
			-511	-488	-465	-442	-419	-396	-373	-350	-327	-304	-281
60	108.00	bu	-323	-296	-268	-241	-213	-186	-158	-130	-103	-75	-48
			-456	-428	-401	-373	-346	-318	-290	-263	-235	-208	-180
70	126.00	bu	-268	-236	-204	-172	-139	-107	-75	-43	-11	20	52
			-400	-368	-336	-304	-272	-240	-208	-176	-143	-111	-79
80	144.00	bu	-213	-176	-139	-103	-66	-29	7	43	80	117	153
			-345	-308	-272	-235	-198	-162	-125	-88	-51	-15	21
90	162.00	bu	-157	-116	-75	-34	7	48	89	131	172	213	255
			-290	-249	-207	-166	-125	-83	-42	-1	40	81	122
100	180.00	bu	-102	-56	-10	34	80	126	172	218	264	310	356
			-235	-189	-143	-97	-51	-5	40	86	132	177	223
110	198.00	bu	-47	3	53	104	154	204	255	305	356	406	457
			-179	-129	-78	-28	22	72	123	173	223	274	324
120	216.00	bu	7	62	117	173	228	283	338	393	448	503	558
			-124	-69	-14	40	95	150	205	260	315	371	426
130	234.00	bu	63	122	182	242	301	361	421	480	540	600	659
			-69	-9	49	109	169	228	288	348	407	467	527
140	252.00	bu	118	182	246	311	375	439	503	568	632	696	760
			-14	50	114	178	242	307	371	435	499	564	628
150	270.00	bu	173	242	311	380	448	517	586	655	724	793	862
			41	109	178	247	316	385	454	523	591	660	729

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

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

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

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

Table 37.A Estimated costs per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	3.3220	65.58	
NBPT	pt	11.06	0.8000	8.85	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Preface	oz	4.05	11.0000	44.55	
Facet L	pt	14.57	2.0000	29.14	
Aim	oz	5.67	1.5000	8.50	
Clincher SF	oz	2.26	7.5000	16.95	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	6.97	23.0000	160.31	
Rice Seed FPH (Levee)	lb	2.67	4.2500	11.35	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	2.40	1.5000	3.60	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	
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	14.68	0.4228	6.20	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	4.8970	7.48	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	15.4779	23.68	
REPAIR & MAINTENANCE					
Implements	acre	8.40	1.0000	8.40	
Tractors	acre	3.07	1.0000	3.07	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	11.99	1.0000	11.99	
TOTAL DIRECT EXPENSES				768.86	
FIXED EXPENSES					
Implements	acre	17.16	1.0000	17.16	
Tractors	acre	18.77	1.0000	18.77	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.16	1.0000	64.16	
TOTAL FIXED EXPENSES				127.81	
TOTAL SPECIFIED EXPENSES				896.67	

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

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

Table 37.B Summary of estimated costs and returns per acre
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	180.0000	918.00	_____

TOTAL INCOME				918.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	94.26	1.0000	94.26	_____
HERBICIDES	acre	144.29	1.0000	144.29	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	172.89	1.0000	172.89	_____
ADJUVANTS	acre	15.92	1.0000	15.92	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
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	14.68	0.5988	8.78	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	23.3194	35.67	_____
REPAIR & MAINTENANCE	acre	30.51	1.0000	30.51	_____
INTEREST ON OP. CAP.	acre	11.99	1.0000	11.99	_____

TOTAL DIRECT EXPENSES				768.86	_____
RETURNS ABOVE DIRECT EXPENSES				149.14	_____
TOTAL FIXED EXPENSES				127.81	_____

TOTAL SPECIFIED EXPENSES				896.67	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				21.33	_____

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

Fertilization decisions should be based on soil tests.

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

Table 37.C Estimated resource use for field operations, per acre
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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 Fullpage Hyb Tr	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 FPH (Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Preface	oz					5.0000				
Facet L	pt					2.0000				
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				
Preface	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 ZT	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 2020 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
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Fullpage Hyb Tr	lb	160.31					3.21	163.52		163.52
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed FPH(Levee)	lb	11.35					0.23	11.58		11.58
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Preface	oz	20.25					0.41	20.66		20.66
Facet L	pt	29.14					0.58	29.72		29.72
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	20.02					0.33	20.35		20.35
Urea, Solid (46% N)	cwt	52.71					0.88	53.59		53.59
NBPT	pt	8.85					0.15	9.00		9.00
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Preface	oz	24.30					0.41	24.71		24.71
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Aim	oz	8.50					0.14	8.64		8.64
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Clincher SF	oz	16.95					0.23	17.18		17.18
MSO	pt	2.40					0.03	2.43		2.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.07	4.96		4.96
Urea, Solid (46% N)	cwt	12.87					0.17	13.04		13.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.42	63.42		63.42
Dry Rice	bu	72.00					0.48	72.48		72.48
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre		23.68	11.80	9.53		0.68	45.69	64.16	109.85
TOTALS		655.14	35.67	30.51	35.55	0.00	11.99	768.86	127.81	896.67

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

Fertilization decisions should be based on soil tests.

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

Table 37.E Estimated monthly income and expense flows per acre
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.39	12.87	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	83.80	32.80	16.95	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	172.89	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	2.40	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	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	3.68	0.00	0.00	0.00	0.00	0.00	7.01	3.18	4.08	4.08	9.30	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	7.26	6.23	6.23	6.23	4.70	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	4.31	7.46	1.55	1.55	9.93	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	5.94	3.05	0.70	0.27	1.06	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	303.01	184.35	53.17	27.67	159.99	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-303.01	-184.35	-53.17	-27.67	758.01	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-333.30	-517.65	-570.82	-598.49	159.52	149.14

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 37.F Estimated returns for various price/yield combinations, per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	90.00	bu	-356 -484	-333 -461	-310 -438	-287 -415	-264 -392	-241 -369	-218 -346	-196 -323	-173 -300	-150 -277	-127 -254
60	108.00	bu	-301 -429	-273 -401	-246 -374	-218 -346	-191 -319	-163 -291	-136 -263	-108 -236	-81 -208	-53 -181	-26 -153
70	126.00	bu	-246 -373	-214 -341	-181 -309	-149 -277	-117 -245	-85 -213	-53 -181	-21 -149	10 -116	43 -84	75 -52
80	144.00	bu	-190 -318	-154 -281	-117 -245	-80 -208	-44 -171	-7 -135	29 -98	66 -61	102 -24	139 11	176 48
90	162.00	bu	-135 -263	-94 -222	-53 -180	-11 -139	29 -98	70 -56	112 -15	153 25	194 67	236 108	277 149
100	180.00	bu	-80 -208	-34 -162	11 -116	57 -70	103 -24	149 21	195 67	240 113	286 159	332 204	378 250
110	198.00	bu	-25 -152	25 -102	75 -51	126 -1	176 49	227 99	277 150	328 200	378 251	429 301	479 351
120	216.00	bu	30 -97	85 -42	140 12	195 67	250 122	305 177	360 232	415 287	470 342	525 398	580 453
130	234.00	bu	85 -42	145 17	204 76	264 136	324 196	383 255	443 315	503 375	562 434	622 494	682 554
140	252.00	bu	140 12	204 77	269 141	333 205	397 269	461 334	526 398	590 462	654 526	719 591	783 655
150	270.00	bu	195 68	264 136	333 205	402 274	471 343	540 412	609 481	677 550	746 618	815 687	884 756

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

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

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

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

Table 38.A Estimated costs per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Provisia	oz	0.85	31.0000	26.35	
Aim	oz	5.67	1.0000	5.67	
Permit	oz	21.99	0.7500	16.49	
Regiment	oz	43.56	0.2500	10.89	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Provisia	lb	1.23	77.0000	94.71	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
ADJUVANTS					
Class Act NG	pt	1.75	0.5000	0.88	
MSO	pt	2.40	0.5000	1.20	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
Dyne-A-Pak	pt	5.16	0.2500	1.29	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.5475	8.03	
Harvesters	hour	14.68	0.2030	2.98	
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	14.68	0.5633	8.27	
DIESEL FUEL					
Tractors	gal	1.53	5.9886	9.16	
Harvesters	gal	1.53	3.3975	5.20	
Flood Irr.	gal	1.53	26.8827	41.14	
REPAIR & MAINTENANCE					
Implements	acre	8.97	1.0000	8.97	
Tractors	acre	3.69	1.0000	3.69	
Harvesters	acre	8.36	1.0000	8.36	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	11.74	1.0000	11.74	
TOTAL DIRECT EXPENSES				789.92	
FIXED EXPENSES					
Implements	acre	18.64	1.0000	18.64	
Tractors	acre	22.58	1.0000	22.58	
Harvesters	acre	31.99	1.0000	31.99	
Flood Irr.	acre	42.08	1.0000	42.08	
TOTAL FIXED EXPENSES				115.29	
TOTAL SPECIFIED EXPENSES				905.21	

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

Table 38.B Summary of estimated costs and returns per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	156.0000	795.60	_____

TOTAL INCOME				795.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	104.56	1.0000	104.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	117.04	1.0000	117.04	_____
ADJUVANTS	acre	15.14	1.0000	15.14	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.7506	11.01	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	14.68	0.5633	8.27	_____
DIESEL FUEL	gal	1.53	36.2688	55.50	_____
REPAIR & MAINTENANCE	acre	35.33	1.0000	35.33	_____
INTEREST ON OP. CAP.	acre	11.74	1.0000	11.74	_____

TOTAL DIRECT EXPENSES				789.92	_____
RETURNS ABOVE DIRECT EXPENSES				5.68	_____
TOTAL FIXED EXPENSES				115.29	_____

TOTAL SPECIFIED EXPENSES				905.21	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-109.61	_____

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

Fertilization decisions should be based on soil tests.

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

Table 38.C Estimated resource use for field operations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 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
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Provisia	lb	79.95					1.60	81.55		81.55
Rice Seed Trt/Insect	lbseed	18.85					0.38	19.23		19.23
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
Class Act NG	pt	0.88					0.02	0.90		0.90
MSO	pt	1.20					0.02	1.22		1.22
Seed Levees										
Rice Seed Provisia	lb	14.76					0.30	15.06		15.06
Rice Seed Trt/Insect	lbseed	3.48					0.07	3.55		3.55
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Provisia	oz	13.18					0.26	13.44		13.44
Aim	oz	5.67					0.11	5.78		5.78
Permit	oz	16.49					0.33	16.82		16.82
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Provisia	oz	13.18					0.22	13.40		13.40
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Rice Management										
RICE MGT. LABOR	hour				2.72		0.05	2.77		2.77
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Regiment	oz	10.89					0.15	11.04		11.04
Dyne-A-Pak	pt	1.29					0.02	1.31		1.31
Rice Management										
RICE MGT. LABOR	hour				4.53		0.06	4.59		4.59
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				4.53		0.05	4.58		4.58
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		5.20	11.22	5.66		0.15	22.23	36.30	58.53
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.36	54.96		54.96
Dry Rice	bu	62.40					0.42	62.82		62.82
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	4.50	42.82	15.12	33.79		1.47	97.70	46.79	144.49
TOTALS		619.54	55.50	35.33	67.81	0.00	11.74	789.92	115.29	905.21

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

Fertilization decisions should be based on soil tests.

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

Table 38.E Estimated monthly income and expense flows per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	795.60	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	69.75	13.18	10.89	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	117.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	1.29	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	16.10	9.52	11.33	11.33	11.63	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.81	11.22	11.22	11.22	6.01	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.10	8.20	2.29	2.29	11.74	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.89	2.83	1.09	0.98	0.98	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	249.99	171.40	82.47	98.03	147.36	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-249.99	-171.40	-82.47	-98.03	648.24	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-280.28	-451.68	-534.15	-632.18	16.06	5.68

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 38.F Estimated returns for various price/yield combinations, per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	78.00	bu	-432 -547	-412 -528	-392 -508	-373 -488	-353 -468	-333 -448	-313 -428	-293 -408	-273 -388	-253 -368	-233 -349
60	93.60	bu	-384 -500	-360 -476	-337 -452	-313 -428	-289 -404	-265 -380	-241 -356	-217 -333	-193 -309	-169 -285	-146 -261
70	109.20	bu	-336 -452	-309 -424	-281 -396	-253 -368	-225 -340	-197 -312	-169 -285	-141 -257	-114 -229	-86 -201	-58 -173
80	124.80	bu	-289 -404	-257 -372	-225 -340	-193 -308	-161 -276	-129 -245	-98 -213	-66 -181	-34 -149	-2 -117	29 -86
90	140.40	bu	-241 -356	-205 -320	-169 -284	-133 -248	-97 -213	-62 -177	-26 -141	9 -105	45 -69	81 -34	116 1
100	156.00	bu	-193 -308	-153 -268	-113 -228	-73 -189	-34 -149	5 -109	45 -69	85 -30	125 9	164 49	204 89
110	171.60	bu	-145 -260	-101 -216	-57 -173	-14 -129	29 -85	73 -41	117 1	160 45	204 89	248 133	292 176
120	187.20	bu	-97 -212	-49 -164	-1 -117	45 -69	93 -21	141 25	188 73	236 121	284 169	332 216	379 264
130	202.80	bu	-49 -164	2 -113	53 -61	105 -9	157 42	209 93	260 145	312 197	364 248	415 300	467 352
140	218.40	bu	-1 -116	54 -61	109 -5	165 50	221 105	276 161	332 217	388 272	443 328	499 384	555 439
150	234.00	bu	46 -69	105 -9	165 50	225 109	284 169	344 229	404 288	463 348	523 408	583 467	642 527

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2020 input prices.

Table 39.A Estimated costs per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Provisia	oz	0.85	31.0000	26.35	
Aim	oz	5.67	1.0000	5.67	
Permit	oz	21.99	0.7500	16.49	
Regiment	oz	43.56	0.2500	10.89	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Provisia	lb	1.23	77.0000	94.71	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
ADJUVANTS					
MSO	pt	2.40	0.5000	1.20	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
Dyne-A-Pak	pt	5.16	0.2500	1.29	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.4999	7.33	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.5719	8.51	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	21.9949	33.64	
REPAIR & MAINTENANCE					
Implements	acre	8.50	1.0000	8.50	
Tractors	acre	3.45	1.0000	3.45	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	11.31	1.0000	11.31	
TOTAL DIRECT EXPENSES				757.43	
FIXED EXPENSES					
Implements	acre	17.65	1.0000	17.65	
Tractors	acre	21.12	1.0000	21.12	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.81	1.0000	64.81	
TOTAL FIXED EXPENSES				131.30	
TOTAL SPECIFIED EXPENSES				888.73	

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

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

Table 39.B Summary of estimated costs and returns per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	156.0000	795.60	_____

TOTAL INCOME				795.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	104.56	1.0000	104.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	117.04	1.0000	117.04	_____
ADJUVANTS	acre	15.14	1.0000	15.14	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.6759	9.91	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	30.5114	46.66	_____
REPAIR & MAINTENANCE	acre	33.50	1.0000	33.50	_____
INTEREST ON OP. CAP.	acre	11.31	1.0000	11.31	_____

TOTAL DIRECT EXPENSES				757.43	_____
RETURNS ABOVE DIRECT EXPENSES				38.17	_____
TOTAL FIXED EXPENSES				131.30	_____

TOTAL SPECIFIED EXPENSES				888.73	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-93.13	_____

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

Fertilization decisions should be based on soil tests.

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

Table 39.C Estimated resource use for field operations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 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
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Provisia	lb	79.95					1.60	81.55		81.55
Rice Seed Trt/Insect	lbseed	18.85					0.38	19.23		19.23
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed Provisia	lb	14.76					0.30	15.06		15.06
Rice Seed Trt/Insect	lbseed	3.48					0.07	3.55		3.55
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Provisia	oz	13.18					0.26	13.44		13.44
Aim	oz	5.67					0.11	5.78		5.78
Permit	oz	16.49					0.33	16.82		16.82
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Provisia	oz	13.18					0.22	13.40		13.40
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Regiment	oz	10.89					0.15	11.04		11.04
Dyne-A-Pak	pt	1.29					0.02	1.31		1.31
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.36	54.96		54.96
Dry Rice	bu	62.40					0.42	62.82		62.82
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	2.25	34.67	14.79	22.65		1.16	75.52	67.65	143.17
TOTALS		617.29	46.66	33.50	48.67	0.00	11.31	757.43	131.30	888.73

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

Fertilization decisions should be based on soil tests.

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

Table 39.E Estimated monthly income and expense flows per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	795.60	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	69.75	13.18	10.89	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	117.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	1.29	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	12.07	5.44	6.34	6.34	10.58	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	10.45	8.72	8.72	8.72	5.03	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.25	8.09	2.18	2.18	10.09	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.77	2.72	0.99	0.90	0.96	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	243.38	164.60	74.77	90.35	143.66	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-243.38	-164.60	-74.77	-90.35	651.94	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-273.67	-438.27	-513.04	-603.39	48.55	38.17

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 39.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	78.00	bu	-400	-380	-360	-340	-320	-300	-280	-260	-241	-221	-201
			-531	-511	-491	-471	-451	-432	-412	-392	-372	-352	-332
60	93.60	bu	-352	-328	-304	-280	-256	-232	-209	-185	-161	-137	-113
			-483	-459	-435	-411	-388	-364	-340	-316	-292	-268	-244
70	109.20	bu	-304	-276	-248	-220	-193	-165	-137	-109	-81	-53	-25
			-435	-407	-380	-352	-324	-296	-268	-240	-212	-185	-157
80	124.80	bu	-256	-224	-192	-161	-129	-97	-65	-33	-1	29	61
			-387	-355	-324	-292	-260	-228	-196	-165	-133	-101	-69
90	140.40	bu	-208	-172	-137	-101	-65	-29	6	41	77	113	149
			-339	-304	-268	-232	-196	-160	-125	-89	-53	-17	18
100	156.00	bu	-160	-120	-81	-41	-1	38	77	117	157	197	237
			-292	-252	-212	-172	-132	-93	-53	-13	26	65	105
110	171.60	bu	-112	-69	-25	18	62	105	149	193	237	280	324
			-244	-200	-156	-112	-69	-25	18	62	105	149	193
120	187.20	bu	-64	-17	30	78	125	173	221	269	316	364	412
			-196	-148	-100	-53	-5	42	90	137	185	233	281
130	202.80	bu	-17	34	86	138	189	241	293	344	396	448	500
			-148	-96	-44	6	58	110	161	213	265	317	368
140	218.40	bu	30	86	142	197	253	309	364	420	476	532	587
			-100	-44	10	66	122	177	233	289	345	400	456
150	234.00	bu	78	138	198	257	317	377	436	496	556	615	675
			-52	7	66	126	186	245	305	365	424	484	544

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

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

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

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

Table 40.A Estimated costs per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Provisia	oz	0.85	31.0000	26.35	
Aim	oz	5.67	1.0000	5.67	
Permit	oz	21.99	0.7500	16.49	
Regiment	oz	43.56	0.2500	10.89	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Seed Provisia	lb	1.23	77.0000	94.71	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
ADJUVANTS					
MSO	pt	2.40	0.5000	1.20	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
Dyne-A-Pak	pt	5.16	0.2500	1.29	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.5281	7.74	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	5.8180	8.89	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	18.7364	28.67	
REPAIR & MAINTENANCE					
Implements	acre	8.58	1.0000	8.58	
Tractors	acre	3.59	1.0000	3.59	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	11.23	1.0000	11.23	
TOTAL DIRECT EXPENSES				749.96	
FIXED EXPENSES					
Implements	acre	18.29	1.0000	18.29	
Tractors	acre	21.98	1.0000	21.98	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.48	1.0000	64.48	
TOTAL FIXED EXPENSES				132.47	
TOTAL SPECIFIED EXPENSES				882.43	

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

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

Table 40.B Summary of estimated costs and returns per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	156.0000	795.60	_____

TOTAL INCOME				795.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	104.56	1.0000	104.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	117.04	1.0000	117.04	_____
ADJUVANTS	acre	15.14	1.0000	15.14	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.7041	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	27.4990	42.07	_____
REPAIR & MAINTENANCE	acre	33.37	1.0000	33.37	_____
INTEREST ON OP. CAP.	acre	11.23	1.0000	11.23	_____

TOTAL DIRECT EXPENSES				749.96	_____
RETURNS ABOVE DIRECT EXPENSES				45.64	_____
TOTAL FIXED EXPENSES				132.47	_____

TOTAL SPECIFIED EXPENSES				882.43	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-86.83	_____

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

Fertilization decisions should be based on soil tests.

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

Table 40.C Estimated resource use for field operations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 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
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Provisia	lb	79.95					1.60	81.55		81.55
Rice Seed Trt/Insect	lbseed	18.85					0.38	19.23		19.23
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed Provisia	lb	14.76					0.30	15.06		15.06
Rice Seed Trt/Insect	lbseed	3.48					0.07	3.55		3.55
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Provisia	oz	13.18					0.26	13.44		13.44
Aim	oz	5.67					0.11	5.78		5.78
Permit	oz	16.49					0.33	16.82		16.82
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Provisia	oz	13.18					0.22	13.40		13.40
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Regiment	oz	10.89					0.15	11.04		11.04
Dyne-A-Pak	pt	1.29					0.02	1.31		1.31
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.36	54.96		54.96
Dry Rice	bu	62.40					0.42	62.82		62.82
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre	10.17	30.08	14.66	12.06		1.08	68.05	68.82	136.87
TOTALS		625.21	42.07	33.37	38.08	0.00	11.23	749.96	132.47	882.43

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

Fertilization decisions should be based on soil tests.

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

Table 40.E Estimated monthly income and expense flows per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	795.60	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	69.75	13.18	10.89	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	7.29	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	117.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	1.29	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	9.90	2.72	3.62	3.62	10.32	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	9.50	7.48	7.48	7.48	5.11	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	5.31	8.01	2.10	2.10	10.14	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.87	2.65	0.93	0.86	0.95	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	248.34	160.49	70.67	86.27	143.52	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-248.34	-160.49	-70.67	-86.27	652.08	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-278.63	-439.12	-509.79	-596.06	56.02	45.64

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 40.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2021

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	-----dollars-----										
50	78.00	bu	-392 -525	-372 -505	-352 -485	-333 -465	-313 -445	-293 -425	-273 -405	-253 -385	-233 -366	-213 -346	-193 -326
60	93.60	bu	-344 -477	-320 -453	-297 -429	-273 -405	-249 -381	-225 -357	-201 -334	-177 -310	-153 -286	-130 -262	-106 -238
70	109.20	bu	-296 -429	-269 -401	-241 -373	-213 -345	-185 -318	-157 -290	-129 -262	-102 -234	-74 -206	-46 -178	-18 -150
80	124.80	bu	-249 -381	-217 -349	-185 -317	-153 -286	-121 -254	-89 -222	-58 -190	-26 -158	5 -126	37 -95	69 -63
90	140.40	bu	-201 -333	-165 -297	-129 -262	-93 -226	-57 -190	-22 -154	13 -118	49 -83	85 -47	121 -11	156 24
100	156.00	bu	-153 -285	-113 -245	-73 -206	-33 -166	5 -126	45 -86	85 -47	125 -7	164 32	204 72	244 112
110	171.60	bu	-105 -237	-61 -194	-17 -150	25 -106	69 -62	113 -19	157 24	200 68	244 112	288 155	332 199
120	187.20	bu	-57 -189	-9 -142	37 -94	85 -46	133 0	181 48	228 96	276 144	324 191	372 239	419 287
130	202.80	bu	-9 -142	42 -90	93 -38	145 13	197 64	248 116	300 168	352 219	404 271	455 323	507 375
140	218.40	bu	38 -94	94 -38	149 17	205 72	261 128	316 184	372 239	428 295	483 351	539 407	595 462
150	234.00	bu	86 -46	145 13	205 73	265 132	324 192	384 252	444 311	503 371	563 431	623 490	682 550

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2020 input prices.

Table 41.A Estimated costs per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	
App by Air (10 gal)	appl	9.00	1.0000	9.00	
App by Air (3 gal)	appl	5.50	1.5000	8.25	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.66	0.5000	9.33	
DAP	cwt	20.99	0.5000	10.50	
Urea, Solid (46% N)	cwt	19.74	4.0000	78.96	
NBPT	pt	11.06	0.7500	8.30	
FUNGICIDES					
Flint Extra	oz	8.88	4.7000	41.74	
Tilt 3.6 EC	oz	0.76	10.0000	7.60	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.13	80.0000	10.40	
2,4-D Amine 4	pt	2.25	2.0000	4.50	
Command 3ME	pt	18.17	1.0000	18.17	
Sharpen	oz	6.04	2.0000	12.08	
Provisia	oz	0.85	31.0000	26.35	
Aim	oz	5.67	1.0000	5.67	
Permit	oz	21.99	0.7500	16.49	
Regiment	oz	43.56	0.2500	10.89	
INSECTICIDES					
Warrior ZT	oz	2.43	3.0000	7.29	
SEED/PLANTS					
Rice Seed Provisia	lb	1.23	77.0000	94.71	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
ADJUVANTS					
MSO	pt	2.40	0.5000	1.20	
Class Act NG	pt	1.75	0.5000	0.88	
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	
Dyne-A-Pak	pt	5.16	0.2500	1.29	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	
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	14.68	0.4228	6.20	
Harvesters	hour	14.68	0.1760	2.58	
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	14.69	0.5389	7.92	
DIESEL FUEL					
Tractors	gal	1.53	4.8970	7.48	
Harvesters	gal	1.53	2.9444	4.51	
Flood Irr.	gal	1.53	15.4779	23.68	
REPAIR & MAINTENANCE					
Implements	acre	8.40	1.0000	8.40	
Tractors	acre	3.07	1.0000	3.07	
Harvesters	acre	7.24	1.0000	7.24	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	10.83	1.0000	10.83	
TOTAL DIRECT EXPENSES				727.60	
FIXED EXPENSES					
Implements	acre	17.16	1.0000	17.16	
Tractors	acre	18.77	1.0000	18.77	
Harvesters	acre	27.72	1.0000	27.72	
Flood Irr.	acre	64.16	1.0000	64.16	
TOTAL FIXED EXPENSES				127.81	
TOTAL SPECIFIED EXPENSES				855.41	

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

Fertilization decisions should be based on soil tests.

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

Table 41.B Summary of estimated costs and returns per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.10	156.0000	795.60	_____

TOTAL INCOME				795.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	107.09	1.0000	107.09	_____
FUNGICIDES	acre	49.34	1.0000	49.34	_____
HERBICIDES	acre	104.56	1.0000	104.56	_____
INSECTICIDES	acre	7.29	1.0000	7.29	_____
SEED/PLANTS	acre	117.04	1.0000	117.04	_____
ADJUVANTS	acre	15.14	1.0000	15.14	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
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	14.68	0.5988	8.78	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	14.69	0.5389	7.92	_____
DIESEL FUEL	gal	1.53	23.3194	35.67	_____
REPAIR & MAINTENANCE	acre	30.51	1.0000	30.51	_____
INTEREST ON OP. CAP.	acre	10.83	1.0000	10.83	_____

TOTAL DIRECT EXPENSES				727.60	_____
RETURNS ABOVE DIRECT EXPENSES				68.00	_____
TOTAL FIXED EXPENSES				127.81	_____

TOTAL SPECIFIED EXPENSES				855.41	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-59.81	_____

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

Fertilization decisions should be based on soil tests.

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

Table 41.C Estimated resource use for field operations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
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				
Flint Extra	oz					4.7000				
Tilt 3.6 EC	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	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 2020 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
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.13	3.46		3.46
Field Cultivate Fld	32'		1.65	1.69	2.60		0.24	6.18	8.28	14.46
Harrow - Folding	40'		0.69	0.57	1.08		0.09	2.43	2.14	4.57
App by Air (5 gal)	appl	7.00					0.19	7.19		7.19
Glyphosate 3lbs a.e	oz	6.24					0.17	6.41		6.41
2,4-D Amine 4	pt	4.50					0.12	4.62		4.62
Grain Drill	24'		1.39	2.54	2.90		0.14	6.97	7.12	14.09
Rice Seed Provisia	lb	79.95					1.60	81.55		81.55
Rice Seed Trt/Insect	lbseed	18.85					0.38	19.23		19.23
Roller/Cultipacker	30'		0.88	0.53	1.39		0.06	2.86	2.43	5.29
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Glyphosate 3lbs a.e	oz	4.16					0.08	4.24		4.24
Command 3ME	pt	18.17					0.36	18.53		18.53
Sharpen	oz	12.08					0.24	12.32		12.32
MSO	pt	1.20					0.02	1.22		1.22
Class Act NG	pt	0.88					0.02	0.90		0.90
Seed Levees										
Rice Seed Provisia	lb	14.76					0.30	15.06		15.06
Rice Seed Trt/Insect	lbseed	3.48					0.07	3.55		3.55
App by Air (5 gal)	appl	7.00					0.14	7.14		7.14
Provisia	oz	13.18					0.26	13.44		13.44
Aim	oz	5.67					0.11	5.78		5.78
Permit	oz	16.49					0.33	16.82		16.82
Crop Oil Conc.(Pet.)	pt	5.72					0.11	5.83		5.83
App Fert by Air	cwt	7.50					0.13	7.63		7.63
Amm Sulfate (21% N)	cwt	9.33					0.16	9.49		9.49
DAP	cwt	10.50					0.18	10.68		10.68
Rice Consultant	acre	8.00					0.13	8.13		8.13
App Fert by Air	cwt	18.75					0.31	19.06		19.06
Urea, Solid (46% N)	cwt	49.35					0.82	50.17		50.17
NBPT	pt	8.30					0.14	8.44		8.44
App by Air (10 gal)	appl	9.00					0.15	9.15		9.15
Provisia	oz	13.18					0.22	13.40		13.40
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.05	3.55		3.55
Regiment	oz	10.89					0.15	11.04		11.04
Dyne-A-Pak	pt	1.29					0.02	1.31		1.31
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.15	11.40		11.40
Urea, Solid (46% N)	cwt	29.61					0.39	30.00		30.00
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.07	7.07		7.07
Flint Extra	oz	41.74					0.42	42.16		42.16
Tilt 3.6 EC	oz	7.60					0.08	7.68		7.68
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.25					0.08	8.33		8.33
Warrior ZT	oz	7.29					0.07	7.36		7.36
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		4.51	9.72	4.91		0.13	19.27	31.45	50.72
Grain Cart Rice	700 bu		0.19	0.21	0.31			0.71	0.71	1.42
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.36	54.96		54.96
Dry Rice	bu	62.40					0.42	62.82		62.82
Disk Heavy	28'		2.68	3.45	4.22		0.03	10.38	11.52	21.90
Flood Irr.	acre		23.68	11.80	9.53		0.68	45.69	64.16	109.85
TOTALS		615.04	35.67	30.51	35.55	0.00	10.83	727.60	127.81	855.41

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

Fertilization decisions should be based on soil tests.

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

Table 41.E Estimated monthly income and expense flows per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	795.60	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.48	29.61	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	49.34	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.74	0.00	69.75	13.18	10.89	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	7.29	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	117.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.80	5.72	1.29	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	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	3.68	0.00	0.00	0.00	0.00	0.00	7.01	3.18	4.08	4.08	9.30	4.22
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	2.34	0.00	0.00	0.00	0.00	0.00	7.26	6.23	6.23	6.23	4.70	2.68
REPAIR & MAINTENANCE	2.26	0.00	0.00	0.00	0.00	0.00	4.31	7.46	1.55	1.55	9.93	3.45
INTEREST ON OP. CAP.	0.46	0.00	0.00	0.00	0.48	0.00	4.54	2.63	0.91	0.84	0.94	0.03
TOTAL DIRECT EXPENSES	12.07	0.00	0.00	0.00	18.22	0.00	231.71	159.13	69.31	84.91	141.87	10.38
NET INCOME	-12.07	0.00	0.00	0.00	-18.22	0.00	-231.71	-159.13	-69.31	-84.91	653.73	-10.38
NET INCOME TO DATE	-12.07	-12.07	-12.07	-12.07	-30.29	-30.29	-262.00	-421.13	-490.44	-575.35	78.38	68.00

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 41.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.82	4.08	4.33	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-370	-350	-330	-310	-290	-270	-251	-231	-211	-191	-171
			-498	-478	-458	-438	-418	-398	-378	-358	-339	-319	-299
60	93.60	bu	-322	-298	-274	-250	-226	-203	-179	-155	-131	-107	-83
			-450	-426	-402	-378	-354	-330	-307	-283	-259	-235	-211
70	109.20	bu	-274	-246	-218	-191	-163	-135	-107	-79	-51	-23	3
			-402	-374	-346	-318	-291	-263	-235	-207	-179	-151	-123
80	124.80	bu	-226	-194	-163	-131	-99	-67	-35	-3	27	59	91
			-354	-322	-290	-259	-227	-195	-163	-131	-99	-68	-36
90	140.40	bu	-178	-142	-107	-71	-35	0	36	71	107	143	179
			-306	-270	-234	-199	-163	-127	-91	-55	-20	15	51
100	156.00	bu	-130	-91	-51	-11	28	68	107	147	187	227	266
			-258	-218	-179	-139	-99	-59	-20	19	59	99	139
110	171.60	bu	-83	-39	4	48	92	135	179	223	267	310	354
			-210	-167	-123	-79	-35	7	51	95	139	183	226
120	187.20	bu	-35	12	60	108	155	203	251	299	346	394	442
			-162	-115	-67	-19	28	75	123	171	218	266	314
130	202.80	bu	12	64	116	167	219	271	323	374	426	478	529
			-115	-63	-11	40	91	143	195	246	298	350	402
140	218.40	bu	60	116	172	227	283	339	394	450	506	561	617
			-67	-11	44	99	155	211	267	322	378	434	489
150	234.00	bu	108	168	227	287	347	406	466	526	585	645	705
			-19	40	100	159	219	279	338	398	458	517	577

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2020 input prices.

Table 42.A Estimated costs per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2021

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

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 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 42.B Summary of estimated costs and returns per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____

TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	_____
HERBICIDES	acre	84.79	1.0000	84.79	_____
INSECTICIDES	acre	17.15	1.0000	17.15	_____
SEED/PLANTS	acre	108.75	1.0000	108.75	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
INOCULANT	acre	7.84	1.0000	7.84	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	14.68	1.8229	26.76	_____
UNALLOCATED LABOR	hour	14.70	1.4583	21.45	_____
DIESEL FUEL	gal	1.53	19.5748	29.92	_____
REPAIR & MAINTENANCE	acre	26.39	1.0000	26.39	_____
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	_____

TOTAL DIRECT EXPENSES				523.92	_____
RETURNS ABOVE DIRECT EXPENSES				236.08	_____
TOTAL FIXED EXPENSES				123.72	_____

TOTAL SPECIFIED EXPENSES				647.64	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				112.36	_____

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 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 42.C Estimated resource use for field operations, per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Plt&Pre Rigid	8R-38	MFWD 225	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	4R-38	MFWD 190	0.186	1.00	Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep		0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.82	1.62	2.04	1.45

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

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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 42.D Estimated costs for field operations, per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Glyphosate 3lbs a.e	pt	8.44					0.17	8.61		8.61
Lime (Spread)	ton	15.80					0.32	16.12		16.12
Bed-Rip/Disk Fold.	8R-38		1.09	0.61	1.93		0.06	3.69	3.47	7.16
Peanut Plt&Pre Rigid	8R-38		2.14	2.95	4.28		0.16	9.53	9.17	18.70
Peanut Seed	lb	108.75					1.81	110.56		110.56
Optimize LIFT	oz	7.84					0.13	7.97		7.97
Admire Pro	oz	16.20					0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33					0.22	13.55		13.55
Valor SX	oz	13.53					0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13			0.24	0.33	0.57
Acephate 90%	lb	0.95					0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Storm	pt	17.87					0.24	18.11		18.11
Cadre	oz	11.60					0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64					0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80					0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64					0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Select Max	pt	12.74					0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30					0.05	5.35		5.35
Tebuconazole 3.6	oz	5.11					0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.99	1.30	2.29
Bravo Weather Stick	pt	7.95					0.03	7.98		7.98
Peanut Dig/Invertor	4R-38		2.79	2.68	4.92		0.03	10.42	8.67	19.09
Peanut Harvester	4R-38		16.56	15.01	24.70		0.19	56.46	72.44	128.90
Dry Peanuts	ton	27.36					0.09	27.45		27.45
Cleaning Peanuts	ton	29.16					0.10	29.26		29.26
Peanut Dump Cart	6-Row		4.64	2.89	8.19		0.05	15.77	15.34	31.11
TOTALS		411.72	29.92	26.39	50.20	0.00	5.69	523.92	123.72	647.64

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

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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 42.E Estimated monthly income and expense flows per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	6.89	1.10	2.20	1.10	38.36
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.24	3.53	0.48	0.96	0.48	24.23
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.81	0.40	0.80	0.40	20.78
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.92	0.65	0.76	0.29	0.49
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	177.75	49.49	76.05	43.16	148.33
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-177.75	-49.49	-76.05	-43.16	611.67
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-206.89	-256.38	-332.43	-375.59	236.08

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

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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 42.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2021

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

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2020 input prices.

Table 43.A Estimated costs per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
 All Areas, Mississippi, 2021

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

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

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

Soil test cost is prorated for a test every 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 43.B Summary of estimated costs and returns per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____

TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	_____
HERBICIDES	acre	84.79	1.0000	84.79	_____
INSECTICIDES	acre	17.15	1.0000	17.15	_____
SEED/PLANTS	acre	108.75	1.0000	108.75	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
INOCULANT	acre	15.69	1.0000	15.69	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	14.68	1.8229	26.76	_____
UNALLOCATED LABOR	hour	14.70	1.4583	21.45	_____
DIESEL FUEL	gal	1.53	19.5748	29.92	_____
REPAIR & MAINTENANCE	acre	30.14	1.0000	30.14	_____
INTEREST ON OP. CAP.	acre	5.88	1.0000	5.88	_____

TOTAL DIRECT EXPENSES				535.71	_____
RETURNS ABOVE DIRECT EXPENSES				224.29	_____
TOTAL FIXED EXPENSES				130.55	_____

TOTAL SPECIFIED EXPENSES				666.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				93.74	_____

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 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 43.C Estimated resource use for field operations, per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
 All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Rigid	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Ptl&PreTwin	8R-30/40	MFWD 225	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					29.6000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	4R-38	MFWD 190	0.186	1.00	Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep		0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.82	1.62	2.04	1.45

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

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

Soil test cost is prorated for a test every 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 43.D Estimated costs for field operations, per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
 All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Glyphosate 3lbs a.e	pt	8.44					0.17	8.61		8.61
Lime (Spread)	ton	15.80					0.32	16.12		16.12
Bed-Rip/Disk Rigid	8R-38		1.09	0.59	1.93		0.06	3.67	3.35	7.02
Peanut Ptl&PreTwin	8R-30/40		2.14	6.72	4.28		0.22	13.36	16.12	29.48
Peanut Seed	lb	108.75					1.81	110.56		110.56
Optimize LIFT	oz	15.69					0.26	15.95		15.95
Admire Pro	oz	16.20					0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33					0.22	13.55		13.55
Valor SX	oz	13.53					0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13			0.24	0.33	0.57
Acephate 90%	lb	0.95					0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Storm	pt	17.87					0.24	18.11		18.11
Cadre	oz	11.60					0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64					0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80					0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64					0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Select Max	pt	12.74					0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30					0.05	5.35		5.35
Tebuconazole 3.6	oz	5.11					0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.99	1.30	2.29
Bravo Weather Stick	pt	7.95					0.03	7.98		7.98
Peanut Dig/Invertor	4R-38		2.79	2.68	4.92		0.03	10.42	8.67	19.09
Peanut Harvester	4R-38		16.56	15.01	24.70		0.19	56.46	72.44	128.90
Dry Peanuts	ton	27.36					0.09	27.45		27.45
Cleaning Peanuts	ton	29.16					0.10	29.26		29.26
Peanut Dump Cart	6-Row		4.64	2.89	8.19		0.05	15.77	15.34	31.11
TOTALS		419.57	29.92	30.14	50.20	0.00	5.88	535.71	130.55	666.26

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

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

Soil test cost is prorated for a test every 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 43.E Estimated monthly income and expense flows per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
 All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.69	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	6.89	1.10	2.20	1.10	38.36
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.24	3.53	0.48	0.96	0.48	24.23
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	7.56	0.40	0.80	0.40	20.78
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	3.11	0.65	0.76	0.29	0.49
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	189.54	49.49	76.05	43.16	148.33
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-189.54	-49.49	-76.05	-43.16	611.67
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-218.68	-268.17	-344.22	-387.38	224.29

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

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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 43.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2021

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

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2020 input prices.

Table 44.A Estimated costs per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2021

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

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

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

Soil test cost is prorated for a test every 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 44.B Summary of estimated costs and returns per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____

TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	_____
HERBICIDES	acre	84.79	1.0000	84.79	_____
INSECTICIDES	acre	17.15	1.0000	17.15	_____
SEED/PLANTS	acre	108.75	1.0000	108.75	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
INOCULANT	acre	7.84	1.0000	7.84	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	14.68	1.3840	20.33	_____
UNALLOCATED LABOR	hour	14.70	1.1072	16.28	_____
DIESEL FUEL	gal	1.53	14.7349	22.51	_____
REPAIR & MAINTENANCE	acre	20.57	1.0000	20.57	_____
INTEREST ON OP. CAP.	acre	5.56	1.0000	5.56	_____

TOTAL DIRECT EXPENSES				498.60	_____
RETURNS ABOVE DIRECT EXPENSES				261.40	_____
TOTAL FIXED EXPENSES				98.45	_____

TOTAL SPECIFIED EXPENSES				597.05	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				162.95	_____

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 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 44.C Estimated resource use for field operations, per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 225	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.38	1.18	1.56	1.10

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

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

Soil test cost is prorated for a test every 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 44.D Estimated costs for field operations, per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Glyphosate 3lbs a.e	pt	8.44					0.17	8.61		8.61
Lime (Spread)	ton	15.80					0.32	16.12		16.12
Bed-Rip/Disk Fold.	12R-38		0.82	0.50	1.22		0.04	2.58	2.75	5.33
Peanut Plt&Pre Fold.	12R-38		1.42	3.39	2.85		0.13	7.79	8.72	16.51
Peanut Seed	lb	108.75					1.81	110.56		110.56
Optimize LIFT	oz	7.84					0.13	7.97		7.97
Admire Pro	oz	16.20					0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33					0.22	13.55		13.55
Valor SX	oz	13.53					0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13			0.24	0.33	0.57
Acephate 90%	lb	0.95					0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Storm	pt	17.87					0.24	18.11		18.11
Cadre	oz	11.60					0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64					0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80					0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64					0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Select Max	pt	12.74					0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30					0.05	5.35		5.35
Tebuconazole 3.6	oz	5.11					0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.99	1.30	2.29
Bravo Weather Stick	pt	7.95					0.03	7.98		7.98
Peanut Dig/Invertor	6R-38		1.86	1.79	3.28		0.02	6.95	6.29	13.24
Peanut Harvester	6R-38		11.07	9.75	16.52		0.12	37.46	50.72	88.18
Dry Peanuts	ton	27.36					0.09	27.45		27.45
Cleaning Peanuts	ton	29.16					0.10	29.26		29.26
Peanut Dump Cart	6-Row		4.64	2.89	8.19		0.05	15.77	15.34	31.11
TOTALS		411.72	22.51	20.57	38.24	0.00	5.56	498.60	98.45	597.05

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

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

Soil test cost is prorated for a test every 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 44.E Estimated monthly income and expense flows per acre
 Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	4.75	1.10	2.20	1.10	28.54
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.24	2.54	0.48	0.96	0.48	17.81
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	4.14	0.40	0.80	0.40	14.63
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.87	0.65	0.76	0.29	0.41
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	174.90	49.49	76.05	43.16	125.86
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-174.90	-49.49	-76.05	-43.16	634.14
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-204.04	-253.53	-329.58	-372.74	261.40

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

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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 44.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2021

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

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2020 input prices.

Table 45.A Estimated costs per acre
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2021

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

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

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

Soil test cost is prorated for a test every 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 45.B Summary of estimated costs and returns per acre
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	2.2000	880.00	_____

TOTAL INCOME				880.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	_____
HERBICIDES	acre	84.79	1.0000	84.79	_____
INSECTICIDES	acre	17.15	1.0000	17.15	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	108.75	1.0000	108.75	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	33.66	1.0000	33.66	_____
DRYING	acre	31.68	1.0000	31.68	_____
CUSTOM LIME	acre	15.80	1.0000	15.80	_____
INOCULANT	acre	7.84	1.0000	7.84	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	14.68	1.4625	21.49	_____
UNALLOCATED LABOR	hour	14.70	1.1072	16.28	_____
DIESEL FUEL	gal	1.53	25.2367	38.59	_____
REPAIR & MAINTENANCE	acre	28.35	1.0000	28.35	_____
INTEREST ON OP. CAP.	acre	6.08	1.0000	6.08	_____

TOTAL DIRECT EXPENSES				544.41	_____
RETURNS ABOVE DIRECT EXPENSES				335.59	_____
TOTAL FIXED EXPENSES				154.17	_____

TOTAL SPECIFIED EXPENSES				698.58	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				181.42	_____

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 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 45.C Estimated resource use for field operations, per acre
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 225	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.3200				
Cleaning Peanuts	ton					1.8700				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
Irrigate Peanuts	acre				Jan	1.0000	0.07	0.07	0.46	
TOTALS							1.46	1.26	2.02	1.10

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

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

Soil test cost is prorated for a test every 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 45.D Estimated costs for field operations, per acre
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Glyphosate 3lbs a.e	pt	8.44					0.17	8.61		8.61
Lime (Spread)	ton	15.80					0.32	16.12		16.12
Bed-Rip/Disk Fold.	12R-38		0.82	0.50	1.22		0.04	2.58	2.75	5.33
Peanut Plt&Pre Fold.	12R-38		1.42	3.39	2.85		0.13	7.79	8.72	16.51
Peanut Seed	lb	108.75					1.81	110.56		110.56
Optimize LIFT	oz	7.84					0.13	7.97		7.97
Admire Pro	oz	16.20					0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33					0.22	13.55		13.55
Valor SX	oz	13.53					0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13			0.24	0.33	0.57
Acephate 90%	lb	0.95					0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Storm	pt	17.87					0.24	18.11		18.11
Cadre	oz	11.60					0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64					0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80					0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64					0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Select Max	pt	12.74					0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30					0.05	5.35		5.35
Tebuconazole 3.6	oz	5.11					0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.99	1.30	2.29
Bravo Weather Stick	pt	7.95					0.03	7.98		7.98
Peanut Dig/Invertor	6R-38		1.86	1.79	3.28		0.02	6.95	6.29	13.24
Peanut Harvester	6R-38		11.07	9.75	16.52		0.12	37.46	50.72	88.18
Dry Peanuts	ton	31.68					0.11	31.79		31.79
Cleaning Peanuts	ton	33.66					0.11	33.77		33.77
Peanut Dump Cart	6-Row		4.64	2.89	8.19		0.05	15.77	15.34	31.11
Irrigate Peanuts	acre	7.92	16.08	7.78	4.69		0.49	36.96	55.72	92.68
TOTALS		428.46	38.59	28.35	42.93	0.00	6.08	544.41	154.17	698.58

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

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

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 45.E Estimated monthly income and expense flows per acre
 Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	880.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.66
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.68
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.56	0.00	0.00	0.00	0.00	0.00	0.78	7.11	1.33	2.66	1.95	28.54
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.57	0.00	0.00	0.00	0.00	0.00	0.24	2.84	4.22	8.44	4.47	17.81
REPAIR & MAINTENANCE	0.30	0.00	0.00	0.00	0.00	0.00	0.20	7.27	1.45	2.90	1.60	14.63
INTEREST ON OP. CAP.	0.06	0.00	0.00	0.00	0.00	0.00	0.58	3.10	0.71	0.86	0.33	0.44
TOTAL DIRECT EXPENSES	1.49	0.00	0.00	0.00	0.00	0.00	29.37	188.84	54.57	86.19	49.24	134.71
NET INCOME	-1.49	0.00	0.00	0.00	0.00	0.00	-29.37	-188.84	-54.57	-86.19	-49.24	745.29
NET INCOME TO DATE	-1.49	-1.49	-1.49	-1.49	-1.49	-1.49	-30.86	-219.70	-274.27	-360.46	-409.70	335.59

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

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 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 45.F Estimated returns for various price/yield combinations, per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2021

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

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

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

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

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

APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2021

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (250-299 hp)	265 hp	391,000	300	8	13.64	14.68	20.86	40.72	76.27	155.91	232.19
Combine (300-349 hp)	325 hp	395,000	300	8	16.73	14.68	25.59	41.14	81.42	157.50	238.93
Combine (350-399 hp)	355 hp	401,000	300	8	18.27	14.68	27.95	41.77	84.40	159.90	244.30
Combine (400-449 hp)	425 hp	436,000	300	8	21.87	14.68	33.47	45.41	93.56	173.85	267.42
Combine (450-499hp)	475 hp	462,000	300	8	24.44	14.68	37.40	48.12	100.21	184.22	284.43
Tractor (20-39hp)CB	MFWD 30	30,100	600	8	1.54	14.68	2.36	0.94	17.98	5.46	23.44
Tractor (20-39hp)RB	MFWD 30	20,700	600	8	1.54	14.68	2.36	0.64	17.68	3.75	21.44
Tractor (40-59hp)CB	2WD 50	30,900	600	8	2.57	14.68	3.93	0.96	19.58	5.61	25.19
Tractor (40-59hp)CB	MFWD 50	41,400	600	8	2.57	14.68	3.93	1.29	19.91	7.51	27.43
Tractor (40-59hp)RB	2WD 50	21,700	600	8	2.57	14.68	3.93	0.67	19.29	3.94	23.23
Tractor (40-59hp)RB	MFWD 50	27,200	600	8	2.57	14.68	3.93	0.85	19.46	4.93	24.40
Tractor (60-89hp)CB	2WD 75	53,200	600	8	3.86	14.68	5.90	1.66	22.24	9.66	31.91
Tractor (60-89hp)CB	MFWD 75	57,600	600	8	3.86	14.68	5.90	1.80	22.38	10.46	32.84
Tractor (60-89hp)RB	2WD 75	38,400	600	8	3.86	14.68	5.90	1.20	21.78	6.97	28.76
Tractor (60-89hp)RB	MFWD 75	41,800	600	8	3.86	14.68	5.90	1.30	21.89	7.59	29.48
Tractor (90-119hp)CB	2WD 105	71,200	600	8	5.40	14.68	8.26	2.22	25.17	12.93	38.10
Tractor (90-119hp)CB	MFWD 105	91,700	600	8	5.40	14.68	8.26	2.86	25.81	16.65	42.46
Tractor (90-119hp)RB	2WD 105	64,600	600	8	5.40	14.68	8.26	2.01	24.96	11.73	36.69
Tractor (90-119hp)RB	MFWD 105	71,900	600	8	5.40	14.68	8.26	2.24	25.19	13.05	38.25
Tractor (120-139hp)CB	2WD 130	113,000	600	8	6.69	14.68	10.23	3.53	28.44	20.52	48.97
Tractor (120-139hp)CB	MFWD 130	126,000	600	8	6.69	14.68	10.23	3.93	28.85	22.88	51.73
Tractor (140-159hp)	2WD 150	111,000	600	8	7.72	14.68	11.81	3.46	29.96	20.15	50.12
Tractor (140-159hp)CB	MFWD 150	143,000	600	8	7.72	14.68	11.81	4.46	30.96	25.97	56.93
Tractor (160-179hp)CB	MFWD 170	160,000	600	8	8.75	14.68	13.38	5.00	33.06	30.47	63.54
Tractor (180-199hp)CB	MFWD 190	194,000	600	8	9.77	14.68	14.96	6.06	35.70	36.95	72.66
Tractor (200-249hp)CB	MFWD 225	233,000	600	8	11.58	14.68	17.71	7.28	39.68	44.38	84.06
Tractor (250-349hp)CB	4WD 300	314,000	600	8	15.44	14.68	23.62	9.81	48.11	59.81	107.93
Tractor (250-349hp)CB	MFWD 300	321,000	600	8	15.44	14.68	23.62	10.03	48.33	61.14	109.48
Tractor (250-349hp)CB	Track 300	329,000	600	8	15.44	14.68	23.62	10.28	48.58	62.67	111.25
Tractor (350-449hp)	Track 400	453,000	600	8	20.58	14.68	31.50	14.15	60.33	86.29	146.63
Tractor (350-449hp)CB	4WD 400	366,000	600	8	20.58	14.68	31.50	11.43	57.61	69.72	127.33
Tractor (450-550hp)CB	4WD 500	412,000	600	8	25.73	14.68	39.37	12.87	66.93	78.48	145.41
Tractor (450-550hp)CB	Track 500	470,000	600	8	25.73	14.68	39.37	14.68	68.74	89.53	158.27
Utility Vehicle	800 CC	12,200	200	8	0.70	14.68	1.32	1.90	17.90	7.29	25.20
Utility Vehicle	900 CC	15,800	200	8	1.00	14.68	1.89	2.46	19.03	9.45	28.48

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2021

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

Notes:

Labor: includes allocated labor plus any additional labor from self-propelled machine.

Direct: Does not include interest on operating capital.

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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	---Fixed--- Imp. P.U.	Total Cost
			dollars	hours	years	hr/ac				\$/acre		
Bed-Paratill w/ro	4R-30	MFWD 225	18,700	150	12	0.204	2.99	3.62	1.37	1.48	9.48	20.85
Bed-Paratill w/ro	4R-38	MFWD 225	18,700	150	12	0.160	2.36	2.85	1.08	1.17	7.47	16.42
Bed-Paratill w/ro	6R-38	MFWD 225	25,500	150	12	0.107	1.57	1.90	0.99	0.78	5.25	11.68
Bed-Rip/Disk Fold.	8R-38	MFWD 190	46,900	300	20	0.073	1.07	1.09	0.17	0.44	2.78	6.24
Bed-Rip/Disk Fold.	12R-30	MFWD 225	67,900	300	20	0.061	0.90	1.09	0.20	0.44	2.65	6.32
Bed-Rip/Disk Fold.	12R-38	MFWD 225	67,900	300	20	0.046	0.67	0.81	0.15	0.33	1.99	4.74
Bed-Rip/Disk Rigid	4R-30	MFWD 190	21,300	300	20	0.184	2.71	2.76	0.19	1.12	6.79	14.51
Bed-Rip/Disk Rigid	4R-38	MFWD 190	21,300	300	20	0.146	2.15	2.19	0.15	0.88	5.39	11.51
Bed-Rip/Disk Rigid	6R-30	MFWD 190	29,700	300	20	0.123	1.80	1.84	0.18	0.74	4.58	9.95
Bed-Rip/Disk Rigid	6R-38	MFWD 190	29,700	300	20	0.097	1.42	1.45	0.14	0.58	3.61	7.86
Bed-Rip/Disk Rigid	8R-30	MFWD 190	39,800	300	20	0.139	2.04	2.07	0.27	0.84	5.23	11.61
Bed-Rip/Disk Rigid	8R-38	MFWD 190	39,800	300	20	0.073	1.07	1.09	0.14	0.44	2.75	6.10
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	24,800	150	12	0.107	1.57	1.90	0.96	0.78	5.23	11.60
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	33,000	150	12	0.080	1.18	1.43	0.96	0.58	4.16	9.35
Bed-Subsoil Fold	8R-38	MFWD 225	46,900	150	12	0.080	1.18	1.43	1.36	0.58	4.57	10.43
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	67,900	150	12	0.053	0.78	0.95	1.31	0.39	3.45	8.03
Bed-Subsoil Fold	12R-38	MFWD 225	67,900	150	12	0.053	0.78	0.95	1.31	0.39	3.45	8.03
Bed-Subsoil Rigid	4R-30	MFWD 225	17,500	150	12	0.204	2.99	3.62	1.29	1.48	9.39	20.62
Bed-Subsoil Rigid	4R-38	MFWD 225	16,800	150	12	0.160	2.36	2.85	0.97	1.17	7.36	16.12
Bed-Subsoil Rigid	6R-30	MFWD 225	24,300	150	12	0.136	1.99	2.41	1.19	0.99	6.60	14.63
Bed-Subsoil Rigid	6R-38	MFWD 225	25,300	150	12	0.107	1.57	1.90	0.98	0.78	5.24	11.66
Bed-Subsoil Rigid	8R-30	MFWD 225	32,500	150	12	0.102	1.49	1.81	1.19	0.74	5.25	11.78
Bed-Subsoil Rigid	8R-38	MFWD 225	33,600	150	12	0.080	1.18	1.43	0.97	0.58	4.18	9.40
Bed/Disk (Hipper)	4R-38	MFWD 150	10,500	160	10	0.147	2.16	1.74	0.38	0.65	4.95	9.78
Bed/Disk (Hipper)	6R-38	MFWD 170	16,200	160	10	0.098	1.44	1.32	0.39	0.49	3.66	7.68
Bed/Disk (Hipper)	8R-30	MFWD 190	20,800	160	10	0.093	1.37	1.40	0.48	0.56	3.83	8.54
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	51,400	160	10	0.049	0.72	0.73	0.63	0.29	2.39	5.83
Bed/Disk (Hipper)	12R-30	MFWD 225	40,100	160	10	0.062	0.91	1.10	0.62	0.45	3.10	7.47
Bed/Disk (Hipper)	12R-38	MFWD 225	51,400	160	10	0.049	0.72	0.87	0.63	0.35	2.59	6.39
Bed/Disk (Hipper)	16R40	MFWD 300	60,800	160	10	0.035	0.51	0.83	0.53	0.35	2.24	5.78
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	22,000	160	10	0.074	1.08	1.10	0.40	0.44	3.05	6.83
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	19,700	160	10	0.074	1.08	1.10	0.36	0.44	3.01	6.68
Bed/Disk w/roller	8R-30	MFWD 190	26,900	160	10	0.093	1.37	1.40	0.63	0.56	3.97	9.04
Bed/Disk w/roller	8R-38	MFWD 190	30,800	160	10	0.074	1.08	1.10	0.57	0.44	3.21	7.41
Bed/Disk w/roller	12R-30/40	MFWD 225	50,900	160	10	0.062	0.91	1.10	0.79	0.45	3.27	8.07
Bed/Lister	4R-38	MFWD 150	18,100	160	8	0.228	3.35	2.69	0.96	1.02	8.03	16.92
Bed/Lister	6R-38	MFWD 150	20,400	160	8	0.120	1.76	1.41	0.57	0.53	4.29	9.16
Bed/Lister	8R-30	MFWD 190	24,900	160	8	0.114	1.67	1.70	0.66	0.69	4.74	10.99
Bed/Lister	8R-38	MFWD 190	25,000	160	8	0.090	1.32	1.35	0.52	0.54	3.75	8.70
Bed/Lister	8R-38 2x1	MFWD 190	40,400	160	8	0.060	0.88	0.89	0.56	0.36	2.71	6.67
Bed/Lister	12R-38	MFWD 225	40,400	160	8	0.060	0.88	1.06	0.56	0.43	2.95	7.35
Bed/Lister	16R-30	MFWD 225	54,700	160	8	0.035	0.51	0.62	0.45	0.25	1.84	4.77
Bed/Lister	16R40	MFWD 300	57,000	160	8	0.043	0.63	1.01	0.57	0.43	2.65	7.04
Bed/Lister-Roll-Fo	8R-38	MFWD 190	24,300	160	10	0.095	1.40	1.43	0.58	0.58	4.00	9.03
Bed/Lister-Roll-Fo	12R-30	MFWD 225	37,800	160	10	0.080	1.18	1.43	0.76	0.58	3.97	9.51
Bed/Lister-Roll-Fo	12R-38	MFWD 225	36,700	160	10	0.063	0.93	1.13	0.58	0.46	3.11	7.44
Bed/Lister-Roll-Fo	16R-30	MFWD 225	48,700	160	10	0.060	0.89	1.07	0.73	0.44	3.14	7.72
Bed/Lister-Roll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.40	1.43	0.59	0.58	4.02	9.09
Blade-Box	6'-7'	MFWD 105	1,470	200	20	0.020	0.29	0.16	0.01	0.04	0.51	0.78
Blade-Box	8'-10'	MFWD 105	3,830	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	12'-16'	MFWD 105	6,190	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'-7'	MFWD 105	1,270	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	8'-10'	MFWD 105	3,870	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	12'-16'	MFWD 105	9,810	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-38(250)	MFWD 190	30,500	200	10	0.257	3.78	3.85	1.96	1.56	11.16	24.54
Boll Buggy	4R-38(350)	MFWD 190	30,500	200	10	0.257	3.78	3.85	1.96	1.56	11.16	24.54
Boll Buggy	4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.52	2.57	1.31	1.04	7.46	16.40
Boll Buggy	6R-30(355)	MFWD 190	30,500	200	10	0.218	3.20	3.26	1.66	1.32	9.45	20.78
Boll Buggy	6R-38(355)	MFWD 190	30,500	200	10	0.172	2.52	2.57	1.31	1.04	7.46	16.40
Chisel Plow-Folding	24'	MFWD 190	43,500	150	12	0.076	1.12	1.14	1.20	0.46	3.93	8.75
Chisel Plow-Folding	32'	MFWD 225	54,500	150	12	0.057	0.84	1.02	1.13	0.42	3.42	7.88
Chisel Plow-Folding	42'	MFWD 225	65,700	150	12	0.044	0.64	0.78	1.04	0.32	2.79	6.48
Chisel Plow-Folding	50'	MFWD 225	85,900	150	12	0.036	0.54	0.65	1.14	0.26	2.61	6.16
Chisel Plow-Folding	61'	MFWD 225	99,100	150	12	0.030	0.44	0.53	1.08	0.22	2.28	5.44
Chisel Plow-Rigid	10'	MFWD 170	7,790	150	12	0.184	2.71	2.47	0.52	0.92	6.63	13.13
Chisel Plow-Rigid	15'	2WD 130	13,200	150	12	0.123	1.80	1.26	0.58	0.43	4.09	7.60
Chisel Plow-Rigid	20'	MFWD 225	13,400	150	12	0.102	1.50	1.81	0.49	0.74	4.57	9.95
Cultivate	4R-30	2WD 105	14,600	150	10	0.206	3.02	1.70	0.80	0.45	5.99	10.70
Cultivate	4R-38	2WD 105	14,200	150	10	0.162	2.38	1.34	0.61	0.32	4.66	8.14
Cultivate	6R-30	MFWD 150	18,500	150	10	0.137	2.01	1.62	0.67	0.61	4.93	10.23
Cultivate	6R-38	MFWD 150	19,300	150	10	0.108	1.59	1.28	0.55	0.48	3.91	8.16
Cultivate	8R-30	MFWD 190	23,800	150	10	0.103	1.51	1.54	0.65	0.62	4.33	9.81
Cultivate	8R-38	MFWD 190	28,400	150	10	0.073	1.08	1.10	0.55	0.44	3.18	7.33
Cultivate	8R-38 2x1	MFWD 190	35,200	150	10	0.054	0.79	0.81	0.50	0.32	2.44	5.75
Cultivate	12R-30	MFWD 225	42,500	150	10	0.068	1.00	1.21	0.77	0.50	3.50	8.54
Cultivate	12R-38	MFWD 225	43,800	150	10	0.054	0.79	0.96	0.63	0.39	2.78	6.81
Cultivate	16R-30	MFWD 225	58,400	150	10	0.051	0.75	0.91	0.80	0.37	2.84	7.18
Cultivate & Post	4R-30	2WD 105	21,900	150	10	0.220	4.34	2.73	1.28	0.42	8.79	15.28
Cultivate & Post	4R-38	2WD 105	21,600	150	10	0.173	3.42	2.15	0.99	0.33	6.90	11.98

(continued)

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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.		Total Direct	--Fixed-- Imp. P.U.		Total Cost
			dollars	hours	years	hr/ac	-----\$/acre-----							
Cultivate & Post	6R-30	MFWD 150	25,900	150	10	0.146	2.89	2.60	1.01	0.64	7.15	2.91	4.19	14.26
Cultivate & Post	6R-38	MFWD 150	26,600	150	10	0.115	2.28	2.05	0.82	0.50	5.67	2.36	3.31	11.34
Cultivate & Post	8R-30	MFWD 190	31,200	150	10	0.110	2.11	1.64	0.91	0.66	5.34	2.33	4.06	11.73
Cultivate & Post	8R-38	MFWD 190	35,800	150	10	0.086	1.67	1.30	0.83	0.52	4.32	2.11	3.21	9.65
Cultivate & Post	8R-38 2x1	MFWD 190	45,400	150	10	0.057	1.11	0.86	0.70	0.35	3.03	1.78	2.13	6.95
Cultivate & Post	12R-30	MFWD 225	49,800	150	10	0.073	1.40	1.29	0.97	0.53	4.21	2.48	3.25	9.95
Cultivate & Post	12R-38	MFWD 225	54,000	150	10	0.057	1.11	1.02	0.83	0.42	3.39	2.12	2.56	8.08
Cultivate & Post	16R-30	MFWD 225	68,600	150	10	0.055	1.05	0.97	1.00	0.40	3.43	2.56	2.44	8.44
Disk & Incorporate	14'	2WD 130	33,700	200	10	0.149	2.87	1.53	1.51	0.52	6.44	2.57	3.07	12.09
Disk & Incorporate	20'	MFWD 190	52,400	200	10	0.092	1.77	1.38	1.45	0.56	5.17	2.46	3.41	11.05
Disk & Incorporate	24'	MFWD 190	53,600	200	10	0.087	1.67	1.30	1.40	0.52	4.91	2.38	3.22	10.52
Disk & Incorporate	28'	MFWD 225	63,300	200	10	0.074	1.43	1.32	1.42	0.54	4.72	2.41	3.32	10.46
Disk & Incorporate	32'	MFWD 225	68,700	200	10	0.065	1.25	1.16	1.34	0.47	4.24	2.29	2.90	9.44
Disk Harrow	14'	2WD 130	26,400	180	10	0.140	2.05	1.43	1.02	0.49	5.02	2.09	2.87	9.99
Disk Harrow	20'	MFWD 190	45,000	180	10	0.098	1.44	1.46	1.22	0.59	4.73	2.50	3.62	10.86
Disk Harrow	24'	MFWD 190	46,200	180	10	0.081	1.20	1.22	1.05	0.49	3.97	2.14	3.02	9.13
Disk Harrow	28'	MFWD 225	56,000	180	10	0.070	1.02	1.24	1.09	0.51	3.87	2.22	3.11	9.21
Disk Harrow	32'	MFWD 225	61,400	180	10	0.061	0.90	1.08	1.04	0.44	3.48	2.13	2.72	8.34
Disk Harrow	42'	MFWD 225	107,000	180	10	0.046	0.68	0.82	1.39	0.34	3.24	2.83	2.07	8.15
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.05	0.82	0.65	0.16	3.70	1.32	0.97	6.01
Disk Heavy	14'	MFWD 150	26,400	180	10	0.145	2.14	1.72	1.07	0.65	5.58	2.18	3.79	11.56
Disk Heavy	20'	MFWD 190	45,000	180	10	0.097	1.42	1.45	1.21	0.58	4.69	2.48	3.59	10.76
Disk Heavy	28'	MFWD 225	56,000	180	10	0.075	1.11	1.34	1.17	0.55	4.18	2.40	3.35	9.94
Disk Ripper	15'	MFWD 225	50,800	180	10	0.136	1.99	2.41	1.92	0.99	7.32	3.91	6.04	17.29
Ditcher		2WD 130	6,120	200	10	0.020	0.29	0.20	0.04	0.07	0.61	0.06	0.41	1.09
Ditcher (1m/160a)		2WD 130	6,120	200	10	0.009	0.13	0.09	0.02	0.03	0.28	0.02	0.19	0.51
Fert Appl (Liquid)		MFWD 150	15,200	150	8	0.154	2.97	1.82	1.56	0.69	7.05	1.70	4.01	12.78
Fert Appl (Liquid)	4R-38	MFWD 170	17,900	150	8	0.130	2.51	1.75	1.56	0.65	6.48	1.70	3.99	12.18
Fert Appl (Liquid)	6R-38	MFWD 170	17,900	150	8	0.103	1.98	1.38	1.23	0.51	5.12	1.34	3.15	9.61
Fert Appl (Liquid)	8R-30	MFWD 190	18,600	150	8	0.098	1.88	1.46	1.21	0.59	5.16	1.32	3.62	10.12
Fert Appl (Liquid)	8R-38	MFWD 190	20,600	150	8	0.077	1.49	1.16	1.06	0.47	4.19	1.16	2.86	8.22
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	21,000	150	8	0.051	0.99	0.77	0.72	0.31	2.80	0.78	1.91	5.50
Fert Appl (Liquid)	12R-30	MFWD 225	24,700	150	8	0.078	1.50	1.39	1.29	0.57	4.76	1.40	3.48	9.66
Fert Appl (Liquid)	12R-38	MFWD 225	19,300	150	8	0.051	0.99	0.91	0.66	0.37	2.95	0.72	2.29	5.96
Field Cult & Inc	42'	MFWD 225	69,500	100	10	0.037	0.72	0.66	0.65	0.27	2.32	2.67	1.67	6.67
Field Cult & Inc	50'	MFWD 225	82,200	100	10	0.031	0.60	0.56	0.65	0.23	2.05	2.65	1.40	6.12
Field Cult & Inc Fld	24'	MFWD 170	38,500	100	10	0.066	1.26	0.88	0.63	0.33	3.12	2.59	2.01	7.73
Field Cult & Inc Fld	32'	MFWD 190	50,900	100	10	0.049	0.95	0.74	0.63	0.30	2.62	2.57	1.83	7.03
Field Cult & Inc Rdg	12'	2WD 150	19,600	100	10	0.132	2.53	1.56	0.64	0.45	5.20	2.64	2.66	10.51
Field Cultivate Fld	24'	MFWD 170	31,100	100	10	0.062	0.91	0.83	0.48	0.31	2.54	1.97	1.89	6.41
Field Cultivate Fld	32'	MFWD 190	43,500	100	10	0.046	0.68	0.69	0.50	0.28	2.17	2.06	1.72	5.96
Field Cultivate Fld	42'	MFWD 225	59,400	100	10	0.035	0.52	0.62	0.52	0.25	1.93	2.15	1.57	5.66
Field Cultivate Fld	50'	MFWD 225	69,000	100	10	0.029	0.43	0.52	0.51	0.21	1.69	2.10	1.32	5.12
Field Cultivate Rdg	12'	2WD 150	12,300	100	10	0.124	1.82	1.46	0.38	0.43	4.11	1.56	2.50	8.17
Grain Cart Corn	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.37	0.18	0.15	1.09	0.31	0.93	2.33
Grain Cart Corn	700 bu	MFWD 190	44,000	200	12	0.025	0.37	0.37	0.30	0.15	1.20	0.50	0.93	2.64
Grain Cart Corn	1000 bu	MFWD 225	57,900	200	12	0.025	0.37	0.44	0.39	0.18	1.40	0.66	1.12	3.18
Grain Cart Rice	500 bu	MFWD 190	27,300	200	12	0.062	0.91	0.93	0.46	0.37	2.69	0.77	2.30	5.77
Grain Cart Rice	700 bu	MFWD 190	44,000	200	12	0.055	0.80	0.82	0.65	0.33	2.61	1.09	2.03	5.74
Grain Cart Rice	1000 bu	MFWD 190	57,900	200	12	0.045	0.67	0.68	0.71	0.27	2.35	1.19	1.69	5.24
Grain Cart Soybean	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.38	0.18	0.15	1.09	0.31	0.94	2.35
Grain Cart Soybean	700 bu	MFWD 190	44,000	200	12	0.021	0.31	0.31	0.25	0.12	1.01	0.42	0.78	2.21
Grain Cart Soybean	1000 bu	MFWD 190	57,900	200	12	0.021	0.31	0.31	0.33	0.12	1.09	0.55	0.78	2.43
Grain Cart Wht/Sor	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.38	0.18	0.15	1.09	0.31	0.94	2.35
Grain Cart Wht/Sor	700 bu	MFWD 190	44,000	200	12	0.021	0.31	0.31	0.25	0.12	1.01	0.42	0.78	2.21
Grain Cart Wht/Sor	1000 bu	MFWD 190	57,900	200	12	0.021	0.31	0.31	0.33	0.12	1.09	0.55	0.78	2.43
Grain Drill	10'	2WD 130	28,000	150	8	0.188	4.47	1.93	1.97	0.66	9.05	3.64	3.86	16.57
Grain Drill	12'	2WD 130	28,100	150	8	0.157	3.73	1.60	1.65	0.55	7.55	3.05	3.22	13.82
Grain Drill	15'	MFWD 150	33,900	150	8	0.125	2.98	1.48	1.59	0.56	6.62	2.94	3.26	12.83
Grain Drill	20'	MFWD 170	41,400	150	8	0.094	2.23	1.26	1.46	0.47	5.43	2.69	2.87	11.00
Grain Drill	24'	MFWD 190	66,800	150	8	0.078	1.86	1.17	1.96	0.47	5.48	3.62	2.90	12.01
Grain Drill	30'	MFWD 225	68,500	150	8	0.062	1.49	1.11	1.61	0.45	4.67	2.97	2.79	10.44
Grain Drill	35'	MFWD 225	91,900	150	8	0.053	1.27	0.95	1.85	0.39	4.48	3.42	2.39	10.29
Grain Drill & Pre	10'	2WD 130	35,400	150	8	0.203	4.82	2.07	2.69	0.71	10.31	4.96	4.16	19.44
Grain Drill & Pre	12'	2WD 130	35,400	150	8	0.169	4.01	1.73	2.24	0.59	8.59	4.13	3.47	16.20
Grain Drill & Pre	15'	MFWD 150	41,200	150	8	0.135	3.21	1.59	2.09	0.60	7.50	3.85	3.51	14.87
Grain Drill & Pre	20'	MFWD 170	48,800	150	8	0.101	2.41	1.35	1.85	0.50	6.13	3.42	3.09	12.65
Grain Drill & Pre	24'	MFWD 190	74,200	150	8	0.084	2.00	1.26	2.35	0.51	6.14	4.33	3.12	13.60
Grain Drill & Pre	30'	MFWD 225	75,800	150	8	0.067	1.60	1.19	1.92	0.49	5.22	3.54	3.00	11.77
Grain Drill & Pre	35'	MFWD 225	101,000	150	8	0.058	1.37	1.02	2.19	0.42	5.02	4.04	2.57	11.64
Grain Drill & Pre T	8R-38	MFWD 225	59,000	150	8	0.062	1.49	1.11	1.39	0.45	4.45	2.56	2.79	9.80
Harrow - Folding	24'	MFWD 190	13,800	200	10	0.064	0.94	0.96	0.31	0.39	2.62	0.45	2.39	5.46
Harrow - Folding	30'	MFWD 190	15,300	200	10	0.051	0.75	0.77	0.27	0.31	2.12	0.40	1.91	4.44
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.56	0.58	0.28	0.23	1.67	0.42	1.43	3.53
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.47	0.57	0.29	0.23	1.57	0.42	1.43	3.44
Header - Corn	6R-30	265 hp	51,400	300	8	0.170	2.49	3.55	2.18	6.93	15.17	3.17	26.54	44.90
Header - Corn	6R-38	265 hp	52,300	300	8	0.134	1.97	2.80	1.75	5.47	12.01	2.55	20.95	35.52
Header - Corn	8R-30	265 hp	66,800	300	8	0.127	1.87	2.66	2.13	5.20	11.87	3.09	19.91	34.88

(continued)

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

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

(continued)

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

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

(continued)

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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.		Total Direct	--Fixed-- Imp. P.U.		Total Cost
			dollars	hours	years	hr/ac	-----\$/acre-----							
Roller/Cultipacker	12'	2WD 130	6,720	300	12	0.124	1.82	1.27	0.19	0.43	3.73	0.26	2.55	6.55
Roller/Cultipacker	20'	MFWD 150	10,900	300	12	0.074	1.09	0.88	0.19	0.33	2.50	0.25	1.93	4.69
Roller/Cultipacker	30'	MFWD 170	14,300	300	12	0.049	0.73	0.66	0.16	0.24	1.81	0.22	1.51	3.55
Roller/Cultipacker	38'	MFWD 225	19,600	300	12	0.039	0.57	0.69	0.18	0.28	1.74	0.24	1.74	3.72
Roller/Stubble	20'	2WD 50	12,700	300	12	0.074	1.09	0.29	0.22	0.05	1.66	0.29	0.29	2.25
Roller/Stubble	32'	MFWD 225	22,200	300	12	0.046	0.68	0.82	0.24	0.33	2.09	0.32	2.07	4.48
Rotary Cutter	7'	MFWD 130	4,500	185	10	0.168	2.47	1.72	0.61	0.66	5.47	0.41	3.85	9.74
Rotary Cutter	12'	2WD 150	13,100	185	10	0.098	1.44	1.16	1.04	0.34	3.98	0.70	1.97	6.67
Rotary Cutter-Flex	15'	MFWD 150	22,100	185	10	0.078	1.15	0.92	1.40	0.35	3.84	0.95	2.04	6.83
Rotary Cutter-Flex	20'	MFWD 150	30,000	185	10	0.058	0.86	0.69	1.43	0.26	3.25	0.97	1.53	5.76
Row Cond & Inc-Fold.	26'	MFWD 190	28,500	100	10	0.063	1.21	0.94	0.45	0.38	3.00	1.84	2.34	7.19
Row Cond & Inc-Fold.	38'	MFWD 225	38,000	100	10	0.043	0.83	0.76	0.41	0.31	2.33	1.68	1.92	5.94
Row Cond & Inc-Rigid	13'	2WD 130	16,000	100	10	0.126	2.43	1.29	0.50	0.44	4.69	2.07	2.60	9.36
Row Cond & Inc-Rigid	21'	2WD 170	21,600	100	10	0.078	1.50	1.05	0.42	0.29	3.27	1.73	1.78	6.78
Row Cond & Inc-Rigid	26'	MFWD 190	24,700	100	10	0.026	0.51	0.39	0.16	0.16	1.23	0.67	0.98	2.88
Row Cond Folding	26'	MFWD 225	21,100	100	10	0.059	0.87	1.05	0.31	0.43	2.68	1.28	2.65	6.62
Row Cond Folding	38'	MFWD 225	27,800	100	10	0.040	0.59	0.72	0.28	0.29	1.90	1.15	1.81	4.87
Row Cond Rigid	13'	2WD 130	8,670	100	10	0.119	1.75	1.22	0.25	0.42	3.65	1.05	2.45	7.16
Row Cond Rigid	21'	2WD 170	14,200	100	10	0.073	1.08	0.99	0.26	0.27	2.61	1.07	1.67	5.36
Row Cond Rigid	26'	MFWD 190	17,300	100	10	0.059	0.87	0.89	0.25	0.36	2.39	1.05	2.20	5.65
Row Cond./Roll-Fol	30'	MFWD 190	46,200	160	10	0.062	0.91	0.93	0.72	0.37	2.95	1.84	2.30	7.10
Row Cond./Roll-Fold.	26'	MFWD 190	26,500	160	10	0.072	1.05	1.07	0.47	0.43	3.05	1.21	2.66	6.93
Row Cond./Roll-Fold.	40'	MFWD 225	34,000	160	10	0.046	0.68	0.83	0.39	0.34	2.25	1.01	2.08	5.35
Row Cond./Roll-Rig	21'	MFWD 190	25,800	160	10	0.089	1.31	1.33	0.57	0.54	3.76	1.46	3.29	8.53
Row Cond./Roll-Rig	26'	MFWD 190	28,400	160	10	0.072	1.05	1.07	0.51	0.43	3.08	1.30	2.66	7.05
Spin Spreader	5 ton	MFWD 190	11,600	100	8	0.042	0.99	0.62	0.27	0.25	2.15	0.53	1.55	4.24
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.00	0.34	0.08	0.49	5.92	0.10	1.89	7.93
Spray (ATV)	20"	800 CC	1,690	200	8	0.084	1.62	0.11	0.06	0.16	1.96	0.07	0.61	2.66
Spray (Band)	27' Fold	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Band)	40' Fold	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Band)	50' Fold	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Band)	60' Fold	MFWD 170	13,200	200	8	0.028	0.54	0.37	0.17	0.14	1.23	0.20	0.85	2.29
Spray (Bcast/HB)	13' Rigid	MFWD 150	7,860	200	8	0.130	2.50	1.53	0.47	0.58	5.09	0.55	3.88	9.03
Spray (Bcast/HB)	20' Rigid	MFWD 150	9,400	200	8	0.084	1.62	0.99	0.37	0.37	3.37	0.43	2.19	6.00
Spray (Bcast/HB)	27' Fold	MFWD 170	16,200	200	8	0.062	1.20	0.83	0.47	0.31	2.83	0.55	1.91	5.29
Spray (Bcast/HB)	27' Rigid	MFWD 170	10,900	200	8	0.062	1.20	0.83	0.32	0.31	2.67	0.37	1.91	4.95
Spray (Bcast/HB)	30' Fold	MFWD 170	18,900	200	8	0.056	1.08	0.75	0.49	0.28	2.62	0.58	1.71	4.92
Spray (Bcast/HB)	40' Fold	MFWD 170	19,100	200	8	0.042	0.81	0.56	0.37	0.21	1.96	0.44	1.28	3.69
Spray (Broadcast)	27'	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Broadcast)	40'	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Broadcast)	50'	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Broadcast)	60'	MFWD 170	13,200	200	8	0.028	0.54	0.37	0.17	0.14	1.23	0.20	0.85	2.29
Spray (Direct/Hood)	8R-30	MFWD 170	17,000	200	8	0.084	1.62	1.13	0.67	0.42	3.85	0.78	2.57	7.21
Spray (Direct/Hood)	8R-38	MFWD 170	17,900	200	8	0.066	1.28	0.89	0.56	0.33	3.07	0.65	2.03	5.76
Spray (Direct/Hood)	12R-30	MFWD 170	23,900	200	8	0.056	1.08	0.75	0.63	0.28	2.75	0.73	1.71	5.20
Spray (Direct/Hood)	12R-38	MFWD 170	25,100	200	8	0.044	0.85	0.59	0.52	0.22	2.19	0.60	1.35	4.16
Spray (Direct/Layby)	8R-30	MFWD 170	15,500	200	8	0.084	1.62	1.13	0.61	0.42	3.79	0.71	2.57	7.09
Spray (Direct/Layby)	8R-38	MFWD 170	15,500	200	8	0.066	1.28	0.89	0.48	0.33	3.00	0.56	2.03	5.60
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	19,400	200	8	0.044	0.85	0.59	0.40	0.22	2.07	0.47	1.35	3.90
Spray (Direct/Layby)	12R-30	MFWD 170	19,400	200	8	0.056	1.08	0.75	0.51	0.28	2.63	0.59	1.71	4.94
Spray (Direct/Layby)	12R-38	MFWD 170	19,400	200	8	0.044	0.85	0.59	0.40	0.22	2.07	0.47	1.35	3.90
Spray (Direct/Layby)	16R-20/30	MFWD 225	22,500	200	8	0.062	1.20	1.11	0.66	0.45	3.43	0.76	2.78	6.98
Spray (Levee Leaper)	50'	MFWD 225	12,800	200	8	0.033	0.65	0.59	0.20	0.24	1.69	0.23	1.50	3.43
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.54	0.49	0.53	0.20	1.78	0.62	1.25	3.66
Spray (Pull Type)	80'	MFWD 225	52,000	200	8	0.021	0.40	0.37	0.51	0.15	1.45	0.59	0.93	2.98
Spray (Pull Type)	90'	MFWD 225	52,900	200	8	0.018	0.36	0.33	0.46	0.13	1.29	0.54	0.83	2.67
Spray (Pull Type)	120'	MFWD 225	80,900	200	8	0.014	0.27	0.24	0.53	0.10	1.15	0.62	0.62	2.40
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.62	1.26	0.16	0.51	3.56	0.18	3.12	6.88
Spray (Spot)	27'	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Spot)	40'	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Spot)	50'	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Spot)	60'	MFWD 225	13,200	200	8	0.028	0.54	0.49	0.17	0.20	1.42	0.20	1.25	2.87
Stalk Shredder	14'	MFWD 150	14,900	200	10	0.117	1.73	1.39	1.53	0.52	5.18	0.89	3.06	9.14
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.21	0.97	2.38	0.36	4.94	1.39	2.14	8.47
Stalk Shredder-Flail	12'	MFWD 150	21,700	200	10	0.137	2.01	1.62	2.61	0.61	6.86	1.52	3.57	11.96
Stalk Shredder-Flail	15'	MFWD 150	24,500	200	10	0.110	1.61	1.29	2.35	0.49	5.76	1.37	2.85	9.99
Stalk Shredder-Flail	18'	MFWD 150	28,900	200	10	0.091	1.34	1.08	2.31	0.40	5.15	1.35	2.38	8.88
Stalk Shredder-Flail	20'	MFWD 150	30,400	200	10	0.082	1.21	0.97	2.19	0.36	4.74	1.27	2.14	8.17
Stalk Shredder-Flail	25'	MFWD 150	46,400	200	10	0.066	0.96	0.77	2.67	0.29	4.72	1.56	1.71	7.99
Strip Till	8R-38	MFWD 225	28,100	150	10	0.061	0.90	1.09	0.75	0.44	3.19	1.17	2.73	7.10
Strip Till	12R-30	MFWD 225	68,900	150	10	0.061	0.90	1.09	1.83	0.44	4.28	2.88	2.73	9.90
Strip Till	12R-40	MFWD 225	67,200	150	10	0.046	0.67	0.81	1.34	0.33	3.17	2.11	2.05	7.34
Subsoiler	3 shank	MFWD 190	6,360	100	15	0.204	2.99	3.05	0.43	1.23	7.72	1.02	7.55	16.30
Subsoiler	4 shank	MFWD 225	11,210	100	15	0.153	2.25	2.72	0.57	1.11	6.67	1.35	6.81	14.84
Subsoiler	5 shank	MFWD 225	14,300	100	15	0.122	1.79	2.16	0.58	0.89	5.43	1.37	5.43	12.24
Subsoiler low-till	6 shank	MFWD 225	19,400	100	15	0.102	1.49	1.81	0.66	0.74	4.71	1.55	4.53	10.80
Subsoiler low-till	8 shank	MFWD 225	21,400	100	15	0.076	1.12	1.35	0.54	0.55	3.58	1.28	3.39	8.26

Notes:

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

Total Direct: Does not include interest on operating capital.

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

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

(continued)

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

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

(continued)

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

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

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

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

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

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	14.68
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)	
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels,
forward contract prices, and loan rates
used in row crop budgets, Mississippi, 2021

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

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

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

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

^d Average Mississippi County CCC Loan Rate for 2020 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2020 Farm-stored Loan Rate for long grain rough rice. National 2020 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

^e Price used in MSU Extension Service Planning Budgets.

^f Cottonseed price is the average marketing year price over the years 2008-2020.

Appendix Table 8. Estimated costs for field operations, per acre
 Cotton irrigated with roll-out pipe
 160-acre roll-out pipe system, 10.5 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	----- OP INPUT	FUEL	R&M	DIRECT COST LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----										
Land Plane	50'x16'		0.57	0.30	0.56			1.43	1.59	3.02
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.13	0.07	0.14		0.01	0.35	0.32	0.67
Roll-Out Pipe	ft	7.92					0.13	8.05		8.05
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.17	0.10	0.41		0.01	0.69	0.79	1.48
IRRIGATE LABOR	hour				1.81		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.15	0.62		0.01	1.03	1.18	2.21
Land Forming (\$450)	each								30.35	30.35
Well & Pump, Furrow	each			2.96			0.05	3.01	8.30	11.31
Main Line Pipe	each								4.59	4.59
Engine, RPF, 75	each								8.60	8.60
June Irrigation	ac-in		4.36	1.40			0.10	5.86		5.86
July Irrigation	ac-in		4.36	1.40			0.08	5.84		5.84
August Irrigation	ac-in		4.36	1.40			0.06	5.82		5.82
TOTALS		7.92	14.20	7.78	4.46	0.00	0.48	34.84	55.72	90.56

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Maintenance										
IRRIGATE LABOR	hour				1.07		0.02	1.09		1.09
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Pivot, 1/4 CP	each			13.48			0.22	13.70	51.82	65.52
Well & Pump, 1/4 CP	each			3.50			0.06	3.56	9.84	13.40
Engine, 1/4 CP, 65	each								10.19	10.19
June Irr. 3app@.75"	ac-in		5.14	1.49			0.11	6.74		6.74
July Irr. 4app@.75"	ac-in		6.86	1.99			0.12	8.97		8.97
Aug Irr. 3app@.75"	ac-in		5.14	1.49			0.07	6.70		6.70
TOTALS		0.00	17.14	21.95	1.84	0.00	0.61	41.54	71.85	113.39

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

Appendix Table 10. Estimated costs for field operations, per acre
 Full-season soybeans irrigated with roll-out pipe
 160-acre system, 9 ac-in., Delta Area, Mississippi, 2021

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

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

Appendix Table 11. Estimated costs for field operations, per acre
 Irrigation with a contour flood system
 80-acre system, 13.5 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.22	0.11	0.24		0.01	0.58	0.63	1.21
Survey & Mark Levees	acre	2.25					0.04	2.29		2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.29	0.15	0.31		0.01	0.76	0.83	1.59
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29		0.01	0.68	0.62	1.30
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Apply Water										
IRRIGATE LABOR	hour				0.11			0.11		0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.22	0.11	0.24		0.01	0.58	0.65	1.23
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.29	0.15	0.31		0.01	0.76	0.83	1.59
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29		0.01	0.68	0.62	1.30
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Apply Water										
IRRIGATE LABOR	hour				0.11			0.11		0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.22	0.11	0.24		0.01	0.58	0.65	1.23
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.29	0.15	0.31		0.01	0.76	0.83	1.59
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29		0.01	0.68	0.62	1.30
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Apply Water										
IRRIGATE LABOR	hour				0.11			0.11		0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.22	0.11	0.24		0.01	0.58	0.65	1.23
Tear Down Levees										
Levee Splitter (1/80	32"		0.17	0.08	0.18			0.43	0.49	0.92
Land Forming (\$113)	each								7.62	7.62
Well & Pump, Flood	each			5.91			0.10	6.01	16.61	22.62
Engine, CF, 75	each								17.20	17.20
June Irrigation	ac-in		5.61	2.80			0.14	8.55		8.55
July Irrigation	ac-in		5.61	2.80			0.11	8.52		8.52
August Irrigation	ac-in		5.61	2.80			0.08	8.49		8.49
TOTALS		2.25	19.56	15.61	5.76	0.00	0.61	43.79	48.85	92.64

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

Appendix Table 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.07			0.07		0.07
Maintenance										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Apply Water										
IRRIGATE LABOR	hour				0.04			0.04		0.04
Apply Water										
IRRIGATE LABOR	hour				0.05			0.05		0.05
Apply Water										
IRRIGATE LABOR	hour				0.04			0.04		0.04
Pivot, 1/2 CP	each			8.60			0.14	8.74	33.07	41.81
Well & Pump, 1/2 CP	each			1.13			0.02	1.15	3.18	4.33
Engine, 1/2 CP, 174	each								4.64	4.64
June Irr. 3app@.75"	ac-in		7.53	0.68			0.14	8.35		8.35
July Irr. 4app@.75"	ac-in		10.04	0.91			0.15	11.10		11.10
Aug Irr. 3app@.75"	ac-in		7.53	0.68			0.08	8.29		8.29
TOTALS		0.00	25.10	12.00	0.47	0.00	0.54	38.11	40.89	79.00

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

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'		0.57	0.30	0.56		0.06	1.49	1.59	3.08
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.13	0.07	0.14			0.34	0.32	0.66
Roll-Out Pipe	ft	7.92					0.11	8.03		8.03
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.17	0.10	0.41		0.01	0.69	0.79	1.48
IRRIGATE LABOR	hour				1.81		0.02	1.83		1.83
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.15	0.62		0.01	1.03	1.18	2.21
Land Forming (\$450)	each								30.35	30.35
Well & Pump, Furrow	each			2.96			0.04	3.00	8.30	11.30
Main Line Pipe	each								4.59	4.59
Engine, RPF, Corn	each								8.60	8.60
1st June Irrigation	ac-in		4.05	1.05			0.07	5.17		5.17
2nd June Irrigation	ac-in		4.05	1.05			0.07	5.17		5.17
3rd June Irrigation	ac-in		4.05	1.05			0.07	5.17		5.17
July Irrigation	ac-in		4.05	1.05			0.05	5.15		5.15
TOTALS		7.92	17.32	7.78	4.69	0.00	0.51	38.22	55.72	93.94

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	----- OP INPUT	FUEL	R&M	DIRECT COST LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.22	0.11	0.24		0.01	0.58	0.63	1.21
Survey & Mark Levees	acre	4.50					0.09	4.59		4.59
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.57	0.28	0.63		0.03	1.51	1.67	3.18
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29		0.01	0.68	0.62	1.30
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Install Gates										
IRRIGATE LABOR	hour				2.72		0.05	2.77		2.77
Apply Water										
IRRIGATE LABOR	hour				6.80		0.14	6.94		6.94
Apply Water										
IRRIGATE LABOR	hour				6.80		0.11	6.91		6.91
Apply Water										
IRRIGATE LABOR	hour				6.80		0.09	6.89		6.89
Apply Water										
IRRIGATE LABOR	hour				6.80		0.07	6.87		6.87
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.45	0.23	0.49		0.01	1.18	1.30	2.48
Tear Down Levees										
Levee Splitter (1/80	32"		0.17	0.08	0.18			0.43	0.49	0.92
Land Forming (\$113)	each								7.62	7.62
Levee Gates	each								0.65	0.65
Well & Pump, Flood	each			5.91			0.10	6.01	16.61	22.62
Engine, Rice CL, 75	each								17.20	17.20
May Irrigation	ac-in		7.48	1.53			0.18	9.19		9.19
June Irrigation	ac-in		11.22	2.29			0.23	13.74		13.74
July Irrigation	ac-in		11.22	2.29			0.18	13.69		13.69
August Irrigation	ac-in		11.22	2.29			0.14	13.65		13.65
TOTALS		4.50	42.82	15.12	33.79	0.00	1.47	97.70	46.79	144.49

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Survey & Mark Levees	acre	2.25					0.05	2.30		2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.43	0.21	0.47		0.02	1.13	1.25	2.38
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29		0.01	0.68	0.62	1.30
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Install Gates										
IRRIGATE LABOR	hour				1.36		0.03	1.39		1.39
Apply Water										
IRRIGATE LABOR	hour				4.53		0.09	4.62		4.62
Apply Water										
IRRIGATE LABOR	hour				4.53		0.08	4.61		4.61
Apply Water										
IRRIGATE LABOR	hour				4.53		0.06	4.59		4.59
Apply Water										
IRRIGATE LABOR	hour				4.53		0.05	4.58		4.58
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.33	0.16	0.37		0.01	0.87	0.97	1.84
Land Forming (\$450)	each								30.35	30.35
Levee Gates	each								0.65	0.65
Well & Pump, Flood	each			5.91			0.10	6.01	16.61	22.62
Engine, Rice SL, 75	each								17.20	17.20
May Irrigation	ac-in		7.48	1.86			0.19	9.53		9.53
June Irrigation	ac-in		8.72	2.18			0.18	11.08		11.08
July Irrigation	ac-in		8.72	2.18			0.15	11.05		11.05
August Irrigation	ac-in		8.72	2.18			0.11	11.01		11.01
TOTALS		2.25	34.67	14.79	22.65	0.00	1.16	75.52	67.65	143.17

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

Appendix 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	----- OP INPUT	FUEL	R&M	DIRECT COST LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Survey & Mark Levees	acre	2.25					0.05	2.30		2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.43	0.21	0.47		0.02	1.13	1.25	2.38
Butt Levees										
Blade-Box	6'-7'		0.27	0.11	0.29		0.01	0.68	0.62	1.30
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Ditcher (1m/160a)			0.13	0.07	0.14		0.01	0.35	0.32	0.67
Roll-Out Pipe	ft	7.92					0.16	8.08		8.08
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.17	0.10	0.41		0.01	0.69	0.79	1.48
Install Gates										
IRRIGATE LABOR	hour				1.36		0.03	1.39		1.39
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
Apply Water										
IRRIGATE LABOR	hour				1.81		0.02	1.83		1.83
Apply Water										
IRRIGATE LABOR	hour				1.81		0.02	1.83		1.83
Remove Gates										
IRRIGATE LABOR	hour				0.45			0.45		0.45
Tear Down Levees										
Levee Splitter (1/80	32"		0.33	0.16	0.37		0.01	0.87	0.97	1.84
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.08	0.05	0.20			0.33	0.39	0.72
Land Forming (\$450)	each								30.35	30.35
Levee Gates	each								0.32	0.32
Well & Pump, Flood	each			5.91			0.10	6.01	16.61	22.62
Engine, Mult In Rice	each								17.20	17.20
May Irrigation	ac-in		6.23	1.75			0.16	8.14		8.14
June Irrigation	ac-in		7.48	2.10			0.16	9.74		9.74
July Irrigation	ac-in		7.48	2.10			0.13	9.71		9.71
August Irrigation	ac-in		7.48	2.10			0.10	9.68		9.68
TOTALS		10.17	30.08	14.66	12.06	0.00	1.08	68.05	68.82	136.87

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Apply Water										
IRRIGATE LABOR	hour				2.27		0.05	2.32		2.32
Apply Water										
IRRIGATE LABOR	hour				2.27		0.04	2.31		2.31
Apply Water										
IRRIGATE LABOR	hour				2.27		0.03	2.30		2.30
Apply Water										
IRRIGATE LABOR	hour				2.27		0.02	2.29		2.29
Land Forming (\$450)	each								30.35	30.35
Well & Pump, Flood	each			5.91			0.10	6.01	16.61	22.62
Engine, Rice SL, 75	each								17.20	17.20
May Irrigation	ac-in		4.99	1.24			0.12	6.35		6.35
June Irrigation	ac-in		6.23	1.55			0.13	7.91		7.91
July Irrigation	ac-in		6.23	1.55			0.10	7.88		7.88
August Irrigation	ac-in		6.23	1.55			0.08	7.86		7.86
TOTALS		0.00	23.68	11.80	9.53	0.00	0.68	45.69	64.16	109.85

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

Appendix Table 18. Estimated costs for field operations, per acre
 Peanuts irrigated with roll-out pipe
 160-acre system, 12 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Land Plane	50'x16'		0.57	0.30	0.56		0.06	1.49	1.59	3.08
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.13	0.07	0.14		0.01	0.35	0.32	0.67
Roll-Out Pipe	ft	7.92					0.13	8.05		8.05
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.17	0.10	0.41		0.01	0.69	0.79	1.48
IRRIGATE LABOR	hour				1.81		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.15	0.62		0.01	1.03	1.18	2.21
Land Forming (\$450)	each								30.35	30.35
Well & Pump, Furrow	each			2.96			0.05	3.01	8.30	11.31
Main Line Pipe	each								4.59	4.59
Engine, RPF, PNUT	each								8.60	8.60
1st July Irrigation	ac-in		3.74	1.05			0.06	4.85		4.85
1st Aug Irrigation	ac-in		3.74	1.05			0.05	4.84		4.84
2nd Aug Irrigation	ac-in		3.74	1.05			0.05	4.84		4.84
1st Sep Irrigation	ac-in		3.74	1.05			0.03	4.82		4.82
TOTALS		7.92	16.08	7.78	4.69	0.00	0.49	36.96	55.72	92.68

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

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