DELTA
2022
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2021-05

November 2021

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 2022 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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The mention in this report of any commercial product does not imply its endorsement by MSU-ES, MAFES, or USDA over other products not named nor does the omission imply they are not satisfactory.

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2022 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 2021. (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:

$$RPH = \frac{RLC \; x \; RP}{THL}$$

$$RPA = RPH \; x \; PR$$

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

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

where:

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

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

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

$$CRCPA = CRCPH \times PR$$

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 2021 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 variety, Delta Area, Mississippi, 2022

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	5.60	5.2500	29.40	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	34.3582	72.15	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	96.0000	10.56	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Engenia	oz	0.83	25.6000	21.25	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Centric 40WG	oz	4.97	2.0000	9.94	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.63	1.5000	11.45	_____
SEED/PLANTS					
Cotton Seed B3XF	thous	2.59	45.0000	116.55	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	48.0000	10.08	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.3993	6.10	_____
Self-Propelled	hour	15.27	0.2075	3.17	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
UNALLOCATED LABOR	hour	15.24	0.4855	7.40	_____
DIESEL FUEL					
Tractors	gal	2.36	6.1665	14.55	_____
Self-Propelled	gal	2.36	4.8836	11.52	_____
REPAIR & MAINTENANCE					
Implements	acre	7.97	1.0000	7.97	_____
Tractors	acre	4.03	1.0000	4.03	_____
Self-Propelled	acre	23.62	1.0000	23.62	_____
INTEREST ON OP. CAP.	acre	11.67	1.0000	11.67	_____

TOTAL DIRECT EXPENSES				786.04	_____
FIXED EXPENSES					
Implements	acre	10.54	1.0000	10.54	_____
Tractors	acre	23.84	1.0000	23.84	_____
Self-Propelled	acre	89.17	1.0000	89.17	_____

TOTAL FIXED EXPENSES				123.55	_____

TOTAL SPECIFIED EXPENSES				909.59	_____

Note: Cost of production estimates are based on 2021 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 variety, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	1200.0000	1025.28	_____
Cotton Seed	lb	0.11	1620.0000	178.20	_____

TOTAL INCOME				1203.48	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	111.61	1.0000	111.61	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	90.77	1.0000	90.77	_____
INSECTICIDES	acre	85.21	1.0000	85.21	_____
SEED/PLANTS	acre	116.55	1.0000	116.55	_____
GROWTH REGULATORS	acre	10.08	1.0000	10.08	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.6069	9.27	_____
UNALLOCATED LABOR	hour	15.24	0.4855	7.40	_____
DIESEL FUEL	gal	2.36	11.0501	26.07	_____
REPAIR & MAINTENANCE	acre	35.62	1.0000	35.62	_____
INTEREST ON OP. CAP.	acre	11.67	1.0000	11.67	_____

TOTAL DIRECT EXPENSES				786.04	_____
RETURNS ABOVE DIRECT EXPENSES				417.44	_____
TOTAL FIXED EXPENSES				123.55	_____

TOTAL SPECIFIED EXPENSES				909.59	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				293.89	_____

Note: Cost of production estimates are based on 2021 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 variety, Delta Area, Mississippi, 2022

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 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	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 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B3XF	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
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
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 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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 300	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 2021 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 variety, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed-Subsoil Fold	12R-38		1.96	1.90	1.48		0.19	5.53	5.38	10.91
Bed/Disk (Hipper)	12R-38		0.90	0.57	0.68		0.08	2.23	2.25	4.48
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.10	4.97	3.95	8.92
UAN (32%)	gal	36.08					0.74	36.82		36.82
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
Plant - Folding	12R-38		1.81	2.06	1.82		0.10	5.79	5.73	11.52
Cotton Seed B3XF	thous	116.55					2.04	118.59		118.59
Cotton Seed Trt.	acre	20.00					0.35	20.35		20.35
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Engenia	oz	10.62					0.19	10.81		10.81
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.01	0.94	1.28	2.22
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.07	4.94	3.95	8.89
UAN (32%)	gal	36.08					0.53	36.61		36.61
Spray (Direct/Layby)	12R-38		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Engenia	oz	10.62					0.15	10.77		10.77
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Dual Magnum	pt	10.02					0.15	10.17		10.17
Centric 40WG	oz	9.94					0.14	10.08		10.08
Mepiquat Chloride	oz	3.36					0.05	3.41		3.41
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
IncidentalPestTrt$15	acre	15.00					0.18	15.18		15.18
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Cotton Picker/Module	6R-38(500)		10.47	22.99	6.29		0.12	39.87	85.33	125.20
Gin & Haul	lb	132.00					0.39	132.39		132.39
Stalk Shredder-Flail	20'		3.01	3.13	2.27		0.02	8.43	6.21	14.64
TOTALS		693.19	26.07	35.62	19.49	0.00	11.67	786.04	123.55	909.59

Note: Cost of production estimates are based on 2021 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 variety, Delta Area, Mississippi, 2022

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	1203.48
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	18.20	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	36.08	0.00	36.08	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	21.75	0.00	44.86	24.16	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	14.23	41.70	24.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.55	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	3.36	6.72	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	39.29	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	2.16	0.00	0.00	0.00	0.00	1.65	3.68	3.44	0.00	0.00	0.00	8.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.86	0.00	0.00	0.00	0.00	1.88	4.00	3.85	0.00	0.00	0.00	13.48
REPAIR & MAINTENANCE	2.47	0.00	0.00	0.00	0.00	1.34	3.21	2.48	0.00	0.00	0.00	26.12
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.00	0.69	0.84	3.64	1.27	0.80	0.31	0.18	0.53
TOTAL DIRECT EXPENSES	100.47	0.00	0.00	0.00	30.10	41.79	210.53	88.87	67.42	35.86	30.31	180.69
NET INCOME	-100.47	0.00	0.00	0.00	-30.10	-41.79	-210.53	-88.87	-67.42	-35.86	-30.31	1022.79
NET INCOME TO DATE	-100.47	-100.47	-100.47	-100.47	-130.57	-172.36	-382.89	-471.76	-539.18	-575.04	-605.35	417.44

Note: Cost of production estimates are based on 2021 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 variety, Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-157	-131	-105	-80	-54	-29	-3	22	47	73	99
			-280	-255	-229	-203	-178	-152	-126	-101	-75	-50	-24
60	720.00	lb	-93	-62	-31	-1	29	60	91	121	152	183	214
			-217	-186	-155	-124	-94	-63	-32	-1	29	59	90
70	840.00	lb	-29	6	41	77	113	149	185	221	257	293	328
			-153	-117	-81	-45	-9	26	61	97	133	169	205
80	960.00	lb	33	74	115	156	197	238	279	320	361	402	443
			-89	-48	-7	33	74	115	156	197	238	279	320
90	1080.00	lb	97	143	189	235	282	328	374	420	466	512	558
			-26	20	66	112	158	204	250	296	343	389	435
100	1200.00	lb	161	212	263	314	366	417	468	519	571	622	673
			37	88	140	191	242	293	345	396	447	498	550
110	1320.00	lb	224	281	337	393	450	506	563	619	675	732	788
			101	157	214	270	326	383	439	495	552	608	665
120	1440.00	lb	288	349	411	472	534	596	657	719	780	842	903
			164	226	287	349	410	472	533	595	657	718	780
130	1560.00	lb	352	418	485	552	618	685	751	818	885	951	1018
			228	295	361	428	495	561	628	695	761	828	894
140	1680.00	lb	415	487	559	631	702	774	846	918	989	1061	1133
			292	363	435	507	579	651	722	794	866	938	1009
150	1800.00	lb	479	556	633	710	786	863	940	1017	1094	1171	1248
			355	432	509	586	663	740	817	894	971	1047	1124

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 2021 input prices.

Table 2.A Estimated costs per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF variety, 10.5 ac-in., Delta Area, Mississippi, 2022

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	5.60	5.7500	32.20	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	34.3582	72.15	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	96.0000	10.56	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Engenia	oz	0.83	25.6000	21.25	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.5000	4.29	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Centric 40WG	oz	4.97	2.0000	9.94	_____
Acephate 90%	lb	9.87	1.5000	14.81	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.5000	22.50	_____
Transform WG	oz	7.63	1.5000	11.45	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Cotton Seed B3XF	thous	2.59	45.0000	116.55	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	51.0000	10.71	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5025	7.67	_____
Self-Propelled	hour	15.27	0.2075	3.17	_____
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	15.23	0.5052	7.70	_____
DIESEL FUEL					
Tractors	gal	2.36	7.2737	17.17	_____
Self-Propelled	gal	2.36	4.8836	11.52	_____
Roll-Out Pipe Irr.	gal	2.36	8.5535	20.19	_____
REPAIR & MAINTENANCE					
Implements	acre	8.50	1.0000	8.50	_____
Tractors	acre	4.73	1.0000	4.73	_____
Self-Propelled	acre	23.62	1.0000	23.62	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	12.34	1.0000	12.34	_____
TOTAL DIRECT EXPENSES				874.29	_____
FIXED EXPENSES					
Implements	acre	12.73	1.0000	12.73	_____
Tractors	acre	27.99	1.0000	27.99	_____
Self-Propelled	acre	89.17	1.0000	89.17	_____
Roll-Out Pipe Irr.	acre	49.28	1.0000	49.28	_____
TOTAL FIXED EXPENSES				179.17	_____
TOTAL SPECIFIED EXPENSES				1053.46	_____

Note: Cost of production estimates are based on 2021 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 variety, 10.5 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	1500.0000	1281.60	_____
Cotton Seed	lb	0.11	2025.0000	222.75	_____

TOTAL INCOME				1504.35	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.70	1.0000	49.70	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	111.61	1.0000	111.61	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	90.77	1.0000	90.77	_____
INSECTICIDES	acre	92.07	1.0000	92.07	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	116.55	1.0000	116.55	_____
GROWTH REGULATORS	acre	10.71	1.0000	10.71	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.7101	10.84	_____
UNALLOCATED LABOR	hour	15.23	0.5052	7.70	_____
DIESEL FUEL	gal	2.36	20.7109	48.88	_____
REPAIR & MAINTENANCE	acre	44.01	1.0000	44.01	_____
INTEREST ON OP. CAP.	acre	12.34	1.0000	12.34	_____

TOTAL DIRECT EXPENSES				874.29	_____
RETURNS ABOVE DIRECT EXPENSES				630.06	_____
TOTAL FIXED EXPENSES				179.17	_____

TOTAL SPECIFIED EXPENSES				1053.46	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				450.89	_____

Note: Cost of production estimates are based on 2021 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 variety, 10.5 ac-in., Delta Area, Mississippi, 2022

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 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	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 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B3XF	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
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90SP	lb					0.5000				
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 300	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 300	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
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 300	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 2021 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 variety, 10.5 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed-Subsoil Fold	12R-38		1.96	1.90	1.48		0.19	5.53	5.38	10.91
Bed/Disk (Hipper)	12R-38		1.80	1.13	1.35		0.15	4.43	4.51	8.94
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.10	4.97	3.95	8.92
UAN (32%)	gal	36.08					0.74	36.82		36.82
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
Plant - Folding	12R-38		1.81	2.06	1.82		0.10	5.79	5.73	11.52
Cotton Seed B3XF	thous	116.55					2.04	118.59		118.59
Cotton Seed Trt.	acre	20.00					0.35	20.35		20.35
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Engenia	oz	10.62					0.19	10.81		10.81
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90SP	lb	4.29					0.08	4.37		4.37
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.01	0.94	1.28	2.22
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.07	4.94	3.95	8.89
UAN (32%)	gal	36.08					0.53	36.61		36.61
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Spray (Direct/Layby)	12R-38		1.62	0.93	1.42		0.05	4.02	3.20	7.22
Engenia	oz	10.62					0.12	10.74		10.74
Glyphosate 3lbs a.e	oz	3.52					0.04	3.56		3.56
Dual Magnum	pt	10.02					0.12	10.14		10.14
Mepiquat Chloride	oz	3.99					0.05	4.04		4.04
Centric 40WG	oz	9.94					0.12	10.06		10.06
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	8.40					0.10	8.50		8.50
IncidentalPestTrt$15	acre	22.50					0.26	22.76		22.76
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Cotton Picker/Module	6R-38(500)		10.47	22.99	6.29		0.12	39.87	85.33	125.20
Gin & Haul	lb	165.00					0.48	165.48		165.48
Stalk Shredder-Flail	20'		3.01	3.13	2.27		0.02	8.43	6.21	14.64
Roll-Out Pipe Irr.	acre	7.92	21.91	7.83	4.50		0.51	42.67	53.36	96.03
TOTALS		744.40	48.88	44.01	24.66	0.00	12.34	874.29	179.17	1053.46

Note: Cost of production estimates are based on 2021 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 variety, 10.5 ac-in., Delta Area, Mississippi, 2022

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	1504.35
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	21.00	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	36.08	0.00	36.08	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	21.75	0.00	44.86	0.00	24.16	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.29	4.29	59.14	24.35	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	116.55	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	10.71	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	39.29	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	2.83	0.00	0.00	0.00	0.00	1.65	3.91	4.62	1.65	0.23	0.63	9.14
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.76	0.00	0.00	0.00	0.00	1.88	4.00	9.41	8.35	6.73	0.39	14.36
REPAIR & MAINTENANCE	3.03	0.00	0.00	0.00	0.00	1.34	3.21	6.09	2.33	1.40	0.17	26.44
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.00	0.69	0.84	3.63	1.00	1.50	0.38	0.19	0.63
TOTAL DIRECT EXPENSES	102.67	0.00	0.00	0.00	30.10	41.79	210.11	69.41	128.84	44.29	31.51	215.57
NET INCOME	-102.67	0.00	0.00	0.00	-30.10	-41.79	-210.11	-69.41	-128.84	-44.29	-31.51	1288.78
NET INCOME TO DATE	-102.67	-102.67	-102.67	-102.67	-132.77	-174.56	-384.67	-454.08	-582.92	-627.21	-658.72	630.06

Note: Cost of production estimates are based on 2021 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 variety, 10.5 ac-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-88	-56	-24	7	39	72	104	136	168	200	232
			-267	-235	-203	-171	-139	-107	-75	-43	-11	20	53
60	900.00	lb	-8	29	68	106	145	183	222	260	298	337	375
			-187	-149	-110	-72	-34	4	42	81	119	158	196
70	1050.00	lb	70	115	160	205	250	295	340	384	429	474	519
			-108	-63	-18	26	71	116	160	205	250	295	340
80	1200.00	lb	150	201	253	304	355	406	458	509	560	611	663
			-28	22	73	125	176	227	278	330	381	432	483
90	1350.00	lb	230	287	345	403	460	518	576	633	691	749	806
			50	108	166	223	281	339	396	454	512	569	627
100	1500.00	lb	309	373	437	501	565	630	694	758	822	886	950
			130	194	258	322	386	450	514	579	643	707	771
110	1650.00	lb	389	459	530	600	671	741	812	882	953	1023	1094
			210	280	351	421	492	562	632	703	773	844	914
120	1800.00	lb	468	545	622	699	776	853	930	1007	1083	1160	1237
			289	366	443	520	597	674	751	827	904	981	1058
130	1950.00	lb	548	631	714	798	881	964	1048	1131	1214	1298	1381
			369	452	535	619	702	785	869	952	1035	1118	1202
140	2100.00	lb	627	717	807	897	986	1076	1166	1255	1345	1435	1525
			448	538	628	717	807	897	987	1076	1166	1256	1345
150	2250.00	lb	707	803	899	995	1092	1188	1284	1380	1476	1572	1668
			528	624	720	816	912	1008	1105	1201	1297	1393	1489

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 2021 input prices.

Table 3.A Estimated costs per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

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	5.60	5.7500	32.20	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	34.3582	72.15	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	96.0000	10.56	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Engenia	oz	0.83	25.6000	21.25	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Centric 40WG	oz	4.97	2.0000	9.94	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.5000	22.50	_____
Transform WG	oz	7.63	1.5000	11.45	_____
SEED/PLANTS					
Cotton Seed B3XF	thous	2.59	45.0000	116.55	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	48.0000	10.08	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.3993	6.10	_____
Self-Propelled	hour	15.27	0.2075	3.17	_____
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	15.24	0.4855	7.40	_____
DIESEL FUEL					
Tractors	gal	2.36	6.1665	14.55	_____
Self-Propelled	gal	2.36	4.8836	11.52	_____
1/4-mi. Pivot Irr.	gal	2.36	11.2011	26.43	_____
REPAIR & MAINTENANCE					
Implements	acre	7.97	1.0000	7.97	_____
Tractors	acre	4.03	1.0000	4.03	_____
Self-Propelled	acre	23.62	1.0000	23.62	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	12.51	1.0000	12.51	_____
TOTAL DIRECT EXPENSES				880.40	_____
FIXED EXPENSES					
Implements	acre	10.54	1.0000	10.54	_____
Tractors	acre	23.84	1.0000	23.84	_____
Self-Propelled	acre	89.17	1.0000	89.17	_____
1/4-mi. Pivot Irr.	acre	68.70	1.0000	68.70	_____
TOTAL FIXED EXPENSES				192.25	_____
TOTAL SPECIFIED EXPENSES				1072.65	_____

Note: Cost of production estimates are based on 2021 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 variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	1500.0000	1281.60	_____
Cotton Seed	lb	0.11	2025.0000	222.75	_____

TOTAL INCOME				1504.35	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.70	1.0000	49.70	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	111.61	1.0000	111.61	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	90.77	1.0000	90.77	_____
INSECTICIDES	acre	92.71	1.0000	92.71	_____
SEED/PLANTS	acre	116.55	1.0000	116.55	_____
GROWTH REGULATORS	acre	10.08	1.0000	10.08	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.6069	9.27	_____
UNALLOCATED LABOR	hour	15.24	0.4855	7.40	_____
DIESEL FUEL	gal	2.36	22.2512	52.50	_____
REPAIR & MAINTENANCE	acre	57.57	1.0000	57.57	_____
INTEREST ON OP. CAP.	acre	12.51	1.0000	12.51	_____

TOTAL DIRECT EXPENSES				880.40	_____
RETURNS ABOVE DIRECT EXPENSES				623.95	_____
TOTAL FIXED EXPENSES				192.25	_____

TOTAL SPECIFIED EXPENSES				1072.65	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				431.70	_____

Note: Cost of production estimates are based on 2021 input prices.

Table 3.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

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 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	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 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B3XF	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
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
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 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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 300	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 2021 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 variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed-Subsoil Fold	12R-38		1.96	1.90	1.48		0.19	5.53	5.38	10.91
Bed/Disk (Hipper)	12R-38		0.90	0.57	0.68		0.08	2.23	2.25	4.48
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.10	4.97	3.95	8.92
UAN (32%)	gal	36.08					0.74	36.82		36.82
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
Plant - Folding	12R-38		1.81	2.06	1.82		0.10	5.79	5.73	11.52
Cotton Seed B3XF	thous	116.55					2.04	118.59		118.59
Cotton Seed Trt.	acre	20.00					0.35	20.35		20.35
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Engenia	oz	10.62					0.19	10.81		10.81
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.01	0.94	1.28	2.22
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.07	4.94	3.95	8.89
UAN (32%)	gal	36.08					0.53	36.61		36.61
Spray (Direct/Layby)	12R-38		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Engenia	oz	10.62					0.15	10.77		10.77
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Dual Magnum	pt	10.02					0.15	10.17		10.17
Centric 40WG	oz	9.94					0.14	10.08		10.08
Mepiquat Chloride	oz	3.36					0.05	3.41		3.41
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	8.40					0.10	8.50		8.50
IncidentalPestTrt$15	acre	22.50					0.26	22.76		22.76
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Cotton Picker/Module	6R-38(500)		10.47	22.99	6.29		0.12	39.87	85.33	125.20
Gin & Haul	lb	165.00					0.48	165.48		165.48
Stalk Shredder-Flail	20'		3.01	3.13	2.27		0.02	8.43	6.21	14.64
1/4-mi. Pivot Irr.	acre		26.43	21.95	1.84		0.64	50.86	68.70	119.56
TOTALS		736.49	52.50	57.57	21.33	0.00	12.51	880.40	192.25	1072.65

Note: Cost of production estimates are based on 2021 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 variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

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	1504.35
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	21.00	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	36.08	0.00	36.08	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	21.75	0.00	44.86	24.16	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	14.23	49.20	24.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.55	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	3.36	6.72	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	39.29	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	2.16	0.00	0.00	0.00	0.00	1.65	5.02	3.59	0.20	0.15	0.00	8.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.86	0.00	0.00	0.00	0.00	1.88	4.00	11.78	10.57	7.93	0.00	13.48
REPAIR & MAINTENANCE	2.47	0.00	0.00	0.00	0.00	1.34	3.21	20.95	1.99	1.49	0.00	26.12
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.00	0.69	0.84	3.66	1.66	1.06	0.39	0.18	0.62
TOTAL DIRECT EXPENSES	100.47	0.00	0.00	0.00	30.10	41.79	211.89	115.81	90.74	45.51	30.31	213.78
NET INCOME	-100.47	0.00	0.00	0.00	-30.10	-41.79	-211.89	-115.81	-90.74	-45.51	-30.31	1290.57
NET INCOME TO DATE	-100.47	-100.47	-100.47	-100.47	-130.57	-172.36	-384.25	-500.06	-590.80	-636.31	-666.62	623.95

Note: Cost of production estimates are based on 2021 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 variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-94	-62	-30	1	33	65	97	129	162	194	226
			-286	-254	-222	-190	-158	-126	-94	-62	-30	1	33
60	900.00	lb	-14	23	62	100	139	177	215	254	292	331	369
			-206	-168	-130	-91	-53	-14	23	62	100	139	177
70	1050.00	lb	64	109	154	199	244	289	333	378	423	468	513
			-127	-82	-37	7	52	96	141	186	231	276	321
80	1200.00	lb	144	195	246	298	349	400	451	503	554	605	657
			-47	3	54	105	157	208	259	311	362	413	464
90	1350.00	lb	223	281	339	396	454	512	570	627	685	743	800
			31	89	147	204	262	320	377	435	493	550	608
100	1500.00	lb	303	367	431	495	559	623	688	752	816	880	944
			111	175	239	303	367	431	495	559	623	688	752
110	1650.00	lb	383	453	524	594	665	735	806	876	947	1017	1088
			190	261	331	402	472	543	613	684	754	825	895
120	1800.00	lb	462	539	616	693	770	847	924	1000	1077	1154	1231
			270	347	424	501	578	654	731	808	885	962	1039
130	1950.00	lb	542	625	708	792	875	958	1042	1125	1208	1292	1375
			350	433	516	599	683	766	849	933	1016	1099	1183
140	2100.00	lb	621	711	801	890	980	1070	1160	1249	1339	1429	1518
			429	519	609	698	788	878	967	1057	1147	1236	1326
150	2250.00	lb	701	797	893	989	1085	1182	1278	1374	1470	1566	1662
			509	605	701	797	893	989	1085	1182	1278	1374	1470

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 2021 input prices.

Table 4.A Estimated costs per acre
Cotton, 12R-38" solid, no-till
B3XF variety, Delta Area, Mississippi, 2022

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	5.60	5.2500	29.40	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	25.4000	53.34	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	96.0000	10.56	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Engenia	oz	0.83	25.6000	21.25	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Centric 40WG	oz	4.97	2.0000	9.94	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.63	1.5000	11.45	_____
SEED/PLANTS					
Cotton Seed B3XF	thous	2.59	45.0000	116.55	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	48.0000	10.08	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.2712	4.14	_____
Self-Propelled	hour	15.27	0.2075	3.17	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
UNALLOCATED LABOR	hour	15.21	0.3830	5.83	_____
DIESEL FUEL					
Tractors	gal	2.36	4.1890	9.88	_____
Self-Propelled	gal	2.36	4.8836	11.52	_____
REPAIR & MAINTENANCE					
Implements	acre	5.78	1.0000	5.78	_____
Tractors	acre	2.74	1.0000	2.74	_____
Self-Propelled	acre	23.62	1.0000	23.62	_____
INTEREST ON OP. CAP.	acre	10.82	1.0000	10.82	_____

TOTAL DIRECT EXPENSES				754.48	_____
FIXED EXPENSES					
Implements	acre	7.27	1.0000	7.27	_____
Tractors	acre	16.20	1.0000	16.20	_____
Self-Propelled	acre	89.17	1.0000	89.17	_____

TOTAL FIXED EXPENSES				112.64	_____

TOTAL SPECIFIED EXPENSES				867.12	_____

Note: Cost of production estimates are based on 2021 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 variety, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	1200.0000	1025.28	_____
Cotton Seed	lb	0.11	1620.0000	178.20	_____

TOTAL INCOME				1203.48	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	92.79	1.0000	92.79	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	90.77	1.0000	90.77	_____
INSECTICIDES	acre	85.21	1.0000	85.21	_____
SEED/PLANTS	acre	116.55	1.0000	116.55	_____
GROWTH REGULATORS	acre	10.08	1.0000	10.08	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.4788	7.31	_____
UNALLOCATED LABOR	hour	15.21	0.3830	5.83	_____
DIESEL FUEL	gal	2.36	9.0726	21.40	_____
REPAIR & MAINTENANCE	acre	32.14	1.0000	32.14	_____
INTEREST ON OP. CAP.	acre	10.82	1.0000	10.82	_____

TOTAL DIRECT EXPENSES				754.48	_____
RETURNS ABOVE DIRECT EXPENSES				449.00	_____
TOTAL FIXED EXPENSES				112.64	_____

TOTAL SPECIFIED EXPENSES				867.12	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				336.36	_____

Note: Cost of production estimates are based on 2021 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 variety, Delta Area, Mississippi, 2022

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 300	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 300	0.051	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed B3XF	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
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
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 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					25.4000				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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 300	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 2021 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 variety, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
NT Plant-Folding	12R-38		1.88	2.39	1.89		0.11	6.27	6.40	12.67
Cotton Seed B3XF	thous	116.55					2.04	118.59		118.59
Cotton Seed Trt.	acre	20.00					0.35	20.35		20.35
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Engenia	oz	10.62					0.19	10.81		10.81
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.01	0.94	1.28	2.22
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.07	4.94	3.95	8.89
UAN (32%)	gal	53.34					0.78	54.12		54.12
Spray (Direct/Layby)	12R-38		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Engenia	oz	10.62					0.15	10.77		10.77
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Dual Magnum	pt	10.02					0.15	10.17		10.17
Centric 40WG	oz	9.94					0.14	10.08		10.08
Mepiquat Chloride	oz	3.36					0.05	3.41		3.41
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
IncidentalPestTrt$15	acre	15.00					0.18	15.18		15.18
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Cotton Picker/Module	6R-38(500)		10.47	22.99	6.29		0.12	39.87	85.33	125.20
Gin & Haul	lb	132.00					0.39	132.39		132.39
Stalk Shredder-Flail	20'		3.01	3.13	2.27		0.02	8.43	6.21	14.64
TOTALS		674.37	21.40	32.14	15.75	0.00	10.82	754.48	112.64	867.12

Note: Cost of production estimates are based on 2021 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 variety, Delta Area, Mississippi, 2022

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	1203.48
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	18.20	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	0.00	0.00	53.34	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	21.75	0.00	44.86	24.16	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	14.23	41.70	24.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.55	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	3.36	6.72	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	39.29	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	3.75	3.44	0.00	0.00	0.00	8.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	4.07	3.85	0.00	0.00	0.00	13.48
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.54	2.48	0.00	0.00	0.00	26.12
INTEREST ON OP. CAP.	3.14	0.00	0.00	0.00	0.69	0.00	3.65	1.52	0.80	0.31	0.18	0.53
TOTAL DIRECT EXPENSES	92.71	0.00	0.00	0.00	30.10	0.00	211.01	106.38	67.42	35.86	30.31	180.69
NET INCOME	-92.71	0.00	0.00	0.00	-30.10	0.00	-211.01	-106.38	-67.42	-35.86	-30.31	1022.79
NET INCOME TO DATE	-92.71	-92.71	-92.71	-92.71	-122.81	-122.81	-333.82	-440.20	-507.62	-543.48	-573.79	449.00

Note: Cost of production estimates are based on 2021 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 variety, Delta Area, Mississippi, 2022

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-125	-99	-74	-48	-23	2	28	53	79	105	130
			-238	-212	-186	-161	-135	-110	-84	-58	-33	-7	18
60	720.00	lb	-61	-31	-0	30	61	91	122	153	184	214	245
			-174	-143	-113	-82	-51	-20	9	40	71	102	132
70	840.00	lb	1	37	73	109	145	181	217	252	288	324	360
			-110	-75	-39	-3	32	68	104	140	176	212	247
80	960.00	lb	65	106	147	188	229	270	311	352	393	434	475
			-47	-6	34	75	116	157	198	239	280	321	362
90	1080.00	lb	129	175	221	267	313	359	405	451	498	544	590
			16	62	108	154	200	247	293	339	385	431	477
100	1200.00	lb	192	243	295	346	397	449	500	551	602	654	705
			80	131	182	233	285	336	387	438	490	541	592
110	1320.00	lb	256	312	369	425	481	538	594	651	707	763	820
			143	200	256	312	369	425	482	538	594	651	707
120	1440.00	lb	319	381	443	504	566	627	689	750	812	873	935
			207	268	330	391	453	514	576	637	699	761	822
130	1560.00	lb	383	450	516	583	650	716	783	850	916	983	1050
			271	337	404	470	537	604	670	737	804	870	937
140	1680.00	lb	447	519	590	662	734	806	877	949	1021	1093	1165
			334	406	478	549	621	693	765	837	908	980	1052
150	1800.00	lb	510	587	664	741	818	895	972	1049	1126	1203	1279
			398	475	552	629	705	782	859	936	1013	1090	1167

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 2021 input prices.

Table 5.A Estimated costs per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF variety, Delta, Mississippi, 2022

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	5.60	5.2500	29.40	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	32.5498	68.35	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	96.0000	10.56	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Engenia	oz	0.83	25.6000	21.25	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Centric 40WG	oz	4.97	1.3400	6.66	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.63	1.5000	11.45	_____
SEED/PLANTS					
Cotton Seed B3XF	thous	2.59	30.0000	77.70	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	42.7200	8.97	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.8159	12.46	_____
Self-Propelled	hour	15.27	0.1958	2.99	_____
HAND LABOR					
Implements	hour	9.06	0.3181	2.87	_____
Self-Propelled	hour	9.06	0.1840	1.66	_____
UNALLOCATED LABOR	hour	15.23	0.8094	12.33	_____
DIESEL FUEL					
Tractors	gal	2.36	12.6003	29.73	_____
Self-Propelled	gal	2.36	3.4035	8.03	_____
REPAIR & MAINTENANCE					
Implements	acre	11.56	1.0000	11.56	_____
Tractors	acre	8.23	1.0000	8.23	_____
Self-Propelled	acre	10.03	1.0000	10.03	_____
INTEREST ON OP. CAP.	acre	10.71	1.0000	10.71	_____

TOTAL DIRECT EXPENSES				707.36	_____
FIXED EXPENSES					
Implements	acre	16.58	1.0000	16.58	_____
Tractors	acre	48.73	1.0000	48.73	_____
Self-Propelled	acre	38.23	1.0000	38.23	_____

TOTAL FIXED EXPENSES				103.54	_____

TOTAL SPECIFIED EXPENSES				810.90	_____

Note: Cost of production estimates are based on 2021 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 variety, Delta, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	811.0000	692.92	_____
Cotton Seed	lb	0.11	1095.0000	120.45	_____

TOTAL INCOME				813.37	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	107.81	1.0000	107.81	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	90.77	1.0000	90.77	_____
INSECTICIDES	acre	81.93	1.0000	81.93	_____
SEED/PLANTS	acre	77.70	1.0000	77.70	_____
GROWTH REGULATORS	acre	8.97	1.0000	8.97	_____
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	39.29	1.0000	39.29	_____
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	15.27	1.0118	15.45	_____
UNALLOCATED LABOR	hour	15.23	0.8094	12.33	_____
DIESEL FUEL	gal	2.36	16.0039	37.76	_____
REPAIR & MAINTENANCE	acre	29.82	1.0000	29.82	_____
INTEREST ON OP. CAP.	acre	10.71	1.0000	10.71	_____

TOTAL DIRECT EXPENSES				707.36	_____
RETURNS ABOVE DIRECT EXPENSES				106.01	_____
TOTAL FIXED EXPENSES				103.54	_____

TOTAL SPECIFIED EXPENSES				810.90	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				2.47	_____

Note: Cost of production estimates are based on 2021 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 variety, Delta, Mississippi, 2022

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 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	8R-38 2x1	MFWD 300	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 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	8R-38 2x1	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B3XF	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
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 300	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 300	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 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					1.3400				
Mepiquat Chloride	oz					10.7200				
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 300	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1(350)	MFWD 300	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 300	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 2021 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 variety, Delta, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed-Subsoil Fold	8R-38 2x1		1.96	1.90	1.48		0.19	5.53	5.38	10.91
Bed/Disk (Hipper)	8R-38 2x1		0.90	0.57	0.68		0.08	2.23	2.25	4.48
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	8R-38 2x1		1.88	1.39	1.65		0.10	5.02	4.00	9.02
UAN (32%)	gal	34.18					0.70	34.88		34.88
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
Plant - Folding	8R-38 2x1		1.81	2.06	1.82		0.10	5.79	5.73	11.52
Cotton Seed B3XF	thous	77.70					1.36	79.06		79.06
Cotton Seed Trt.	acre	13.40					0.23	13.63		13.63
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Engenia	oz	10.62					0.19	10.81		10.81
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Spray (Direct/Layby)	8R-38 2x1		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	8R-38 2x1		1.88	1.39	1.65		0.07	4.99	4.00	8.99
UAN (32%)	gal	34.18					0.50	34.68		34.68
Spray (Direct/Layby)	8R-38 2x1		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Engenia	oz	10.62					0.15	10.77		10.77
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Dual Magnum	pt	10.02					0.15	10.17		10.17
Centric 40WG	oz	6.66					0.10	6.76		6.76
Mepiquat Chloride	oz	2.25					0.03	2.28		2.28
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
IncidentalPestTrt$15	acre	15.00					0.18	15.18		15.18
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Cotton Picker	4R2x1(350)		7.33	9.61	6.29		0.07	23.30	35.67	58.97
Boll Buggy	4R2x1(350)		6.28	3.05	4.73		0.04	14.10	12.76	26.86
Module Builder	4R2x1(350)		6.28	3.23	6.29		0.05	15.85	13.10	28.95
Gin & Haul	lb	89.21					0.26	89.47		89.47
Stalk Shredder-Flail	15'		4.01	3.61	3.02		0.03	10.67	7.98	18.65
TOTALS		596.76	37.76	29.82	32.31	0.00	10.71	707.36	103.54	810.90

Note: Cost of production estimates are based on 2021 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 variety, Delta, Mississippi, 2022

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	813.37
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	18.20	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	34.18	0.00	34.18	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	13.40	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	44.86	24.16	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	10.95	41.70	24.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.70	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	6.72	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	39.29	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	2.16	0.00	0.00	0.00	0.00	1.65	3.68	4.49	0.00	0.00	0.00	20.33
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	2.86	0.00	0.00	0.00	0.00	1.88	4.00	5.12	0.00	0.00	0.00	23.90
REPAIR & MAINTENANCE	2.47	0.00	0.00	0.00	0.00	1.39	3.21	3.25	0.00	0.00	0.00	19.50
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.00	0.69	0.80	2.84	1.23	0.80	0.31	0.18	0.45
TOTAL DIRECT EXPENSES	100.47	0.00	0.00	0.00	30.10	39.90	164.28	85.63	67.42	35.86	30.31	153.39
NET INCOME	-100.47	0.00	0.00	0.00	-30.10	-39.90	-164.28	-85.63	-67.42	-35.86	-30.31	659.98
NET INCOME TO DATE	-100.47	-100.47	-100.47	-100.47	-130.57	-170.47	-334.75	-420.38	-487.80	-523.66	-553.97	106.01

Note: Cost of production estimates are based on 2021 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 variety, Delta, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-282	-265	-247	-230	-213	-195	-178	-161	-143	-126	-109
			-385	-368	-351	-333	-316	-299	-281	-264	-247	-229	-212
60	486.60	lb	-239	-218	-197	-176	-156	-135	-114	-93	-73	-52	-31
			-342	-322	-301	-280	-259	-238	-218	-197	-176	-155	-134
70	567.70	lb	-196	-172	-147	-123	-99	-75	-50	-26	-2	21	46
			-299	-275	-251	-227	-202	-178	-154	-130	-105	-81	-57
80	648.80	lb	-153	-125	-97	-70	-42	-14	13	40	68	96	123
			-256	-229	-201	-173	-145	-118	-90	-62	-35	-7	20
90	729.90	lb	-110	-79	-47	-16	14	45	76	108	139	170	201
			-213	-182	-151	-120	-89	-57	-26	4	35	66	98
100	811.00	lb	-67	-32	2	36	71	106	140	175	209	244	279
			-170	-136	-101	-66	-32	2	37	71	106	141	175
110	892.10	lb	-24	13	52	90	128	166	204	242	280	318	356
			-127	-89	-51	-13	24	62	100	139	177	215	253
120	973.20	lb	18	60	101	143	185	226	268	309	351	393	434
			-84	-43	-1	40	81	123	164	206	247	289	331
130	1054.30	lb	61	106	151	196	242	287	332	377	422	467	512
			-41	3	48	93	138	183	228	273	318	363	408
140	1135.40	lb	104	153	201	250	298	347	395	444	492	541	589
			1	49	98	146	195	243	292	340	389	437	486
150	1216.50	lb	147	199	251	303	355	407	459	511	563	615	667
			44	96	148	200	252	304	356	408	460	512	564

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 2021 input prices.

Table 6.A Estimated costs per acre
Cotton, 12R-38" solid, conservation tillage
W3FE variety, Delta Area, Mississippi, 2022

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	5.60	5.2500	29.40	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	34.3582	72.15	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Enlist Duo	pt	3.49	7.0000	24.43	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Centric 40WG	oz	4.97	2.0000	9.94	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.63	1.5000	11.45	_____
SEED/PLANTS					
Cotton Seed W3FE	thous	2.59	45.0000	116.55	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	48.0000	10.08	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.3993	6.10	_____
Self-Propelled	hour	15.27	0.2075	3.17	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
UNALLOCATED LABOR	hour	15.24	0.4855	7.40	_____
DIESEL FUEL					
Tractors	gal	2.36	6.1665	14.55	_____
Self-Propelled	gal	2.36	4.8836	11.52	_____
REPAIR & MAINTENANCE					
Implements	acre	7.97	1.0000	7.97	_____
Tractors	acre	4.03	1.0000	4.03	_____
Self-Propelled	acre	23.62	1.0000	23.62	_____
INTEREST ON OP. CAP.	acre	11.61	1.0000	11.61	_____

TOTAL DIRECT EXPENSES				782.14	_____
FIXED EXPENSES					
Implements	acre	10.54	1.0000	10.54	_____
Tractors	acre	23.84	1.0000	23.84	_____
Self-Propelled	acre	89.17	1.0000	89.17	_____

TOTAL FIXED EXPENSES				123.55	_____

TOTAL SPECIFIED EXPENSES				905.69	_____

Note: Cost of production estimates are based on 2021 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 6.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, conservation tillage
W3FE variety, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	1200.0000	1025.28	_____
Cotton Seed	lb	0.11	1620.0000	178.20	_____

TOTAL INCOME				1203.48	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	111.61	1.0000	111.61	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	86.93	1.0000	86.93	_____
INSECTICIDES	acre	85.21	1.0000	85.21	_____
SEED/PLANTS	acre	116.55	1.0000	116.55	_____
GROWTH REGULATORS	acre	10.08	1.0000	10.08	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.6069	9.27	_____
UNALLOCATED LABOR	hour	15.24	0.4855	7.40	_____
DIESEL FUEL	gal	2.36	11.0501	26.07	_____
REPAIR & MAINTENANCE	acre	35.62	1.0000	35.62	_____
INTEREST ON OP. CAP.	acre	11.61	1.0000	11.61	_____

TOTAL DIRECT EXPENSES				782.14	_____
RETURNS ABOVE DIRECT EXPENSES				421.34	_____
TOTAL FIXED EXPENSES				123.55	_____

TOTAL SPECIFIED EXPENSES				905.69	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				297.79	_____

Note: Cost of production estimates are based on 2021 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 6.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
W3FE variety, Delta Area, Mississippi, 2022

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 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	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 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed 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
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
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 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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 300	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 2021 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 6.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
W3FE variety, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed-Subsoil Fold	12R-38		1.96	1.90	1.48		0.19	5.53	5.38	10.91
Bed/Disk (Hipper)	12R-38		0.90	0.57	0.68		0.08	2.23	2.25	4.48
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.10	4.97	3.95	8.92
UAN (32%)	gal	36.08					0.74	36.82		36.82
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
Plant - Folding	12R-38		1.81	2.06	1.82		0.10	5.79	5.73	11.52
Cotton Seed W3FE	thous	116.55					2.04	118.59		118.59
Cotton Seed Trt.	acre	20.00					0.35	20.35		20.35
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Enlist Duo	pt	12.22					0.21	12.43		12.43
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.01	0.94	1.28	2.22
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.07	4.94	3.95	8.89
UAN (32%)	gal	36.08					0.53	36.61		36.61
Spray (Direct/Layby)	12R-38		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Enlist Duo	pt	12.22					0.18	12.40		12.40
Dual Magnum	pt	10.02					0.15	10.17		10.17
Centric 40WG	oz	9.94					0.14	10.08		10.08
Mepiquat Chloride	oz	3.36					0.05	3.41		3.41
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
IncidentalPestTrt$15	acre	15.00					0.18	15.18		15.18
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Cotton Picker/Module	6R-38(500)		10.47	22.99	6.29		0.12	39.87	85.33	125.20
Gin & Haul	lb	132.00					0.39	132.39		132.39
Stalk Shredder-Flail	20'		3.01	3.13	2.27		0.02	8.43	6.21	14.64
TOTALS		689.35	26.07	35.62	19.49	0.00	11.61	782.14	123.55	905.69

Note: Cost of production estimates are based on 2021 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 6.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, conservation tillage
W3FE variety, Delta Area, Mississippi, 2022

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	1203.48
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	18.20	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	36.08	0.00	36.08	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	21.75	0.00	42.94	22.24	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	14.23	41.70	24.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.55	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	3.36	6.72	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	39.29	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	2.16	0.00	0.00	0.00	0.00	1.65	3.68	3.44	0.00	0.00	0.00	8.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.86	0.00	0.00	0.00	0.00	1.88	4.00	3.85	0.00	0.00	0.00	13.48
REPAIR & MAINTENANCE	2.47	0.00	0.00	0.00	0.00	1.34	3.21	2.48	0.00	0.00	0.00	26.12
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.00	0.69	0.84	3.60	1.25	0.80	0.31	0.18	0.53
TOTAL DIRECT EXPENSES	100.47	0.00	0.00	0.00	30.10	41.79	208.57	86.93	67.42	35.86	30.31	180.69
NET INCOME	-100.47	0.00	0.00	0.00	-30.10	-41.79	-208.57	-86.93	-67.42	-35.86	-30.31	1022.79
NET INCOME TO DATE	-100.47	-100.47	-100.47	-100.47	-130.57	-172.36	-380.93	-467.86	-535.28	-571.14	-601.45	421.34

Note: Cost of production estimates are based on 2021 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 6.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, conservation tillage
W3FE variety, Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-153	-127	-102	-76	-50	-25	0	26	51	77	103
			-276	-251	-225	-199	-174	-148	-123	-97	-71	-46	-20
60	720.00	lb	-89	-58	-28	2	33	64	94	125	156	187	217
			-213	-182	-151	-120	-90	-59	-28	2	32	63	94
70	840.00	lb	-25	9	45	81	117	153	189	225	261	297	332
			-149	-113	-77	-41	-5	29	65	101	137	173	209
80	960.00	lb	37	78	119	160	201	242	283	324	365	406	447
			-85	-44	-3	37	78	119	160	201	242	283	324
90	1080.00	lb	101	147	193	239	285	332	378	424	470	516	562
			-22	23	70	116	162	208	254	300	346	393	439
100	1200.00	lb	165	216	267	318	370	421	472	523	575	626	677
			41	92	143	195	246	297	349	400	451	502	554
110	1320.00	lb	228	285	341	397	454	510	567	623	679	736	792
			105	161	217	274	330	387	443	499	556	612	669
120	1440.00	lb	292	353	415	476	538	599	661	722	784	845	907
			168	230	291	353	414	476	537	599	660	722	783
130	1560.00	lb	355	422	489	555	622	689	755	822	889	955	1022
			232	299	365	432	499	565	632	698	765	832	898
140	1680.00	lb	419	491	563	634	706	778	850	922	993	1065	1137
			296	367	439	511	583	654	726	798	870	942	1013
150	1800.00	lb	483	560	637	713	790	867	944	1021	1098	1175	1252
			359	436	513	590	667	744	821	898	974	1051	1128

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 2021 input prices.

Table 7.A Estimated costs per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2022

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	5.60	5.7500	32.20	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	34.3582	72.15	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Enlist Duo	pt	3.49	7.0000	24.43	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Centric 40WG	oz	4.97	2.0000	9.94	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.5000	22.50	_____
Transform WG	oz	7.63	1.5000	11.45	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Cotton Seed W3FE	thous	2.59	45.0000	116.55	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	51.0000	10.71	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5025	7.67	_____
Self-Propelled	hour	15.27	0.2075	3.17	_____
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	15.23	0.5052	7.70	_____
DIESEL FUEL					
Tractors	gal	2.36	7.2737	17.17	_____
Self-Propelled	gal	2.36	4.8836	11.52	_____
Roll-Out Pipe Irr.	gal	2.36	8.5535	20.19	_____
REPAIR & MAINTENANCE					
Implements	acre	8.50	1.0000	8.50	_____
Tractors	acre	4.73	1.0000	4.73	_____
Self-Propelled	acre	23.62	1.0000	23.62	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	12.29	1.0000	12.29	_____

TOTAL DIRECT EXPENSES				871.04	_____
FIXED EXPENSES					
Implements	acre	12.73	1.0000	12.73	_____
Tractors	acre	27.99	1.0000	27.99	_____
Self-Propelled	acre	89.17	1.0000	89.17	_____
Roll-Out Pipe Irr.	acre	49.28	1.0000	49.28	_____

TOTAL FIXED EXPENSES				179.17	_____

TOTAL SPECIFIED EXPENSES				1050.21	_____

Note: Cost of production estimates are based on 2021 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 7.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	1500.0000	1281.60	_____
Cotton Seed	lb	0.11	2025.0000	222.75	_____

TOTAL INCOME				1504.35	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.70	1.0000	49.70	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	111.61	1.0000	111.61	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	86.93	1.0000	86.93	_____
INSECTICIDES	acre	92.71	1.0000	92.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	116.55	1.0000	116.55	_____
GROWTH REGULATORS	acre	10.71	1.0000	10.71	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.7101	10.84	_____
UNALLOCATED LABOR	hour	15.23	0.5052	7.70	_____
DIESEL FUEL	gal	2.36	20.7109	48.88	_____
REPAIR & MAINTENANCE	acre	44.01	1.0000	44.01	_____
INTEREST ON OP. CAP.	acre	12.29	1.0000	12.29	_____

TOTAL DIRECT EXPENSES				871.04	_____
RETURNS ABOVE DIRECT EXPENSES				633.31	_____
TOTAL FIXED EXPENSES				179.17	_____

TOTAL SPECIFIED EXPENSES				1050.21	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				454.14	_____

Note: Cost of production estimates are based on 2021 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 7.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2022

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 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	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 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed 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
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
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 300	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 300	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					19.0000				
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 300	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 2021 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 7.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed-Subsoil Fold	12R-38		1.96	1.90	1.48		0.19	5.53	5.38	10.91
Bed/Disk (Hipper)	12R-38		1.80	1.13	1.35		0.15	4.43	4.51	8.94
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.10	4.97	3.95	8.92
UAN (32%)	gal	36.08					0.74	36.82		36.82
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
Plant - Folding	12R-38		1.81	2.06	1.82		0.10	5.79	5.73	11.52
Cotton Seed W3FE	thous	116.55					2.04	118.59		118.59
Cotton Seed Trt.	acre	20.00					0.35	20.35		20.35
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Enlist Duo	pt	12.22					0.21	12.43		12.43
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.01	0.94	1.28	2.22
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.07	4.94	3.95	8.89
UAN (32%)	gal	36.08					0.53	36.61		36.61
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Spray (Direct/Layby)	12R-38		1.62	0.93	1.42		0.05	4.02	3.20	7.22
Enlist Duo	pt	12.22					0.14	12.36		12.36
Dual Magnum	pt	10.02					0.12	10.14		10.14
Centric 40WG	oz	9.94					0.12	10.06		10.06
Mepiquat Chloride	oz	3.99					0.05	4.04		4.04
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	8.40					0.10	8.50		8.50
IncidentalPestTrt$15	acre	22.50					0.26	22.76		22.76
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Cotton Picker/Module	6R-38(500)		10.47	22.99	6.29		0.12	39.87	85.33	125.20
Gin & Haul	lb	165.00					0.48	165.48		165.48
Stalk Shredder-Flail	20'		3.01	3.13	2.27		0.02	8.43	6.21	14.64
Roll-Out Pipe Irr.	acre	7.92	21.91	7.83	4.50		0.51	42.67	53.36	96.03
TOTALS		741.20	48.88	44.01	24.66	0.00	12.29	871.04	179.17	1050.21

Note: Cost of production estimates are based on 2021 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 7.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2022

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	1504.35
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	21.00	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	36.08	0.00	36.08	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	21.75	0.00	42.94	0.00	22.24	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	4.29	59.14	24.35	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	116.55	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	10.71	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	39.29	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	2.83	0.00	0.00	0.00	0.00	1.65	3.91	4.62	1.65	0.23	0.63	9.14
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.76	0.00	0.00	0.00	0.00	1.88	4.00	9.41	8.35	6.73	0.39	14.36
REPAIR & MAINTENANCE	3.03	0.00	0.00	0.00	0.00	1.34	3.21	6.09	2.33	1.40	0.17	26.44
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.00	0.69	0.84	3.60	1.00	1.48	0.38	0.19	0.63
TOTAL DIRECT EXPENSES	102.67	0.00	0.00	0.00	30.10	41.79	208.80	69.41	126.90	44.29	31.51	215.57
NET INCOME	-102.67	0.00	0.00	0.00	-30.10	-41.79	-208.80	-69.41	-126.90	-44.29	-31.51	1288.78
NET INCOME TO DATE	-102.67	-102.67	-102.67	-102.67	-132.77	-174.56	-383.36	-452.77	-579.67	-623.96	-655.47	633.31

Note: Cost of production estimates are based on 2021 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 7.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2022

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-84	-52	-20	11	43	75	107	139	171	203	235
			-264	-232	-200	-168	-135	-103	-71	-39	-7	24	56
60	900.00	lb	-5	33	71	109	148	186	225	263	302	340	379
			-184	-146	-107	-69	-30	7	46	84	123	161	199
70	1050.00	lb	74	119	163	208	253	298	343	388	433	477	522
			-104	-60	-15	29	74	119	164	209	253	298	343
80	1200.00	lb	153	205	256	307	358	410	461	512	563	615	666
			-25	25	77	128	179	230	282	333	384	435	487
90	1350.00	lb	233	291	348	406	464	521	579	637	694	752	810
			54	111	169	227	284	342	400	457	515	573	630
100	1500.00	lb	312	376	441	505	569	633	697	761	825	889	953
			133	197	261	325	390	454	518	582	646	710	774
110	1650.00	lb	392	462	533	603	674	744	815	885	956	1026	1097
			213	283	354	424	495	565	636	706	777	847	918
120	1800.00	lb	472	548	625	702	779	856	933	1010	1087	1164	1241
			292	369	446	523	600	677	754	831	908	984	1061
130	1950.00	lb	551	634	718	801	884	968	1051	1134	1218	1301	1384
			372	455	539	622	705	788	872	955	1038	1122	1205
140	2100.00	lb	631	720	810	900	990	1079	1169	1259	1348	1438	1528
			452	541	631	721	810	900	990	1080	1169	1259	1349
150	2250.00	lb	710	806	903	999	1095	1191	1287	1383	1479	1575	1671
			531	627	723	819	916	1012	1108	1204	1300	1396	1492

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 2021 input prices.

Table 8.A Estimated costs per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

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	5.60	5.7500	32.20	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	34.3582	72.15	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Enlist Duo	pt	3.49	7.0000	24.43	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Centric 40WG	oz	4.97	2.0000	9.94	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.5000	22.50	_____
Transform WG	oz	7.63	1.5000	11.45	_____
SEED/PLANTS					
Cotton Seed W3FE	thous	2.59	45.0000	116.55	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	48.0000	10.08	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.3993	6.10	_____
Self-Propelled	hour	15.27	0.2075	3.17	_____
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	15.24	0.4855	7.40	_____
DIESEL FUEL					
Tractors	gal	2.36	6.1665	14.55	_____
Self-Propelled	gal	2.36	4.8836	11.52	_____
1/4-mi. Pivot Irr.	gal	2.36	11.2011	26.43	_____
REPAIR & MAINTENANCE					
Implements	acre	7.97	1.0000	7.97	_____
Tractors	acre	4.03	1.0000	4.03	_____
Self-Propelled	acre	23.62	1.0000	23.62	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	12.45	1.0000	12.45	_____

TOTAL DIRECT EXPENSES				876.50	_____
FIXED EXPENSES					
Implements	acre	10.54	1.0000	10.54	_____
Tractors	acre	23.84	1.0000	23.84	_____
Self-Propelled	acre	89.17	1.0000	89.17	_____
1/4-mi. Pivot Irr.	acre	68.70	1.0000	68.70	_____

TOTAL FIXED EXPENSES				192.25	_____

TOTAL SPECIFIED EXPENSES				1068.75	_____

Note: Cost of production estimates are based on 2021 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 8.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	1500.0000	1281.60	_____
Cotton Seed	lb	0.11	2025.0000	222.75	_____

TOTAL INCOME				1504.35	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.70	1.0000	49.70	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	111.61	1.0000	111.61	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	86.93	1.0000	86.93	_____
INSECTICIDES	acre	92.71	1.0000	92.71	_____
SEED/PLANTS	acre	116.55	1.0000	116.55	_____
GROWTH REGULATORS	acre	10.08	1.0000	10.08	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.6069	9.27	_____
UNALLOCATED LABOR	hour	15.24	0.4855	7.40	_____
DIESEL FUEL	gal	2.36	22.2512	52.50	_____
REPAIR & MAINTENANCE	acre	57.57	1.0000	57.57	_____
INTEREST ON OP. CAP.	acre	12.45	1.0000	12.45	_____

TOTAL DIRECT EXPENSES				876.50	_____
RETURNS ABOVE DIRECT EXPENSES				627.85	_____
TOTAL FIXED EXPENSES				192.25	_____

TOTAL SPECIFIED EXPENSES				1068.75	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				435.60	_____

Note: Cost of production estimates are based on 2021 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 8.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

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 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	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 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed 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
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
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 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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 300	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 2021 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 8.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed-Subsoil Fold	12R-38		1.96	1.90	1.48		0.19	5.53	5.38	10.91
Bed/Disk (Hipper)	12R-38		0.90	0.57	0.68		0.08	2.23	2.25	4.48
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.10	4.97	3.95	8.92
UAN (32%)	gal	36.08					0.74	36.82		36.82
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
Plant - Folding	12R-38		1.81	2.06	1.82		0.10	5.79	5.73	11.52
Cotton Seed W3FE	thous	116.55					2.04	118.59		118.59
Cotton Seed Trt.	acre	20.00					0.35	20.35		20.35
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Enlist Duo	pt	12.22					0.21	12.43		12.43
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.01	0.94	1.28	2.22
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.07	4.94	3.95	8.89
UAN (32%)	gal	36.08					0.53	36.61		36.61
Spray (Direct/Layby)	12R-38		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Enlist Duo	pt	12.22					0.18	12.40		12.40
Dual Magnum	pt	10.02					0.15	10.17		10.17
Centric 40WG	oz	9.94					0.14	10.08		10.08
Mepiquat Chloride	oz	3.36					0.05	3.41		3.41
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	8.40					0.10	8.50		8.50
IncidentalPestTrt$15	acre	22.50					0.26	22.76		22.76
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Cotton Picker/Module	6R-38(500)		10.47	22.99	6.29		0.12	39.87	85.33	125.20
Gin & Haul	lb	165.00					0.48	165.48		165.48
Stalk Shredder-Flail	20'		3.01	3.13	2.27		0.02	8.43	6.21	14.64
1/4-mi. Pivot Irr.	acre		26.43	21.95	1.84		0.64	50.86	68.70	119.56
TOTALS		732.65	52.50	57.57	21.33	0.00	12.45	876.50	192.25	1068.75

Note: Cost of production estimates are based on 2021 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 8.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

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	1504.35
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	21.00	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	36.08	0.00	36.08	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	21.75	0.00	42.94	22.24	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	14.23	49.20	24.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.55	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	3.36	6.72	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	39.29	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	2.16	0.00	0.00	0.00	0.00	1.65	5.02	3.59	0.20	0.15	0.00	8.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.86	0.00	0.00	0.00	0.00	1.88	4.00	11.78	10.57	7.93	0.00	13.48
REPAIR & MAINTENANCE	2.47	0.00	0.00	0.00	0.00	1.34	3.21	20.95	1.99	1.49	0.00	26.12
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.00	0.69	0.84	3.62	1.64	1.06	0.39	0.18	0.62
TOTAL DIRECT EXPENSES	100.47	0.00	0.00	0.00	30.10	41.79	209.93	113.87	90.74	45.51	30.31	213.78
NET INCOME	-100.47	0.00	0.00	0.00	-30.10	-41.79	-209.93	-113.87	-90.74	-45.51	-30.31	1290.57
NET INCOME TO DATE	-100.47	-100.47	-100.47	-100.47	-130.57	-172.36	-382.29	-496.16	-586.90	-632.41	-662.72	627.85

Note: Cost of production estimates are based on 2021 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 8.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-90	-58	-26	5	37	69	101	133	165	197	229
			-282	-250	-218	-186	-154	-122	-90	-58	-26	5	37
60	900.00	lb	-10	27	66	104	142	181	219	258	296	335	373
			-203	-164	-126	-87	-49	-10	27	66	104	142	181
70	1050.00	lb	68	113	158	203	248	293	337	382	427	472	517
			-123	-78	-33	11	55	100	145	190	235	280	325
80	1200.00	lb	148	199	250	302	353	404	455	507	558	609	660
			-43	7	58	109	161	212	263	314	366	417	468
90	1350.00	lb	227	285	343	400	458	516	573	631	689	746	804
			35	93	150	208	266	323	381	439	497	554	612
100	1500.00	lb	307	371	435	499	563	627	691	756	820	884	948
			115	179	243	307	371	435	499	563	627	691	756
110	1650.00	lb	387	457	527	598	668	739	809	880	950	1021	1091
			194	265	335	406	476	547	617	688	758	829	899
120	1800.00	lb	466	543	620	697	774	851	927	1004	1081	1158	1235
			274	351	428	505	581	658	735	812	889	966	1043
130	1950.00	lb	546	629	712	796	879	962	1045	1129	1212	1295	1379
			353	437	520	603	687	770	853	937	1020	1103	1186
140	2100.00	lb	625	715	805	894	984	1074	1164	1253	1343	1433	1522
			433	523	612	702	792	882	971	1061	1151	1240	1330
150	2250.00	lb	705	801	897	993	1089	1185	1282	1378	1474	1570	1666
			513	609	705	801	897	993	1089	1185	1282	1378	1474

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 2021 input prices.

Table 9.A Estimated costs per acre
Cotton, 12R-38" solid, no-till
W3FE variety, Delta Area, Mississippi, 2022

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	5.60	5.2500	29.40	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	25.4000	53.34	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Enlist Duo	pt	3.49	7.0000	24.43	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Centric 40WG	oz	4.97	2.0000	9.94	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.63	1.5000	11.45	_____
SEED/PLANTS					
Cotton Seed W3FE	thous	2.59	45.0000	116.55	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	48.0000	10.08	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.2712	4.14	_____
Self-Propelled	hour	15.27	0.2075	3.17	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
UNALLOCATED LABOR	hour	15.21	0.3830	5.83	_____
DIESEL FUEL					
Tractors	gal	2.36	4.1890	9.88	_____
Self-Propelled	gal	2.36	4.8836	11.52	_____
REPAIR & MAINTENANCE					
Implements	acre	5.78	1.0000	5.78	_____
Tractors	acre	2.74	1.0000	2.74	_____
Self-Propelled	acre	23.62	1.0000	23.62	_____
INTEREST ON OP. CAP.	acre	10.76	1.0000	10.76	_____

TOTAL DIRECT EXPENSES				750.58	_____
FIXED EXPENSES					
Implements	acre	7.27	1.0000	7.27	_____
Tractors	acre	16.20	1.0000	16.20	_____
Self-Propelled	acre	89.17	1.0000	89.17	_____

TOTAL FIXED EXPENSES				112.64	_____

TOTAL SPECIFIED EXPENSES				863.22	_____

Note: Cost of production estimates are based on 2021 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 9.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, no-till
W3FE variety, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	1200.0000	1025.28	_____
Cotton Seed	lb	0.11	1620.0000	178.20	_____

TOTAL INCOME				1203.48	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	92.79	1.0000	92.79	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	86.93	1.0000	86.93	_____
INSECTICIDES	acre	85.21	1.0000	85.21	_____
SEED/PLANTS	acre	116.55	1.0000	116.55	_____
GROWTH REGULATORS	acre	10.08	1.0000	10.08	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.4788	7.31	_____
UNALLOCATED LABOR	hour	15.21	0.3830	5.83	_____
DIESEL FUEL	gal	2.36	9.0726	21.40	_____
REPAIR & MAINTENANCE	acre	32.14	1.0000	32.14	_____
INTEREST ON OP. CAP.	acre	10.76	1.0000	10.76	_____

TOTAL DIRECT EXPENSES				750.58	_____
RETURNS ABOVE DIRECT EXPENSES				452.90	_____
TOTAL FIXED EXPENSES				112.64	_____

TOTAL SPECIFIED EXPENSES				863.22	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				340.26	_____

Note: Cost of production estimates are based on 2021 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 9.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, no-till
W3FE variety, Delta Area, Mississippi, 2022

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 300	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 300	0.051	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed 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
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
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 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					25.4000				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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 300	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 2021 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 9.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, no-till
W3FE variety, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
NT Plant-Folding	12R-38		1.88	2.39	1.89		0.11	6.27	6.40	12.67
Cotton Seed W3FE	thous	116.55					2.04	118.59		118.59
Cotton Seed Trt.	acre	20.00					0.35	20.35		20.35
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Enlist Duo	pt	12.22					0.21	12.43		12.43
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.01	0.94	1.28	2.22
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	12R-38		1.88	1.34	1.65		0.07	4.94	3.95	8.89
UAN (32%)	gal	53.34					0.78	54.12		54.12
Spray (Direct/Layby)	12R-38		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Enlist Duo	pt	12.22					0.18	12.40		12.40
Dual Magnum	pt	10.02					0.15	10.17		10.17
Centric 40WG	oz	9.94					0.14	10.08		10.08
Mepiquat Chloride	oz	3.36					0.05	3.41		3.41
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
IncidentalPestTrt$15	acre	15.00					0.18	15.18		15.18
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Cotton Picker/Module	6R-38(500)		10.47	22.99	6.29		0.12	39.87	85.33	125.20
Gin & Haul	lb	132.00					0.39	132.39		132.39
Stalk Shredder-Flail	20'		3.01	3.13	2.27		0.02	8.43	6.21	14.64
TOTALS		670.53	21.40	32.14	15.75	0.00	10.76	750.58	112.64	863.22

Note: Cost of production estimates are based on 2021 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 9.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, no-till
W3FE variety, Delta Area, Mississippi, 2022

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	1203.48
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	18.20	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	0.00	0.00	53.34	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	21.75	0.00	42.94	22.24	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	14.23	41.70	24.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.55	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	3.36	6.72	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	39.29	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	3.75	3.44	0.00	0.00	0.00	8.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	4.07	3.85	0.00	0.00	0.00	13.48
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.54	2.48	0.00	0.00	0.00	26.12
INTEREST ON OP. CAP.	3.14	0.00	0.00	0.00	0.69	0.00	3.61	1.50	0.80	0.31	0.18	0.53
TOTAL DIRECT EXPENSES	92.71	0.00	0.00	0.00	30.10	0.00	209.05	104.44	67.42	35.86	30.31	180.69
NET INCOME	-92.71	0.00	0.00	0.00	-30.10	0.00	-209.05	-104.44	-67.42	-35.86	-30.31	1022.79
NET INCOME TO DATE	-92.71	-92.71	-92.71	-92.71	-122.81	-122.81	-331.86	-436.30	-503.72	-539.58	-569.89	452.90

Note: Cost of production estimates are based on 2021 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 9.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, no-till
W3FE variety, Delta Area, Mississippi, 2022

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-121	-96	-70	-44	-19	6	32	57	83	108	134
			-234	-208	-183	-157	-131	-106	-80	-54	-29	-3	21
60	720.00	lb	-58	-27	3	34	64	95	126	157	188	218	249
			-170	-139	-109	-78	-47	-16	13	44	75	106	136
70	840.00	lb	5	41	77	113	149	185	220	256	292	328	364
			-107	-71	-35	0	36	72	108	144	180	215	251
80	960.00	lb	69	110	151	192	233	274	315	356	397	438	479
			-43	-2	38	79	120	161	202	243	284	325	366
90	1080.00	lb	132	179	225	271	317	363	409	455	502	548	594
			20	66	112	158	204	250	297	343	389	435	481
100	1200.00	lb	196	247	299	350	401	452	504	555	606	657	709
			83	135	186	237	288	340	391	442	494	545	596
110	1320.00	lb	260	316	373	429	485	542	598	654	711	767	824
			147	203	260	316	373	429	485	542	598	655	711
120	1440.00	lb	323	385	446	508	569	631	692	754	816	877	939
			211	272	334	395	457	518	580	641	703	764	826
130	1560.00	lb	387	454	520	587	654	720	787	854	920	987	1053
			274	341	408	474	541	608	674	741	808	874	941
140	1680.00	lb	451	522	594	666	738	810	881	953	1025	1097	1168
			338	410	482	553	625	697	769	840	912	984	1056
150	1800.00	lb	514	591	668	745	822	899	976	1053	1130	1206	1283
			402	479	556	632	709	786	863	940	1017	1094	1171

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 2021 input prices.

Table 10.A Estimated costs per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., W3FE variety, Delta Area, Mississippi, 2022

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	5.60	5.2500	29.40	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	2.07	2.3000	4.76	_____
Ethephon 6E	pt	3.89	2.3125	9.00	_____
Tribufos 6lb	pt	11.74	0.5000	5.87	_____
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	_____
FERTILIZERS					
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN (32%)	gal	2.10	32.5498	68.35	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____
HERBICIDES					
Clarity	pt	11.00	0.5000	5.50	_____
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Select Max	pt	12.73	1.0000	12.73	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	5.79	2.0000	11.58	_____
Enlist Duo	pt	3.49	7.0000	24.43	_____
Dual Magnum	pt	10.02	2.0000	20.04	_____
INSECTICIDES					
Acephate 90%	lb	9.87	2.0000	19.74	_____
Bidrin 8EC	oz	1.34	5.2000	6.97	_____
Centric 40WG	oz	4.97	1.3400	6.66	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	0.78	2.0000	1.56	_____
Bifenthrin	oz	0.86	12.8000	11.01	_____
Lambda	oz	1.88	1.0000	1.88	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.63	1.5000	11.45	_____
SEED/PLANTS					
Cotton Seed W3FE	thous	2.59	30.0000	77.70	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.21	42.7200	8.97	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.8159	12.46	_____
Self-Propelled	hour	15.27	0.1958	2.99	_____
HAND LABOR					
Implements	hour	9.06	0.3181	2.87	_____
Self-Propelled	hour	9.06	0.1840	1.66	_____
UNALLOCATED LABOR	hour	15.23	0.8094	12.33	_____
DIESEL FUEL					
Tractors	gal	2.36	12.6003	29.73	_____
Self-Propelled	gal	2.36	3.4035	8.03	_____
REPAIR & MAINTENANCE					
Implements	acre	11.56	1.0000	11.56	_____
Tractors	acre	8.23	1.0000	8.23	_____
Self-Propelled	acre	10.03	1.0000	10.03	_____
INTEREST ON OP. CAP.	acre	10.65	1.0000	10.65	_____

TOTAL DIRECT EXPENSES				703.46	_____
FIXED EXPENSES					
Implements	acre	16.58	1.0000	16.58	_____
Tractors	acre	48.73	1.0000	48.73	_____
Self-Propelled	acre	38.23	1.0000	38.23	_____

TOTAL FIXED EXPENSES				103.54	_____

TOTAL SPECIFIED EXPENSES				807.00	_____

Note: Cost of production estimates are based on 2021 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 10.B Summary of estimated costs and returns per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., W3FE variety, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.85	811.0000	692.92	_____
Cotton Seed	lb	0.11	1095.0000	120.45	_____

TOTAL INCOME				813.37	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
HARVEST AIDS	acre	19.63	1.0000	19.63	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	107.81	1.0000	107.81	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	86.93	1.0000	86.93	_____
INSECTICIDES	acre	81.93	1.0000	81.93	_____
SEED/PLANTS	acre	77.70	1.0000	77.70	_____
GROWTH REGULATORS	acre	8.97	1.0000	8.97	_____
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	39.29	1.0000	39.29	_____
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	15.27	1.0118	15.45	_____
UNALLOCATED LABOR	hour	15.23	0.8094	12.33	_____
DIESEL FUEL	gal	2.36	16.0039	37.76	_____
REPAIR & MAINTENANCE	acre	29.82	1.0000	29.82	_____
INTEREST ON OP. CAP.	acre	10.65	1.0000	10.65	_____

TOTAL DIRECT EXPENSES				703.46	_____
RETURNS ABOVE DIRECT EXPENSES				109.91	_____
TOTAL FIXED EXPENSES				103.54	_____

TOTAL SPECIFIED EXPENSES				807.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				6.37	_____

Note: Cost of production estimates are based on 2021 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 10.C Estimated resource use for field operations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., W3FE variety, Delta Area, Mississippi, 2022

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 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	8R-38 2x1	MFWD 300	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 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	8R-38 2x1	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed 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
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 300	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 300	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 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					1.3400				
Mepiquat Chloride	oz					10.7200				
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 300	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1(350)	MFWD 300	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 300	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 2021 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 10.D Estimated costs for field operations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., W3FE variety, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed-Subsoil Fold	8R-38 2x1		1.96	1.90	1.48		0.19	5.53	5.38	10.91
Bed/Disk (Hipper)	8R-38 2x1		0.90	0.57	0.68		0.08	2.23	2.25	4.48
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Clarity	pt	5.50					0.13	5.63		5.63
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.66					0.02	0.68		0.68
Fert Appl (Liquid)	8R-38 2x1		1.88	1.39	1.65		0.10	5.02	4.00	9.02
UAN (32%)	gal	34.18					0.70	34.88		34.88
Row Cond Folding	38'		1.49	0.73	1.12		0.06	3.40	3.71	7.11
Plant - Folding	8R-38 2x1		1.81	2.06	1.82		0.10	5.79	5.73	11.52
Cotton Seed W3FE	thous	77.70					1.36	79.06		79.06
Cotton Seed Trt.	acre	13.40					0.23	13.63		13.63
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Cotoran	pt	11.58					0.20	11.78		11.78
Surfactant	pt	0.66					0.01	0.67		0.67
Cotton Consultant	acre	8.00					0.14	8.14		8.14
Eradication	acre	1.00					0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.35	0.21	0.37		0.02	0.95	1.28	2.23
Enlist Duo	pt	12.22					0.21	12.43		12.43
Dual Magnum	pt	10.02					0.18	10.20		10.20
Acephate 90%	lb	4.93					0.09	5.02		5.02
Spray (Direct/Layby)	8R-38 2x1		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Bidrin 8EC	oz	4.29					0.06	4.35		4.35
Fert Appl (Liquid)	8R-38 2x1		1.88	1.39	1.65		0.07	4.99	4.00	8.99
UAN (32%)	gal	34.18					0.50	34.68		34.68
Spray (Direct/Layby)	8R-38 2x1		1.62	0.93	1.42		0.06	4.03	3.20	7.23
Enlist Duo	pt	12.22					0.18	12.40		12.40
Dual Magnum	pt	10.02					0.15	10.17		10.17
Centric 40WG	oz	6.66					0.10	6.76		6.76
Mepiquat Chloride	oz	2.25					0.03	2.28		2.28
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Diamond .83EC	oz	7.68					0.09	7.77		7.77
Imidacloprid 4F	oz	1.56					0.02	1.58		1.58
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Acephate 90%	lb	7.40					0.09	7.49		7.49
Mepiquat Chloride	oz	3.36					0.04	3.40		3.40
Bifenthrin	oz	5.50					0.06	5.56		5.56
App by Air (3 gal)	appl	1.40					0.02	1.42		1.42
Lambda	oz	1.88					0.02	1.90		1.90
Bidrin 8EC	oz	2.68					0.03	2.71		2.71
Incidental Pest										
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
IncidentalPestTrt$15	acre	15.00					0.18	15.18		15.18
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Acephate 90%	lb	7.40					0.06	7.46		7.46
Bifenthrin	oz	5.50					0.05	5.55		5.55
App by Air (3 gal)	appl	5.60					0.05	5.65		5.65
Transform WG	oz	11.45					0.10	11.55		11.55
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Thidiazuron 4lb	oz	4.76					0.03	4.79		4.79
Ethephon 6E	pt	7.78					0.05	7.83		7.83
App by Air (5 gal)	appl	3.50					0.02	3.52		3.52
Ethephon 6E	pt	1.22					0.01	1.23		1.23
Tribufos 6lb	pt	5.87					0.03	5.90		5.90
Cotton Picker	4R2x1(350)		7.33	9.61	6.29		0.07	23.30	35.67	58.97
Boll Buggy	4R2x1(350)		6.28	3.05	4.73		0.04	14.10	12.76	26.86
Module Builder	4R2x1(350)		6.28	3.23	6.29		0.05	15.85	13.10	28.95
Gin & Haul	lb	89.21					0.26	89.47		89.47
Stalk Shredder-Flail	15'		4.01	3.61	3.02		0.03	10.67	7.98	18.65
TOTALS		592.92	37.76	29.82	32.31	0.00	10.65	703.46	103.54	807.00

Note: Cost of production estimates are based on 2021 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 10.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., W3FE variety, Delta, Mississippi, 2022

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	813.37
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	18.20	11.20	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	19.63	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	39.45	0.00	0.00	0.00	0.00	34.18	0.00	34.18	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	13.40	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	42.94	22.24	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.93	10.95	41.70	24.35	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.70	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	6.72	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	39.29	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	2.16	0.00	0.00	0.00	0.00	1.65	3.68	4.49	0.00	0.00	0.00	20.33
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	2.86	0.00	0.00	0.00	0.00	1.88	4.00	5.12	0.00	0.00	0.00	23.90
REPAIR & MAINTENANCE	2.47	0.00	0.00	0.00	0.00	1.39	3.21	3.25	0.00	0.00	0.00	19.50
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.00	0.69	0.80	2.80	1.21	0.80	0.31	0.18	0.45
TOTAL DIRECT EXPENSES	100.47	0.00	0.00	0.00	30.10	39.90	162.32	83.69	67.42	35.86	30.31	153.39
NET INCOME	-100.47	0.00	0.00	0.00	-30.10	-39.90	-162.32	-83.69	-67.42	-35.86	-30.31	659.98
NET INCOME TO DATE	-100.47	-100.47	-100.47	-100.47	-130.57	-170.47	-332.79	-416.48	-483.90	-519.76	-550.07	109.91

Note: Cost of production estimates are based on 2021 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 10.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., W3FE variety, Delta, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.64	0.68	0.72	0.76	0.81	0.85	0.89	0.93	0.98	1.02	1.06
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-278	-261	-243	-226	-209	-191	-174	-157	-139	-122	-105
			-381	-364	-347	-330	-312	-295	-278	-260	-243	-226	-208
60	486.60	lb	-235	-214	-193	-173	-152	-131	-110	-89	-69	-48	-27
			-338	-318	-297	-276	-255	-235	-214	-193	-172	-151	-131
70	567.70	lb	-192	-168	-143	-119	-95	-71	-46	-22	1	25	50
			-295	-271	-247	-223	-198	-174	-150	-126	-101	-77	-53
80	648.80	lb	-149	-121	-93	-66	-38	-10	16	44	72	100	127
			-252	-225	-197	-169	-142	-114	-86	-58	-31	-3	24
90	729.90	lb	-106	-75	-43	-12	18	49	80	111	143	174	205
			-209	-178	-147	-116	-85	-53	-22	8	39	70	101
100	811.00	lb	-63	-28	5	40	75	109	144	179	213	248	283
			-166	-132	-97	-62	-28	6	41	75	110	144	179
110	892.10	lb	-20	17	55	94	132	170	208	246	284	322	360
			-123	-85	-47	-9	28	66	104	142	181	219	257
120	973.20	lb	22	64	105	147	189	230	272	313	355	396	438
			-80	-39	2	43	85	127	168	210	251	293	334
130	1054.30	lb	65	110	155	200	245	290	335	381	426	471	516
			-37	7	52	97	142	187	232	277	322	367	412
140	1135.40	lb	108	157	205	254	302	351	399	448	496	545	593
			5	53	102	150	199	247	296	344	393	441	490
150	1216.50	lb	151	203	255	307	359	411	463	515	567	619	671
			48	100	152	204	256	308	360	412	464	515	567

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2021 input prices.

Table 11.A Estimated costs per acre
Soybeans, full-season, Enlist E3, stale seedbed, 16R30"
Non-irrigated, Delta Area, Mississippi, 2022

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	8.54	0.6000	5.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	64.0000	7.04	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Select Max	pt	12.73	1.0000	12.73	_____
Valor SX	oz	3.60	2.0000	7.20	_____
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Enlist Duo	pt	3.49	3.5000	12.22	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
Zidua DF	oz	8.76	1.5000	13.14	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.2773	4.23	_____
Harvesters	hour	15.27	0.0851	1.30	_____
HAND LABOR					
Implements	hour	9.06	0.0789	0.72	_____
UNALLOCATED LABOR	hour	15.26	0.3262	4.98	_____
DIESEL FUEL					
Tractors	gal	2.36	4.2827	10.11	_____
Harvesters	gal	2.36	1.4243	3.36	_____
REPAIR & MAINTENANCE					
Implements	acre	5.67	1.0000	5.67	_____
Tractors	acre	2.81	1.0000	2.81	_____
Harvesters	acre	3.67	1.0000	3.67	_____
INTEREST ON OP. CAP.	acre	7.39	1.0000	7.39	_____

TOTAL DIRECT EXPENSES				372.14	_____
FIXED EXPENSES					
Implements	acre	10.77	1.0000	10.77	_____
Tractors	acre	16.55	1.0000	16.55	_____
Harvesters	acre	13.62	1.0000	13.62	_____

TOTAL FIXED EXPENSES				40.94	_____

TOTAL SPECIFIED EXPENSES				413.08	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Non-irrigated, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	42.0000	523.32	_____
TOTAL INCOME				523.32	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	8.16	1.0000	8.16	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	97.65	1.0000	97.65	_____
INSECTICIDES	acre	14.44	1.0000	14.44	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0789	0.72	_____
OPERATOR LABOR	hour	15.27	0.3624	5.53	_____
UNALLOCATED LABOR	hour	15.26	0.3262	4.98	_____
DIESEL FUEL	gal	2.36	5.7071	13.47	_____
REPAIR & MAINTENANCE	acre	12.15	1.0000	12.15	_____
INTEREST ON OP. CAP.	acre	7.39	1.0000	7.39	_____
TOTAL DIRECT EXPENSES				372.14	_____
RETURNS ABOVE DIRECT EXPENSES				151.18	_____
TOTAL FIXED EXPENSES				40.94	_____
TOTAL SPECIFIED EXPENSES				413.08	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				110.24	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Non-irrigated, Delta Area, Mississippi, 2022

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 300	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 300	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 300	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	16R-30	MFWD 300	0.050	1.00	Apr		0.05	0.05	0.10	0.04
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 300	0.028	1.00	May		0.02	0.02	0.04	0.02
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 300	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 300	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.36	0.36	0.44	0.32

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Non-irrigated, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Subsoiler	3 shank		1.49	0.50	1.18		0.11	3.28	2.64	5.92
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Disk Harrow	32'		2.24	1.69	1.78		0.20	5.91	5.76	11.67
Field Cultivate Fld	32'		1.70	0.99	1.35		0.14	4.18	4.83	9.01
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Select Max	pt	12.73					0.30	13.03		13.03
Valor SX	oz	7.20					0.17	7.37		7.37
Surfactant	pt	1.32					0.03	1.35		1.35
Plant & Pre-Folding	16R-30		1.85	2.91	1.94		0.12	6.82	7.28	14.10
Soybean Enlist E3	lb	60.00					1.05	61.05		61.05
CruiserMaxx Vibrance	oz	7.36					0.13	7.49		7.49
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	20.90					0.37	21.27		21.27
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Surfactant	pt	1.32					0.02	1.34		1.34
Soybeans Consultant	acre	6.50					0.09	6.59		6.59
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Enlist Duo	pt	12.22					0.18	12.40		12.40
Dual Magnum	pt	10.02					0.15	10.17		10.17
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Zidua DF	oz	13.14					0.19	13.33		13.33
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Acephate 90SP	lb	6.44					0.04	6.48		6.48
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	5.12					0.03	5.15		5.15
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		3.36	4.62	2.47		0.03	10.48	14.95	25.43
Haul Soybeans	bu	11.34					0.03	11.37		11.37
Grain Cart Soybean	700 bu		0.77	0.48	0.61		0.01	1.87	1.68	3.55
TOTALS		327.90	13.47	12.15	11.23	0.00	7.39	372.14	40.94	413.08

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Non-irrigated, Delta Area, Mississippi, 2022

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	523.32
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	8.16	0.00
FERTILIZERS	59.12	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	28.73	0.00	30.02	38.90	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	14.44	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.31	0.00	0.00	0.00	0.00	0.00	1.94	1.90	0.00	0.00	0.00	3.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.43	0.00	0.00	0.00	0.00	0.00	1.85	2.06	0.00	0.00	0.00	4.13
REPAIR & MAINTENANCE	3.18	0.00	0.00	0.00	0.00	0.00	2.91	0.96	0.00	0.00	0.00	5.10
INTEREST ON OP. CAP.	3.58	0.00	0.00	0.00	0.86	0.00	1.88	0.74	0.00	0.00	0.26	0.07
TOTAL DIRECT EXPENSES	106.10	0.00	0.00	0.00	37.91	0.00	108.83	51.06	0.00	0.00	44.52	23.72
NET INCOME	-106.10	0.00	0.00	0.00	-37.91	0.00	-108.83	-51.06	0.00	0.00	-44.52	499.60
NET INCOME TO DATE	-106.10	-106.10	-106.10	-106.10	-144.01	-144.01	-252.84	-303.90	-303.90	-303.90	-348.42	151.18

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Non-irrigated, Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-170	-157	-144	-130	-117	-104	-91	-78	-65	-52	-39
			-211	-198	-184	-171	-158	-145	-132	-119	-106	-93	-80
60	25.20	bu	-132	-116	-100	-84	-69	-53	-37	-22	-6	9	24
			-173	-157	-141	-125	-110	-94	-78	-63	-47	-31	-16
70	29.40	bu	-93	-75	-57	-39	-20	-2	15	34	52	70	89
			-134	-116	-98	-79	-61	-43	-25	-6	11	29	48
80	33.60	bu	-55	-34	-14	6	27	48	69	90	111	132	153
			-96	-75	-54	-34	-13	7	28	49	70	91	112
90	37.80	bu	-17	5	29	52	76	99	123	147	170	194	217
			-58	-35	-11	11	35	59	82	106	129	153	176
100	42.00	bu	20	46	72	98	125	151	177	203	229	255	282
			-20	5	31	57	84	110	136	162	188	214	241
110	46.20	bu	58	87	116	144	173	202	231	259	288	317	346
			17	46	75	103	132	161	190	219	247	276	305
120	50.40	bu	96	127	159	190	222	253	284	316	347	379	410
			55	87	118	149	181	212	244	275	306	338	369
130	54.60	bu	134	168	202	236	270	304	338	372	406	440	474
			93	127	161	195	229	263	297	331	365	399	433
140	58.80	bu	172	209	246	282	319	355	392	429	465	502	539
			131	168	205	241	278	315	351	388	424	461	498
150	63.00	bu	210	250	289	328	367	407	446	485	524	564	603
			169	209	248	287	326	366	405	444	483	523	562

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 2021 input prices.

Table 12.A Estimated costs per acre
Soybeans, full-season, Enlist E3, stale seedbed, 16R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

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	8.54	0.6000	5.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
Miravis Top	oz	1.34	13.7000	18.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	64.0000	7.04	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Select Max	pt	12.73	1.0000	12.73	_____
Valor SX	oz	3.60	2.0000	7.20	_____
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Enlist Duo	pt	3.49	3.5000	12.22	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
Zidua DF	oz	8.76	1.5000	13.14	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4165	6.36	_____
Harvesters	hour	15.27	0.0851	1.30	_____
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	0.0789	0.72	_____
UNALLOCATED LABOR	hour	15.25	0.3808	5.81	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9456	14.04	_____
Harvesters	gal	2.36	1.4243	3.36	_____
Roll-Out Pipe Irr.	gal	2.36	7.3316	17.31	_____
REPAIR & MAINTENANCE					
Implements	acre	6.63	1.0000	6.63	_____
Tractors	acre	3.87	1.0000	3.87	_____
Harvesters	acre	3.67	1.0000	3.67	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	8.25	1.0000	8.25	_____
TOTAL DIRECT EXPENSES				448.15	_____
FIXED EXPENSES					
Implements	acre	14.00	1.0000	14.00	_____
Tractors	acre	22.84	1.0000	22.84	_____
Harvesters	acre	13.62	1.0000	13.62	_____
Roll-Out Pipe Irr.	acre	49.28	1.0000	49.28	_____
TOTAL FIXED EXPENSES				99.74	_____
TOTAL SPECIFIED EXPENSES				547.89	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	60.0000	747.60	_____
TOTAL INCOME				747.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	8.16	1.0000	8.16	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	25.72	1.0000	25.72	_____
HERBICIDES	acre	97.65	1.0000	97.65	_____
INSECTICIDES	acre	14.44	1.0000	14.44	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0789	0.72	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	15.27	0.5016	7.66	_____
UNALLOCATED LABOR	hour	15.25	0.3808	5.81	_____
DIESEL FUEL	gal	2.36	14.7017	34.71	_____
REPAIR & MAINTENANCE	acre	21.33	1.0000	21.33	_____
INTEREST ON OP. CAP.	acre	8.25	1.0000	8.25	_____
TOTAL DIRECT EXPENSES				448.15	_____
RETURNS ABOVE DIRECT EXPENSES				299.45	_____
TOTAL FIXED EXPENSES				99.74	_____
TOTAL SPECIFIED EXPENSES				547.89	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				199.71	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

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 300	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 300	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 300	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	16R-30	MFWD 300	0.060	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	Apr		0.05	0.05	0.10	0.04
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 300	0.028	1.00	May		0.02	0.02	0.04	0.02
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 300	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 300	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							0.50	0.50	0.94	0.38

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Subsoiler	3 shank		1.49	0.50	1.18		0.11	3.28	2.64	5.92
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Disk Harrow	32'		2.24	1.69	1.78		0.20	5.91	5.76	11.67
Field Cultivate Fld	32'		1.70	0.99	1.35		0.14	4.18	4.83	9.01
Bed/Lister-Roll-Fo	16R-30		2.21	1.35	1.76		0.19	5.51	5.44	10.95
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Select Max	pt	12.73					0.30	13.03		13.03
Valor SX	oz	7.20					0.17	7.37		7.37
Surfactant	pt	1.32					0.03	1.35		1.35
Plant & Pre-Folding	16R-30		1.85	2.91	1.94		0.12	6.82	7.28	14.10
Soybean Enlist E3	lb	60.00					1.05	61.05		61.05
CruiserMaxx Vibrance	oz	7.36					0.13	7.49		7.49
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	20.90					0.37	21.27		21.27
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Surfactant	pt	1.32					0.02	1.34		1.34
Soybeans Consultant	acre	6.50					0.09	6.59		6.59
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Enlist Duo	pt	12.22					0.18	12.40		12.40
Dual Magnum	pt	10.02					0.15	10.17		10.17
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Zidua DF	oz	13.14					0.19	13.33		13.33
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Miravis Top	oz	18.36					0.16	18.52		18.52
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Acephate 90SP	lb	6.44					0.04	6.48		6.48
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	5.12					0.03	5.15		5.15
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		3.36	4.62	2.47		0.03	10.48	14.95	25.43
Haul Soybeans	bu	16.20					0.05	16.25		16.25
Grain Cart Soybean	700 bu		0.77	0.48	0.61		0.01	1.87	1.68	3.55
Roll-Out Pipe Irr.	acre	7.92	19.03	7.83	4.50		0.43	39.71	53.36	93.07
TOTALS		366.37	34.71	21.33	17.49	0.00	8.25	448.15	99.74	547.89

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

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	747.60
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	8.16	0.00
FERTILIZERS	59.12	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	7.36	0.00	0.00	18.36	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	28.73	0.00	30.02	38.90	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	14.44	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.65	0.00	0.00	0.00	0.00	0.00	1.94	2.13	2.83	0.23	0.00	3.71
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	8.52	0.00	0.00	0.00	0.00	0.00	1.85	2.06	11.99	5.77	0.00	4.52
REPAIR & MAINTENANCE	4.85	0.00	0.00	0.00	0.00	0.00	2.91	0.96	5.94	1.40	0.00	5.27
INTEREST ON OP. CAP.	3.83	0.00	0.00	0.00	0.86	0.00	1.88	0.74	0.31	0.28	0.26	0.09
TOTAL DIRECT EXPENSES	113.45	0.00	0.00	0.00	37.91	0.00	108.83	51.29	28.99	33.37	44.52	29.79
NET INCOME	-113.45	0.00	0.00	0.00	-37.91	0.00	-108.83	-51.29	-28.99	-33.37	-44.52	717.81
NET INCOME TO DATE	-113.45	-113.45	-113.45	-113.45	-151.36	-151.36	-260.19	-311.48	-340.47	-373.84	-418.36	299.45

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-159	-140	-122	-103	-84	-66	-47	-28	-10	8	27
			-259	-240	-222	-203	-184	-165	-147	-128	-109	-91	-72
60	36.00	bu	-105	-82	-60	-37	-15	6	29	51	74	96	119
			-204	-182	-160	-137	-115	-92	-70	-47	-25	-3	19
70	42.00	bu	-50	-24	1	27	53	80	106	132	158	184	210
			-150	-124	-98	-72	-45	-19	6	32	58	84	111
80	48.00	bu	3	33	63	93	123	153	183	212	242	272	302
			-96	-66	-36	-6	23	53	83	113	143	173	202
90	54.00	bu	58	91	125	159	192	226	259	293	327	360	394
			-41	-7	25	59	92	126	160	193	227	261	294
100	60.00	bu	112	149	187	224	262	299	336	374	411	448	486
			12	50	87	124	162	199	237	274	311	349	386
110	66.00	bu	166	208	249	290	331	372	413	454	495	537	578
			67	108	149	190	231	272	313	355	396	437	478
120	72.00	bu	221	266	311	356	400	445	490	535	580	625	670
			121	166	211	256	301	345	390	435	480	525	570
130	78.00	bu	275	324	373	421	470	518	567	616	664	713	761
			176	224	273	321	370	419	467	516	564	613	662
140	84.00	bu	330	382	434	487	539	591	644	696	748	801	853
			230	282	335	387	439	492	544	596	649	701	753
150	90.00	bu	384	440	496	552	609	665	721	777	833	889	945
			285	341	397	453	509	565	621	677	733	789	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 2021 input prices.

Table 13.A Estimated costs per acre
Soybeans, full-season, Enlist E3, stale seedbed, 16R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

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	8.54	0.6000	5.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
Miravis Top	oz	1.34	13.7000	18.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	64.0000	7.04	_____
Select Max	pt	12.73	1.0000	12.73	_____
Valor SX	oz	3.60	2.0000	7.20	_____
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Enlist Duo	pt	3.49	3.5000	12.22	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4208	6.44	_____
Harvesters	hour	15.27	0.0851	1.30	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.0930	0.85	_____
UNALLOCATED LABOR	hour	15.28	0.2728	4.17	_____
DIESEL FUEL					
Tractors	gal	2.36	5.1416	12.11	_____
Harvesters	gal	2.36	1.4243	3.36	_____
Contour Flood Irr.	gal	2.36	10.9974	25.95	_____
REPAIR & MAINTENANCE					
Implements	acre	5.47	1.0000	5.47	_____
Tractors	acre	3.26	1.0000	3.26	_____
Harvesters	acre	3.67	1.0000	3.67	_____
Contour Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	7.87	1.0000	7.87	_____

TOTAL DIRECT EXPENSES				424.97	_____
FIXED EXPENSES					
Implements	acre	9.69	1.0000	9.69	_____
Tractors	acre	19.12	1.0000	19.12	_____
Harvesters	acre	13.62	1.0000	13.62	_____
Contour Flood Irr.	acre	39.45	1.0000	39.45	_____

TOTAL FIXED EXPENSES				81.88	_____

TOTAL SPECIFIED EXPENSES				506.85	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	53.0000	660.38	_____
TOTAL INCOME				660.38	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	8.16	1.0000	8.16	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	25.72	1.0000	25.72	_____
HERBICIDES	acre	79.23	1.0000	79.23	_____
INSECTICIDES	acre	14.44	1.0000	14.44	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0930	0.85	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	15.27	0.5060	7.74	_____
UNALLOCATED LABOR	hour	15.28	0.2728	4.17	_____
DIESEL FUEL	gal	2.36	17.5635	41.42	_____
REPAIR & MAINTENANCE	acre	26.71	1.0000	26.71	_____
INTEREST ON OP. CAP.	acre	7.87	1.0000	7.87	_____
TOTAL DIRECT EXPENSES				424.97	_____
RETURNS ABOVE DIRECT EXPENSES				235.41	_____
TOTAL FIXED EXPENSES				81.88	_____
TOTAL SPECIFIED EXPENSES				506.85	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				153.53	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

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 300	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 300	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	16R-30	MFWD 300	0.050	1.00	May		0.05	0.05	0.10	0.04
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 300	0.028	1.00	May		0.02	0.02	0.04	0.02
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 300	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 300	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							0.50	0.50	0.91	0.27

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Disk Harrow	32'		2.24	1.69	1.78		0.20	5.91	5.76	11.67
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Spray (Broadcast)	60'		1.03	0.48	0.95		0.06	2.52	1.90	4.42
Glyphosate 3lbs a.e	oz	3.52					0.09	3.61		3.61
Select Max	pt	12.73					0.33	13.06		13.06
Surfactant	pt	1.32					0.03	1.35		1.35
Valor SX	oz	7.20					0.19	7.39		7.39
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Plant & Pre-Folding	16R-30		1.85	2.91	1.94		0.12	6.82	7.28	14.10
Soybean Enlist E3	lb	60.00					1.05	61.05		61.05
CruiserMaxx Vibrance	oz	7.36					0.13	7.49		7.49
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	20.90					0.37	21.27		21.27
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Enlist Duo	pt	12.22					0.21	12.43		12.43
Dual Magnum	pt	10.02					0.18	10.20		10.20
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
App by Air (5 gal)	appl	7.00					0.08	7.08		7.08
Miravis Top	oz	18.36					0.21	18.57		18.57
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	6.44					0.06	6.50		6.50
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	5.12					0.03	5.15		5.15
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		3.36	4.62	2.47		0.03	10.48	14.95	25.43
Haul Soybeans	bu	14.31					0.04	14.35		14.35
Grain Cart Soybean	700 bu		0.77	0.48	0.61		0.01	1.87	1.68	3.55
Contour Flood Irr.	acre	2.25	30.11	15.57	5.93		0.66	54.52	46.51	101.03
TOTALS		333.39	41.42	26.71	15.58	0.00	7.87	424.97	81.88	506.85

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

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	660.38
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	8.16	0.00
FERTILIZERS	59.12	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	7.36	0.00	18.36	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	23.45	0.00	0.00	52.26	3.52	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	6.44	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.78	0.00	0.00	0.95	0.00	0.00	3.34	2.88	1.68	1.68	0.19	3.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.24	0.00	0.00	1.03	0.00	0.00	2.88	11.20	9.84	9.84	0.26	4.13
REPAIR & MAINTENANCE	1.69	0.00	0.00	0.48	0.00	0.00	3.39	9.66	3.16	3.16	0.07	5.10
INTEREST ON OP. CAP.	3.33	0.00	0.00	0.70	0.00	0.00	2.43	0.43	0.46	0.26	0.18	0.08
TOTAL DIRECT EXPENSES	98.64	0.00	0.00	27.93	0.00	0.00	141.03	29.94	40.83	28.38	31.52	26.70
NET INCOME	-98.64	0.00	0.00	-27.93	0.00	0.00	-141.03	-29.94	-40.83	-28.38	-31.52	633.68
NET INCOME TO DATE	-98.64	-98.64	-98.64	-126.57	-126.57	-126.57	-267.60	-297.54	-338.37	-366.75	-398.27	235.41

Note: Cost of production estimates are based on 2021 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, Enlist E3, stale seedbed, 16R30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-170	-153	-137	-120	-104	-87	-71	-54	-38	-21	-5
			-252	-235	-219	-202	-185	-169	-152	-136	-119	-103	-86
60	31.80	bu	-122	-102	-82	-62	-42	-23	-3	16	36	56	76
			-203	-184	-164	-144	-124	-104	-85	-65	-45	-25	-5
70	37.10	bu	-73	-50	-27	-4	18	41	64	87	110	134	157
			-155	-132	-109	-86	-63	-40	-17	5	29	52	75
80	42.40	bu	-25	0	26	53	79	106	132	159	185	211	238
			-107	-81	-54	-28	-2	24	50	77	103	129	156
90	47.70	bu	22	51	81	111	141	170	200	230	259	289	319
			-59	-29	-0	29	59	88	118	148	178	207	237
100	53.00	bu	70	103	136	169	202	235	268	301	334	367	400
			-11	21	54	87	120	153	186	219	252	285	318
110	58.30	bu	118	154	191	227	263	300	336	372	408	445	481
			36	72	109	145	181	218	254	290	327	363	399
120	63.60	bu	166	206	245	285	324	364	404	443	483	523	562
			84	124	163	203	243	282	322	361	401	441	480
130	68.90	bu	214	257	300	343	386	429	472	515	557	600	643
			132	175	218	261	304	347	390	433	476	519	561
140	74.20	bu	262	308	355	401	447	493	540	586	632	678	724
			180	227	273	319	365	411	458	504	550	596	643
150	79.50	bu	310	360	409	459	508	558	607	657	707	756	806
			228	278	327	377	427	476	526	575	625	674	724

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2021 input prices.

Table 14.A Estimated costs per acre
Soybeans, double crop after wheat, Enlist E3, 16R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

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	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
Miravis Top	oz	1.34	13.7000	18.36	_____
HERBICIDES					
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Enlist Duo	pt	3.49	3.5000	12.22	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.86	6.4000	5.50	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.1002	1.53	_____
Harvesters	hour	15.27	0.1021	1.56	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0648	0.59	_____
UNALLOCATED LABOR	hour	15.28	0.1740	2.66	_____
DIESEL FUEL					
Tractors	gal	2.36	1.5477	3.65	_____
Harvesters	gal	2.36	1.3935	3.29	_____
1/2-mi Pivot Irr.	gal	2.36	16.4057	38.73	_____
REPAIR & MAINTENANCE					
Implements	acre	3.80	1.0000	3.80	_____
Tractors	acre	1.02	1.0000	1.02	_____
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	6.48	1.0000	6.48	_____

TOTAL DIRECT EXPENSES				394.67	_____
FIXED EXPENSES					
Implements	acre	6.20	1.0000	6.20	_____
Tractors	acre	5.98	1.0000	5.98	_____
Harvesters	acre	15.44	1.0000	15.44	_____
1/2-mi Pivot Irr.	acre	39.11	1.0000	39.11	_____

TOTAL FIXED EXPENSES				66.73	_____

TOTAL SPECIFIED EXPENSES				461.40	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	50.0000	623.00	_____
TOTAL INCOME				623.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	25.72	1.0000	25.72	_____
HERBICIDES	acre	52.26	1.0000	52.26	_____
INSECTICIDES	acre	35.62	1.0000	35.62	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0648	0.59	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	15.27	0.2024	3.09	_____
UNALLOCATED LABOR	hour	15.28	0.1740	2.66	_____
DIESEL FUEL	gal	2.36	19.3470	45.67	_____
REPAIR & MAINTENANCE	acre	20.98	1.0000	20.98	_____
INTEREST ON OP. CAP.	acre	6.48	1.0000	6.48	_____
TOTAL DIRECT EXPENSES				394.67	_____
RETURNS ABOVE DIRECT EXPENSES				228.33	_____
TOTAL FIXED EXPENSES				66.73	_____
TOTAL SPECIFIED EXPENSES				461.40	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				161.60	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

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	16R-30	MFWD 300	0.050	1.00	Jun		0.05	0.05	0.10	0.04
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 300	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Enlist Duo	pt					3.5000				
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 300	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							0.20	0.20	0.31	0.17

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Plant & Pre-Folding	16R-30		1.85	2.91	1.91		0.10	6.77	7.28	14.05
Soybean Enlist E3	lb	60.00					0.88	60.88		60.88
CruiserMaxx Vibrance	oz	7.36					0.11	7.47		7.47
Inoculant -Soybean	acre	1.55					0.02	1.57		1.57
Boundary	pt	20.90					0.30	21.20		21.20
Gramoxone SL 2.0	oz	9.12					0.13	9.25		9.25
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		1.03	0.48	0.93		0.03	2.47	1.90	4.37
Enlist Duo	pt	12.22					0.14	12.36		12.36
Dual Magnum	pt	10.02					0.12	10.14		10.14
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Miravis Top	oz	18.36					0.16	18.52		18.52
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	6.44					0.06	6.50		6.50
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Prevathon	oz	15.68					0.14	15.82		15.82
Surfactant	pt	0.33						0.33		0.33
Bifenthrin	oz	5.50					0.05	5.55		5.55
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
Header -Soybean	25' Flex		3.29	5.11	2.90		0.03	11.33	16.76	28.09
Haul Soybeans	bu	13.50					0.04	13.54		13.54
Grain Cart Soybean	700 bu		0.77	0.48	0.60		0.01	1.86	1.68	3.54
1/2-mi Pivot Irr.	acre		38.73	12.00	0.47		0.63	51.83	39.11	90.94
TOTALS		314.73	45.67	20.98	6.81	0.00	6.48	394.67	66.73	461.40

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

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	623.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	59.12	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	7.36	0.00	18.36	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.02	22.24	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	27.62	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	1.95	0.98	0.04	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.47	16.52	11.62	0.00	4.06
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.32	1.39	0.68	0.00	5.59
INTEREST ON OP. CAP.	3.13	0.00	0.00	0.00	0.00	0.00	0.11	1.89	0.48	0.70	0.09	0.08
TOTAL DIRECT EXPENSES	92.73	0.00	0.00	0.00	0.00	0.00	6.95	130.88	41.61	80.68	15.09	26.73
NET INCOME	-92.73	0.00	0.00	0.00	0.00	0.00	-6.95	-130.88	-41.61	-80.68	-15.09	596.27
NET INCOME TO DATE	-92.73	-92.73	-92.73	-92.73	-92.73	-92.73	-99.68	-230.56	-272.17	-352.85	-367.94	228.33

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-154	-138	-123	-107	-91	-76	-60	-45	-29	-14	1
			-221	-205	-189	-174	-158	-143	-127	-111	-96	-80	-65
60	30.00	bu	-108	-90	-71	-52	-34	-15	3	21	40	59	77
			-175	-156	-138	-119	-100	-82	-63	-44	-26	-7	11
70	35.00	bu	-63	-41	-19	1	23	45	67	89	110	132	154
			-130	-108	-86	-64	-43	-21	0	22	44	65	87
80	40.00	bu	-18	6	31	56	81	106	131	156	181	206	231
			-84	-59	-35	-10	14	39	64	89	114	139	164
90	45.00	bu	27	55	83	111	139	167	195	223	251	279	307
			-39	-11	16	44	72	100	128	156	184	212	240
100	50.00	bu	72	103	134	166	197	228	259	290	321	352	384
			5	37	68	99	130	161	192	223	255	286	317
110	55.00	bu	117	152	186	220	255	289	323	357	392	426	460
			51	85	119	154	188	222	256	291	325	359	393
120	60.00	bu	163	200	238	275	312	350	387	424	462	499	537
			96	133	171	208	246	283	320	358	395	433	470
130	65.00	bu	208	249	289	330	370	411	451	492	532	573	613
			141	182	222	263	303	344	384	425	465	506	546
140	70.00	bu	254	297	341	384	428	472	515	559	602	646	690
			187	230	274	318	361	405	448	492	536	579	623
150	75.00	bu	299	346	392	439	486	533	579	626	673	719	766
			232	279	326	372	419	466	513	559	606	653	699

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 2021 input prices.

Table 15.A Estimated costs per acre
Soybeans, double crop after wheat, Enlist E3, 16R30"
Non-irrigated, All Areas, Mississippi, 2022

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	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Enlist Duo	pt	3.49	3.5000	12.22	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.86	6.4000	5.50	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.1002	1.53	_____
Harvesters	hour	15.27	0.1021	1.56	_____
HAND LABOR					
Implements	hour	9.06	0.0648	0.59	_____
UNALLOCATED LABOR	hour	15.28	0.1740	2.66	_____
DIESEL FUEL					
Tractors	gal	2.36	1.5477	3.65	_____
Harvesters	gal	2.36	1.3935	3.29	_____
REPAIR & MAINTENANCE					
Implements	acre	3.80	1.0000	3.80	_____
Tractors	acre	1.02	1.0000	1.02	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	5.61	1.0000	5.61	_____

TOTAL DIRECT EXPENSES				310.16	_____
FIXED EXPENSES					
Implements	acre	6.20	1.0000	6.20	_____
Tractors	acre	5.98	1.0000	5.98	_____
Harvesters	acre	15.44	1.0000	15.44	_____

TOTAL FIXED EXPENSES				27.62	_____

TOTAL SPECIFIED EXPENSES				337.78	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Non-irrigated, All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	25.0000	311.50	_____
TOTAL INCOME				311.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	52.26	1.0000	52.26	_____
INSECTICIDES	acre	35.62	1.0000	35.62	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0648	0.59	_____
OPERATOR LABOR	hour	15.27	0.2024	3.09	_____
UNALLOCATED LABOR	hour	15.28	0.1740	2.66	_____
DIESEL FUEL	gal	2.36	2.9413	6.94	_____
REPAIR & MAINTENANCE	acre	8.98	1.0000	8.98	_____
INTEREST ON OP. CAP.	acre	5.61	1.0000	5.61	_____
TOTAL DIRECT EXPENSES				310.16	_____
RETURNS ABOVE DIRECT EXPENSES				1.34	_____
TOTAL FIXED EXPENSES				27.62	_____
TOTAL SPECIFIED EXPENSES				337.78	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-26.28	_____

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Non-irrigated, All Areas, Mississippi, 2022

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	16R-30	MFWD 300	0.050	1.00	Jun		0.05	0.05	0.10	0.04
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 300	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Enlist Duo	pt					3.5000				
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 300	0.021	1.00	Oct		0.02	0.02	0.02	0.01
							-------	-------	-------	-------
TOTALS							0.20	0.20	0.26	0.17

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Non-irrigated, All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Plant & Pre-Folding	16R-30		1.85	2.91	1.91		0.10	6.77	7.28	14.05
Soybean Enlist E3	lb	60.00					0.88	60.88		60.88
CruiserMaxx Vibrance	oz	7.36					0.11	7.47		7.47
Inoculant -Soybean	acre	1.55					0.02	1.57		1.57
Boundary	pt	20.90					0.30	21.20		21.20
Gramoxone SL 2.0	oz	9.12					0.13	9.25		9.25
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		1.03	0.48	0.93		0.03	2.47	1.90	4.37
Enlist Duo	pt	12.22					0.14	12.36		12.36
Dual Magnum	pt	10.02					0.12	10.14		10.14
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	6.44					0.06	6.50		6.50
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Prevathon	oz	15.68					0.14	15.82		15.82
Surfactant	pt	0.33						0.33		0.33
Bifenthrin	oz	5.50					0.05	5.55		5.55
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
Header -Soybean	25' Flex		3.29	5.11	2.90		0.03	11.33	16.76	28.09
Haul Soybeans	bu	6.75					0.02	6.77		6.77
Grain Cart Soybean	700 bu		0.77	0.48	0.60		0.01	1.86	1.68	3.54
TOTALS		282.29	6.94	8.98	6.34	0.00	5.61	310.16	27.62	337.78

Note: Cost of production estimates are based on 2021 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, Enlist E3, 16R30"
Non-irrigated, All Areas, Mississippi, 2022

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	311.50
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	59.12	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	7.36	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.02	22.24	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	27.62	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.93	0.00	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85	1.03	0.00	0.00	4.06
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.91	0.48	0.00	0.00	5.59
INTEREST ON OP. CAP.	3.13	0.00	0.00	0.00	0.00	0.00	0.11	1.56	0.29	0.37	0.09	0.06
TOTAL DIRECT EXPENSES	92.73	0.00	0.00	0.00	0.00	0.00	6.61	108.48	24.97	42.32	15.09	19.96
NET INCOME	-92.73	0.00	0.00	0.00	0.00	0.00	-6.61	-108.48	-24.97	-42.32	-15.09	291.54
NET INCOME TO DATE	-92.73	-92.73	-92.73	-92.73	-92.73	-92.73	-99.34	-207.82	-232.79	-275.11	-290.20	1.34

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, Enlist E3, 16R30"
Non-irrigated, All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-189	-182	-174	-166	-158	-151	-143	-135	-127	-119	-112
			-217	-209	-202	-194	-186	-178	-170	-163	-155	-147	-139
60	15.00	bu	-167	-157	-148	-139	-129	-120	-111	-101	-92	-83	-73
			-194	-185	-176	-166	-157	-148	-138	-129	-120	-110	-101
70	17.50	bu	-144	-133	-122	-111	-100	-90	-79	-68	-57	-46	-35
			-172	-161	-150	-139	-128	-117	-106	-95	-84	-74	-63
80	20.00	bu	-121	-109	-96	-84	-72	-59	-47	-34	-22	-9	2
			-149	-137	-124	-112	-99	-87	-74	-62	-49	-37	-24
90	22.50	bu	-99	-85	-71	-57	-43	-29	-15	-1	12	26	40
			-126	-112	-98	-84	-70	-56	-42	-28	-14	-0	13
100	25.00	bu	-76	-60	-45	-29	-14	1	16	32	48	63	79
			-104	-88	-73	-57	-41	-26	-10	4	20	36	51
110	27.50	bu	-53	-36	-19	-2	14	31	48	66	83	100	117
			-81	-64	-47	-30	-12	4	21	38	55	72	89
120	30.00	bu	-31	-12	6	24	43	62	80	99	118	137	155
			-58	-40	-21	-2	15	34	53	72	90	109	128
130	32.50	bu	-8	11	32	52	72	92	113	133	153	173	193
			-36	-15	4	24	44	65	85	105	125	146	166
140	35.00	bu	14	36	57	79	101	123	145	166	188	210	232
			-13	8	30	52	73	95	117	139	161	182	204
150	37.50	bu	36	60	83	106	130	153	177	200	223	247	270
			9	32	55	79	102	126	149	172	196	219	242

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 2021 input prices.

Table 16.A Estimated costs per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Non-irrigated, Delta Area, Mississippi, 2022

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	8.54	0.6000	5.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	96.0000	10.56	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Select Max	pt	12.73	1.0000	12.73	_____
Valor SX	oz	3.60	2.0000	7.20	_____
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
Zidua DF	oz	8.76	1.5000	13.14	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.2773	4.23	_____
Harvesters	hour	15.27	0.0851	1.30	_____
HAND LABOR					
Implements	hour	9.06	0.0789	0.72	_____
UNALLOCATED LABOR	hour	15.26	0.3262	4.98	_____
DIESEL FUEL					
Tractors	gal	2.36	4.2827	10.11	_____
Harvesters	gal	2.36	1.4243	3.36	_____
REPAIR & MAINTENANCE					
Implements	acre	5.67	1.0000	5.67	_____
Tractors	acre	2.81	1.0000	2.81	_____
Harvesters	acre	3.67	1.0000	3.67	_____
INTEREST ON OP. CAP.	acre	7.53	1.0000	7.53	_____

TOTAL DIRECT EXPENSES				381.20	_____
FIXED EXPENSES					
Implements	acre	10.77	1.0000	10.77	_____
Tractors	acre	16.55	1.0000	16.55	_____
Harvesters	acre	13.62	1.0000	13.62	_____

TOTAL FIXED EXPENSES				40.94	_____

TOTAL SPECIFIED EXPENSES				422.14	_____

Note: Cost of production estimates are based on 2021 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 16.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Non-irrigated, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	42.0000	523.32	_____
TOTAL INCOME				523.32	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	8.16	1.0000	8.16	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	99.57	1.0000	99.57	_____
INSECTICIDES	acre	14.44	1.0000	14.44	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0789	0.72	_____
OPERATOR LABOR	hour	15.27	0.3624	5.53	_____
UNALLOCATED LABOR	hour	15.26	0.3262	4.98	_____
DIESEL FUEL	gal	2.36	5.7071	13.47	_____
REPAIR & MAINTENANCE	acre	12.15	1.0000	12.15	_____
INTEREST ON OP. CAP.	acre	7.53	1.0000	7.53	_____
TOTAL DIRECT EXPENSES				381.20	_____
RETURNS ABOVE DIRECT EXPENSES				142.12	_____
TOTAL FIXED EXPENSES				40.94	_____
TOTAL SPECIFIED EXPENSES				422.14	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				101.18	_____

Note: Cost of production estimates are based on 2021 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 16.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Non-irrigated, Delta Area, Mississippi, 2022

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 300	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 300	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 300	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	16R-30	MFWD 300	0.050	1.00	Apr		0.05	0.05	0.10	0.04
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 300	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 300	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 300	0.021	1.00	Sep		0.02	0.02	0.02	0.01
TOTALS							0.36	0.36	0.44	0.32

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 16.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Non-irrigated, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Subsoiler	3 shank		1.49	0.50	1.18		0.11	3.28	2.64	5.92
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Disk Harrow	32'		2.24	1.69	1.78		0.20	5.91	5.76	11.67
Field Cultivate Fld	32'		1.70	0.99	1.35		0.14	4.18	4.83	9.01
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Select Max	pt	12.73					0.30	13.03		13.03
Valor SX	oz	7.20					0.17	7.37		7.37
Surfactant	pt	1.32					0.03	1.35		1.35
Plant & Pre-Folding	16R-30		1.85	2.91	1.94		0.12	6.82	7.28	14.10
Soybean Seed RR2X	lb	67.00					1.17	68.17		68.17
CruiserMaxx Vibrance	oz	7.36					0.13	7.49		7.49
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	20.90					0.37	21.27		21.27
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Surfactant	pt	1.32					0.02	1.34		1.34
Soybeans Consultant	acre	6.50					0.09	6.59		6.59
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Engenia	oz	10.62					0.15	10.77		10.77
Dual Magnum	pt	10.02					0.15	10.17		10.17
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Zidua DF	oz	13.14					0.19	13.33		13.33
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Acephate 90SP	lb	6.44					0.04	6.48		6.48
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	5.12					0.03	5.15		5.15
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		3.36	4.62	2.47		0.03	10.48	14.95	25.43
Haul Soybeans	bu	11.34					0.03	11.37		11.37
Grain Cart Soybean	700 bu		0.77	0.48	0.61		0.01	1.87	1.68	3.55
TOTALS		336.82	13.47	12.15	11.23	0.00	7.53	381.20	40.94	422.14

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust,but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 16.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Non-irrigated, Delta Area, Mississippi, 2022

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	523.32
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	8.16	0.00
FERTILIZERS	59.12	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	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	28.73	0.00	30.02	40.82	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	14.44	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.31	0.00	0.00	0.00	0.00	0.00	1.94	1.90	0.00	0.00	0.00	3.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.43	0.00	0.00	0.00	0.00	0.00	1.85	2.06	0.00	0.00	0.00	4.13
REPAIR & MAINTENANCE	3.18	0.00	0.00	0.00	0.00	0.00	2.91	0.96	0.00	0.00	0.00	5.10
INTEREST ON OP. CAP.	3.58	0.00	0.00	0.00	0.86	0.00	2.00	0.76	0.00	0.00	0.26	0.07
TOTAL DIRECT EXPENSES	106.10	0.00	0.00	0.00	37.91	0.00	115.95	53.00	0.00	0.00	44.52	23.72
NET INCOME	-106.10	0.00	0.00	0.00	-37.91	0.00	-115.95	-53.00	0.00	0.00	-44.52	499.60
NET INCOME TO DATE	-106.10	-106.10	-106.10	-106.10	-144.01	-144.01	-259.96	-312.96	-312.96	-312.96	-357.48	142.12

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.
* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Non-irrigated, Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-179	-166	-153	-140	-126	-113	-100	-87	-74	-61	-48
			-220	-207	-194	-180	-167	-154	-141	-128	-115	-102	-89
60	25.20	bu	-141	-125	-109	-94	-78	-62	-46	-31	-15	0	15
			-182	-166	-150	-134	-119	-103	-87	-72	-56	-40	-25
70	29.40	bu	-103	-84	-66	-48	-29	-11	6	25	43	61	80
			-143	-125	-107	-89	-70	-52	-34	-15	2	20	39
80	33.60	bu	-64	-44	-23	-2	18	39	60	81	102	123	144
			-105	-84	-64	-43	-22	-1	19	40	61	82	103
90	37.80	bu	-26	-3	20	43	67	90	114	138	161	185	208
			-67	-44	-20	2	26	49	73	97	120	144	167
100	42.00	bu	11	37	63	89	115	142	168	194	220	246	272
			-29	-3	22	48	75	101	127	153	179	205	232
110	46.20	bu	49	78	106	135	164	193	222	250	279	308	337
			8	37	66	94	123	152	181	209	238	267	296
120	50.40	bu	87	118	150	181	213	244	275	307	338	370	401
			46	77	109	140	172	203	234	266	297	329	360
130	54.60	bu	125	159	193	227	261	295	329	363	397	431	465
			84	118	152	186	220	254	288	322	356	390	424
140	58.80	bu	163	200	237	273	310	346	383	420	456	493	530
			122	159	196	232	269	305	342	379	415	452	489
150	63.00	bu	201	241	280	319	358	398	437	476	515	555	594
			160	200	239	278	317	357	396	435	474	514	553

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 2021 input prices.

Table 17.A Estimated costs per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

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	8.54	0.6000	5.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
Miravis Top	oz	1.34	13.7000	18.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	96.0000	10.56	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Select Max	pt	12.73	1.0000	12.73	_____
Valor SX	oz	3.60	2.0000	7.20	_____
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
Zidua DF	oz	8.76	1.5000	13.14	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4165	6.36	_____
Harvesters	hour	15.27	0.0851	1.30	_____
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	0.0789	0.72	_____
UNALLOCATED LABOR	hour	15.25	0.3808	5.81	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9456	14.04	_____
Harvesters	gal	2.36	1.4243	3.36	_____
Roll-Out Pipe Irr.	gal	2.36	7.3316	17.31	_____
REPAIR & MAINTENANCE					
Implements	acre	6.63	1.0000	6.63	_____
Tractors	acre	3.87	1.0000	3.87	_____
Harvesters	acre	3.67	1.0000	3.67	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	8.39	1.0000	8.39	_____

TOTAL DIRECT EXPENSES				457.21	_____
FIXED EXPENSES					
Implements	acre	14.00	1.0000	14.00	_____
Tractors	acre	22.84	1.0000	22.84	_____
Harvesters	acre	13.62	1.0000	13.62	_____
Roll-Out Pipe Irr.	acre	49.28	1.0000	49.28	_____

TOTAL FIXED EXPENSES				99.74	_____

TOTAL SPECIFIED EXPENSES				556.95	_____

Note: Cost of production estimates are based on 2021 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 17.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	60.0000	747.60	_____
TOTAL INCOME				747.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	8.16	1.0000	8.16	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	25.72	1.0000	25.72	_____
HERBICIDES	acre	99.57	1.0000	99.57	_____
INSECTICIDES	acre	14.44	1.0000	14.44	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0789	0.72	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	15.27	0.5016	7.66	_____
UNALLOCATED LABOR	hour	15.25	0.3808	5.81	_____
DIESEL FUEL	gal	2.36	14.7017	34.71	_____
REPAIR & MAINTENANCE	acre	21.33	1.0000	21.33	_____
INTEREST ON OP. CAP.	acre	8.39	1.0000	8.39	_____
TOTAL DIRECT EXPENSES				457.21	_____
RETURNS ABOVE DIRECT EXPENSES				290.39	_____
TOTAL FIXED EXPENSES				99.74	_____
TOTAL SPECIFIED EXPENSES				556.95	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				190.65	_____

Note: Cost of production estimates are based on 2021 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 17.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

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 300	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 300	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 300	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	16R-30	MFWD 300	0.060	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	Apr		0.05	0.05	0.10	0.04
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 300	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 300	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 300	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							0.50	0.50	0.94	0.38

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 17.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Subsoiler	3 shank		1.49	0.50	1.18		0.11	3.28	2.64	5.92
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Disk Harrow	32'		2.24	1.69	1.78		0.20	5.91	5.76	11.67
Field Cultivate Fld	32'		1.70	0.99	1.35		0.14	4.18	4.83	9.01
Bed/Lister-Roll-Fo	16R-30		2.21	1.35	1.76		0.19	5.51	5.44	10.95
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Select Max	pt	12.73					0.30	13.03		13.03
Valor SX	oz	7.20					0.17	7.37		7.37
Surfactant	pt	1.32					0.03	1.35		1.35
Plant & Pre-Folding	16R-30		1.85	2.91	1.94		0.12	6.82	7.28	14.10
Soybean Seed RR2X	lb	67.00					1.17	68.17		68.17
CruiserMaxx Vibrance	oz	7.36					0.13	7.49		7.49
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	20.90					0.37	21.27		21.27
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Surfactant	pt	1.32					0.02	1.34		1.34
Soybeans Consultant	acre	6.50					0.09	6.59		6.59
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Engenia	oz	10.62					0.15	10.77		10.77
Dual Magnum	pt	10.02					0.15	10.17		10.17
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
Zidua DF	oz	13.14					0.19	13.33		13.33
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Miravis Top	oz	18.36					0.16	18.52		18.52
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Acephate 90SP	lb	6.44					0.04	6.48		6.48
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	5.12					0.03	5.15		5.15
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		3.36	4.62	2.47		0.03	10.48	14.95	25.43
Haul Soybeans	bu	16.20					0.05	16.25		16.25
Grain Cart Soybean	700 bu		0.77	0.48	0.61		0.01	1.87	1.68	3.55
Roll-Out Pipe Irr.	acre	7.92	19.03	7.83	4.50		0.43	39.71	53.36	93.07
TOTALS		375.29	34.71	21.33	17.49	0.00	8.39	457.21	99.74	556.95

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 17.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

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	747.60
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	8.16	0.00
FERTILIZERS	59.12	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	7.36	0.00	0.00	18.36	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	28.73	0.00	30.02	40.82	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	14.44	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.65	0.00	0.00	0.00	0.00	0.00	1.94	2.13	2.83	0.23	0.00	3.71
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	8.52	0.00	0.00	0.00	0.00	0.00	1.85	2.06	11.99	5.77	0.00	4.52
REPAIR & MAINTENANCE	4.85	0.00	0.00	0.00	0.00	0.00	2.91	0.96	5.94	1.40	0.00	5.27
INTEREST ON OP. CAP.	3.83	0.00	0.00	0.00	0.86	0.00	2.00	0.76	0.31	0.28	0.26	0.09
TOTAL DIRECT EXPENSES	113.45	0.00	0.00	0.00	37.91	0.00	115.95	53.23	28.99	33.37	44.52	29.79
NET INCOME	-113.45	0.00	0.00	0.00	-37.91	0.00	-115.95	-53.23	-28.99	-33.37	-44.52	717.81
NET INCOME TO DATE	-113.45	-113.45	-113.45	-113.45	-151.36	-151.36	-267.31	-320.54	-349.53	-382.90	-427.42	290.39

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.
* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-168	-150	-131	-112	-93	-75	-56	-37	-19	-0	18
			-268	-249	-231	-212	-193	-175	-156	-137	-118	-100	-81
60	36.00	bu	-114	-91	-69	-47	-24	-2	20	42	65	87	109
			-214	-191	-169	-146	-124	-101	-79	-57	-34	-12	10
70	42.00	bu	-59	-33	-7	18	44	70	97	123	149	175	201
			-159	-133	-107	-81	-54	-28	-2	23	49	75	102
80	48.00	bu	-5	24	54	84	114	144	174	203	233	263	293
			-105	-75	-45	-15	14	44	74	104	134	163	193
90	54.00	bu	49	82	116	149	183	217	250	284	318	351	385
			-50	-17	16	50	83	117	151	184	218	252	285
100	60.00	bu	103	140	178	215	253	290	327	365	402	439	477
			3	41	78	115	153	190	228	265	302	340	377
110	66.00	bu	157	199	240	281	322	363	404	445	486	527	569
			58	99	140	181	222	263	304	346	387	428	469
120	72.00	bu	212	257	302	346	391	436	481	526	571	616	660
			112	157	202	247	292	336	381	426	471	516	561
130	78.00	bu	266	315	364	412	461	509	558	606	655	704	752
			167	215	264	312	361	410	458	507	555	604	653
140	84.00	bu	321	373	425	478	530	582	635	687	739	792	844
			221	273	326	378	430	483	535	587	640	692	744
150	90.00	bu	375	431	487	543	599	656	712	768	824	880	936
			275	332	388	444	500	556	612	668	724	780	836

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 2021 input prices.

Table 18.A Estimated costs per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

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	8.54	0.6000	5.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
Miravis Top	oz	1.34	13.7000	18.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	96.0000	10.56	_____
Select Max	pt	12.73	1.0000	12.73	_____
Valor SX	oz	3.60	2.0000	7.20	_____
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4208	6.44	_____
Harvesters	hour	15.27	0.0851	1.30	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.0930	0.85	_____
UNALLOCATED LABOR	hour	15.28	0.2728	4.17	_____
DIESEL FUEL					
Tractors	gal	2.36	5.1416	12.11	_____
Harvesters	gal	2.36	1.4243	3.36	_____
Contour Flood Irr.	gal	2.36	10.9974	25.95	_____
REPAIR & MAINTENANCE					
Implements	acre	5.47	1.0000	5.47	_____
Tractors	acre	3.26	1.0000	3.26	_____
Harvesters	acre	3.67	1.0000	3.67	_____
Contour Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	8.03	1.0000	8.03	_____

TOTAL DIRECT EXPENSES				434.05	_____
FIXED EXPENSES					
Implements	acre	9.69	1.0000	9.69	_____
Tractors	acre	19.12	1.0000	19.12	_____
Harvesters	acre	13.62	1.0000	13.62	_____
Contour Flood Irr.	acre	39.45	1.0000	39.45	_____

TOTAL FIXED EXPENSES				81.88	_____

TOTAL SPECIFIED EXPENSES				515.93	_____

Note: Cost of production estimates are based on 2021 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 18.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	53.0000	660.38	_____
TOTAL INCOME				660.38	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	8.16	1.0000	8.16	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	25.72	1.0000	25.72	_____
HERBICIDES	acre	81.15	1.0000	81.15	_____
INSECTICIDES	acre	14.44	1.0000	14.44	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0930	0.85	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	15.27	0.5060	7.74	_____
UNALLOCATED LABOR	hour	15.28	0.2728	4.17	_____
DIESEL FUEL	gal	2.36	17.5635	41.42	_____
REPAIR & MAINTENANCE	acre	26.71	1.0000	26.71	_____
INTEREST ON OP. CAP.	acre	8.03	1.0000	8.03	_____
TOTAL DIRECT EXPENSES				434.05	_____
RETURNS ABOVE DIRECT EXPENSES				226.33	_____
TOTAL FIXED EXPENSES				81.88	_____
TOTAL SPECIFIED EXPENSES				515.93	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				144.45	_____

Note: Cost of production estimates are based on 2021 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 18.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

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 300	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 300	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	16R-30	MFWD 300	0.050	1.00	May		0.05	0.05	0.10	0.04
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 300	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 300	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 300	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							0.50	0.50	0.91	0.27

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 18.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Disk Harrow	32'		2.24	1.69	1.78		0.20	5.91	5.76	11.67
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Spray (Broadcast)	60'		1.03	0.48	0.95		0.06	2.52	1.90	4.42
Glyphosate 3lbs a.e	oz	3.52					0.09	3.61		3.61
Select Max	pt	12.73					0.33	13.06		13.06
Surfactant	pt	1.32					0.03	1.35		1.35
Valor SX	oz	7.20					0.19	7.39		7.39
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Plant & Pre-Folding	16R-30		1.85	2.91	1.94		0.12	6.82	7.28	14.10
Soybean Seed RR2X	lb	67.00					1.17	68.17		68.17
CruiserMaxx Vibrance	oz	7.36					0.13	7.49		7.49
Inoculant -Soybean	acre	1.55					0.03	1.58		1.58
Boundary	pt	20.90					0.37	21.27		21.27
Gramoxone SL 2.0	oz	9.12					0.16	9.28		9.28
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Engenia	oz	10.62					0.19	10.81		10.81
Dual Magnum	pt	10.02					0.18	10.20		10.20
Spray (Broadcast)	60'		1.03	0.48	0.95		0.04	2.50	1.90	4.40
Glyphosate 3lbs a.e	oz	3.52					0.05	3.57		3.57
App by Air (5 gal)	appl	7.00					0.08	7.08		7.08
Miravis Top	oz	18.36					0.21	18.57		18.57
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	6.44					0.06	6.50		6.50
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
Gramoxone SL	oz	3.04					0.02	3.06		3.06
Sodium Chlorate 5L	gal	5.12					0.03	5.15		5.15
Surfactant	pt	0.66						0.66		0.66
Header -Soybean	30' Flex		3.36	4.62	2.47		0.03	10.48	14.95	25.43
Haul Soybeans	bu	14.31					0.04	14.35		14.35
Grain Cart Soybean	700 bu		0.77	0.48	0.61		0.01	1.87	1.68	3.55
Contour Flood Irr.	acre	2.25	30.11	15.57	5.93		0.66	54.52	46.51	101.03
TOTALS		342.31	41.42	26.71	15.58	0.00	8.03	434.05	81.88	515.93

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust,but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 18.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

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	660.38
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	8.16	0.00
FERTILIZERS	59.12	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	7.36	0.00	18.36	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	23.45	0.00	0.00	54.18	3.52	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	6.44	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.78	0.00	0.00	0.95	0.00	0.00	3.34	2.88	1.68	1.68	0.19	3.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.24	0.00	0.00	1.03	0.00	0.00	2.88	11.20	9.84	9.84	0.26	4.13
REPAIR & MAINTENANCE	1.69	0.00	0.00	0.48	0.00	0.00	3.39	9.66	3.16	3.16	0.07	5.10
INTEREST ON OP. CAP.	3.33	0.00	0.00	0.70	0.00	0.00	2.59	0.43	0.46	0.26	0.18	0.08
TOTAL DIRECT EXPENSES	98.64	0.00	0.00	27.93	0.00	0.00	150.11	29.94	40.83	28.38	31.52	26.70
NET INCOME	-98.64	0.00	0.00	-27.93	0.00	0.00	-150.11	-29.94	-40.83	-28.38	-31.52	633.68
NET INCOME TO DATE	-98.64	-98.64	-98.64	-126.57	-126.57	-126.57	-276.68	-306.62	-347.45	-375.83	-407.35	226.33

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

* Lease costs are based on hourly usage costs.

Table 18.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-179	-162	-146	-129	-113	-96	-80	-63	-47	-30	-14
			-261	-244	-228	-211	-195	-178	-162	-145	-129	-112	-96
60	31.80	bu	-131	-111	-91	-71	-51	-32	-12	7	27	47	66
			-213	-193	-173	-153	-133	-113	-94	-74	-54	-34	-14
70	37.10	bu	-83	-59	-36	-13	9	32	55	78	101	124	148
			-164	-141	-118	-95	-72	-49	-26	-3	19	43	66
80	42.40	bu	-34	-8	17	44	70	97	123	149	176	202	229
			-116	-90	-64	-37	-11	15	41	68	94	120	147
90	47.70	bu	13	42	72	102	132	161	191	221	250	280	310
			-68	-39	-9	20	50	79	109	139	168	198	228
100	53.00	bu	61	94	127	160	193	226	259	292	325	358	391
			-20	12	45	78	111	144	177	210	243	276	309
110	58.30	bu	109	145	181	218	254	290	327	363	399	436	472
			27	63	100	136	172	209	245	281	318	354	390
120	63.60	bu	157	197	236	276	315	355	395	434	474	514	553
			75	115	154	194	234	273	313	352	392	432	471
130	68.90	bu	205	248	291	334	377	420	463	505	548	591	634
			123	166	209	252	295	338	381	424	467	509	552
140	74.20	bu	253	299	346	392	438	484	530	577	623	669	715
			171	217	264	310	356	402	449	495	541	587	633
150	79.50	bu	301	351	400	450	499	549	598	648	697	747	796
			219	269	318	368	417	467	516	566	616	665	715

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 2021 input prices.

Table 19.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

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	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
Miravis Top	oz	1.34	13.7000	18.36	_____
HERBICIDES					
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.86	6.4000	5.50	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.1002	1.53	_____
Harvesters	hour	15.27	0.1021	1.56	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0648	0.59	_____
UNALLOCATED LABOR	hour	15.28	0.1740	2.66	_____
DIESEL FUEL					
Tractors	gal	2.36	1.5477	3.65	_____
Harvesters	gal	2.36	1.3935	3.29	_____
1/2-mi Pivot Irr.	gal	2.36	16.4057	38.73	_____
REPAIR & MAINTENANCE					
Implements	acre	3.80	1.0000	3.80	_____
Tractors	acre	1.02	1.0000	1.02	_____
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	6.60	1.0000	6.60	_____

TOTAL DIRECT EXPENSES				403.71	_____
FIXED EXPENSES					
Implements	acre	6.20	1.0000	6.20	_____
Tractors	acre	5.98	1.0000	5.98	_____
Harvesters	acre	15.44	1.0000	15.44	_____
1/2-mi Pivot Irr.	acre	39.11	1.0000	39.11	_____

TOTAL FIXED EXPENSES				66.73	_____

TOTAL SPECIFIED EXPENSES				470.44	_____

Note: Cost of production estimates are based on 2021 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 19.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	50.0000	623.00	_____
TOTAL INCOME				623.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	25.72	1.0000	25.72	_____
HERBICIDES	acre	54.18	1.0000	54.18	_____
INSECTICIDES	acre	35.62	1.0000	35.62	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0648	0.59	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	15.27	0.2024	3.09	_____
UNALLOCATED LABOR	hour	15.28	0.1740	2.66	_____
DIESEL FUEL	gal	2.36	19.3470	45.67	_____
REPAIR & MAINTENANCE	acre	20.98	1.0000	20.98	_____
INTEREST ON OP. CAP.	acre	6.60	1.0000	6.60	_____
TOTAL DIRECT EXPENSES				403.71	_____
RETURNS ABOVE DIRECT EXPENSES				219.29	_____
TOTAL FIXED EXPENSES				66.73	_____
TOTAL SPECIFIED EXPENSES				470.44	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				152.56	_____

Note: Cost of production estimates are based on 2021 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 19.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

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	16R-30	MFWD 300	0.050	1.00	Jun		0.05	0.05	0.10	0.04
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 300	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
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 300	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							0.20	0.20	0.31	0.17

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 19.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Plant & Pre-Folding	16R-30		1.85	2.91	1.91		0.10	6.77	7.28	14.05
Soybean Seed RR2X	lb	67.00					0.98	67.98		67.98
CruiserMaxx Vibrance	oz	7.36					0.11	7.47		7.47
Inoculant -Soybean	acre	1.55					0.02	1.57		1.57
Boundary	pt	20.90					0.30	21.20		21.20
Gramoxone SL 2.0	oz	9.12					0.13	9.25		9.25
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		1.03	0.48	0.93		0.03	2.47	1.90	4.37
Glyphosate 3lbs a.e	oz	3.52					0.04	3.56		3.56
Engenia	oz	10.62					0.12	10.74		10.74
Dual Magnum	pt	10.02					0.12	10.14		10.14
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Miravis Top	oz	18.36					0.16	18.52		18.52
Surfactant	pt	0.33						0.33		0.33
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	6.44					0.06	6.50		6.50
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Prevathon	oz	15.68					0.14	15.82		15.82
Surfactant	pt	0.33						0.33		0.33
Bifenthrin	oz	5.50					0.05	5.55		5.55
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
Header -Soybean	25' Flex		3.29	5.11	2.90		0.03	11.33	16.76	28.09
Haul Soybeans	bu	13.50					0.04	13.54		13.54
Grain Cart Soybean	700 bu		0.77	0.48	0.60		0.01	1.86	1.68	3.54
1/2-mi Pivot Irr.	acre		38.73	12.00	0.47		0.63	51.83	39.11	90.94
TOTALS		323.65	45.67	20.98	6.81	0.00	6.60	403.71	66.73	470.44

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.

Table 19.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

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	623.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	59.12	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	7.36	0.00	18.36	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.02	24.16	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	27.62	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	1.95	0.98	0.04	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.47	16.52	11.62	0.00	4.06
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.32	1.39	0.68	0.00	5.59
INTEREST ON OP. CAP.	3.13	0.00	0.00	0.00	0.00	0.00	0.11	1.99	0.50	0.70	0.09	0.08
TOTAL DIRECT EXPENSES	92.73	0.00	0.00	0.00	0.00	0.00	6.95	137.98	43.55	80.68	15.09	26.73
NET INCOME	-92.73	0.00	0.00	0.00	0.00	0.00	-6.95	-137.98	-43.55	-80.68	-15.09	596.27
NET INCOME TO DATE	-92.73	-92.73	-92.73	-92.73	-92.73	-92.73	-99.68	-237.66	-281.21	-361.89	-376.98	219.29

Note: Cost of production estimates are based on 2021 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from $10 to $18 plus application cost per acre.
* Lease costs are based on hourly usage costs.

Table 19.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-163	-147	-132	-116	-101	-85	-69	-54	-38	-23	-7
			-230	-214	-198	-183	-167	-152	-136	-121	-105	-89	-74
60	30.00	bu	-117	-99	-80	-61	-43	-24	-5	12	31	50	68
			-184	-165	-147	-128	-109	-91	-72	-53	-35	-16	2
70	35.00	bu	-72	-50	-28	-7	14	36	58	80	101	123	145
			-139	-117	-95	-73	-52	-30	-8	13	35	56	78
80	40.00	bu	-27	-2	22	47	72	97	122	147	172	197	221
			-93	-69	-44	-19	5	30	55	80	105	130	155
90	45.00	bu	18	46	74	102	130	158	186	214	242	270	298
			-48	-20	7	35	63	91	119	147	175	203	231
100	50.00	bu	63	94	125	156	188	219	250	281	312	343	375
			-3	27	59	90	121	152	183	214	246	277	308
110	55.00	bu	108	143	177	211	245	280	314	348	383	417	451
			42	76	110	144	179	213	247	282	316	350	384
120	60.00	bu	154	191	229	266	303	341	378	415	453	490	528
			87	124	162	199	237	274	311	349	386	423	461
130	65.00	bu	199	240	280	321	361	402	442	483	523	564	604
			132	173	213	254	294	335	375	416	456	497	537
140	70.00	bu	245	288	332	375	419	463	506	550	593	637	681
			178	221	265	309	352	396	439	483	527	570	614
150	75.00	bu	290	337	383	430	477	524	570	617	664	710	757
			223	270	317	363	410	457	504	550	597	644	690

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 2021 input prices.

Table 20.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Non-irrigated, All Areas, Mississippi, 2022

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	27.75	0.8700	24.14	_____
Potash (60% K2O)	cwt	26.30	1.3300	34.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Boundary	pt	10.45	2.0000	20.90	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
INSECTICIDES					
Acephate 90SP	lb	8.58	0.7500	6.44	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.86	6.4000	5.50	_____
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	59.00	0.3330	19.65	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.1002	1.53	_____
Harvesters	hour	15.27	0.1021	1.56	_____
HAND LABOR					
Implements	hour	9.06	0.0648	0.59	_____
UNALLOCATED LABOR	hour	15.28	0.1740	2.66	_____
DIESEL FUEL					
Tractors	gal	2.36	1.5477	3.65	_____
Harvesters	gal	2.36	1.3935	3.29	_____
REPAIR & MAINTENANCE					
Implements	acre	3.80	1.0000	3.80	_____
Tractors	acre	1.02	1.0000	1.02	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	5.73	1.0000	5.73	_____

TOTAL DIRECT EXPENSES				319.20	_____
FIXED EXPENSES					
Implements	acre	6.20	1.0000	6.20	_____
Tractors	acre	5.98	1.0000	5.98	_____
Harvesters	acre	15.44	1.0000	15.44	_____

TOTAL FIXED EXPENSES				27.62	_____

TOTAL SPECIFIED EXPENSES				346.82	_____

Note: Cost of production estimates are based on 2021 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 20.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Non-irrigated, All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	12.46	25.0000	311.50	_____
TOTAL INCOME				311.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	59.12	1.0000	59.12	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	54.18	1.0000	54.18	_____
INSECTICIDES	acre	35.62	1.0000	35.62	_____
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	19.65	1.0000	19.65	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0648	0.59	_____
OPERATOR LABOR	hour	15.27	0.2024	3.09	_____
UNALLOCATED LABOR	hour	15.28	0.1740	2.66	_____
DIESEL FUEL	gal	2.36	2.9413	6.94	_____
REPAIR & MAINTENANCE	acre	8.98	1.0000	8.98	_____
INTEREST ON OP. CAP.	acre	5.73	1.0000	5.73	_____
TOTAL DIRECT EXPENSES				319.20	_____
RETURNS ABOVE DIRECT EXPENSES				-7.70	_____
TOTAL FIXED EXPENSES				27.62	_____
TOTAL SPECIFIED EXPENSES				346.82	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-35.32	_____

Note: Cost of production estimates are based on 2021 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 20.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Non-irrigated, All Areas, Mississippi, 2022

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	16R-30	MFWD 300	0.050	1.00	Jun		0.05	0.05	0.10	0.04
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 300	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
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 300	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.20	0.20	0.26	0.17

Note: Cost of production estimates are based on 2021 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 20.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Non-irrigated, All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	19.65					0.69	20.34		20.34
Custom Apply Fert	acre	7.50					0.26	7.76		7.76
Phosphorus(46% P2O5)	cwt	24.14					0.84	24.98		24.98
Potash (60% K2O)	cwt	34.98					1.22	36.20		36.20
Soybeans Consultant	acre	6.50					0.11	6.61		6.61
Plant & Pre-Folding	16R-30		1.85	2.91	1.91		0.10	6.77	7.28	14.05
Soybean Seed RR2X	lb	67.00					0.98	67.98		67.98
CruiserMaxx Vibrance	oz	7.36					0.11	7.47		7.47
Inoculant -Soybean	acre	1.55					0.02	1.57		1.57
Boundary	pt	20.90					0.30	21.20		21.20
Gramoxone SL 2.0	oz	9.12					0.13	9.25		9.25
Surfactant	pt	1.32					0.02	1.34		1.34
Spray (Broadcast)	60'		1.03	0.48	0.93		0.03	2.47	1.90	4.37
Glyphosate 3lbs a.e	oz	3.52					0.04	3.56		3.56
Engenia	oz	10.62					0.12	10.74		10.74
Dual Magnum	pt	10.02					0.12	10.14		10.14
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	6.44					0.06	6.50		6.50
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Prevathon	oz	15.68					0.14	15.82		15.82
Surfactant	pt	0.33						0.33		0.33
Bifenthrin	oz	5.50					0.05	5.55		5.55
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.04	7.04		7.04
IncidentalPestTrt $8	acre	8.00					0.05	8.05		8.05
Header -Soybean	25' Flex		3.29	5.11	2.90		0.03	11.33	16.76	28.09
Haul Soybeans	bu	6.75					0.02	6.77		6.77
Grain Cart Soybean	700 bu		0.77	0.48	0.60		0.01	1.86	1.68	3.54
TOTALS		291.21	6.94	8.98	6.34	0.00	5.73	319.20	27.62	346.82

Note: Cost of production estimates are based on 2021 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 20.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Non-irrigated, All Areas, Mississippi, 2022

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	311.50
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	59.12	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	7.36	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.02	24.16	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	27.62	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	19.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.93	0.00	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85	1.03	0.00	0.00	4.06
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.91	0.48	0.00	0.00	5.59
INTEREST ON OP. CAP.	3.13	0.00	0.00	0.00	0.00	0.00	0.11	1.66	0.31	0.37	0.09	0.06
TOTAL DIRECT EXPENSES	92.73	0.00	0.00	0.00	0.00	0.00	6.61	115.58	26.91	42.32	15.09	19.96
NET INCOME	-92.73	0.00	0.00	0.00	0.00	0.00	-6.61	-115.58	-26.91	-42.32	-15.09	291.54
NET INCOME TO DATE	-92.73	-92.73	-92.73	-92.73	-92.73	-92.73	-99.34	-214.92	-241.83	-284.15	-299.24	-7.70

Note: Cost of production estimates are based on 2021 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 20.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2X/XF, 16R 30"
Non-irrigated, All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			9.34	9.96	10.59	11.21	11.83	12.46	13.08	13.70	14.32	14.95	15.57
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-199	-191	-183	-175	-167	-160	-152	-144	-136	-128	-121
			-226	-218	-211	-203	-195	-187	-179	-172	-164	-156	-148
60	15.00	bu	-176	-166	-157	-148	-138	-129	-120	-110	-101	-92	-82
			-203	-194	-185	-175	-166	-157	-147	-138	-129	-119	-110
70	17.50	bu	-153	-142	-131	-120	-110	-99	-88	-77	-66	-55	-44
			-181	-170	-159	-148	-137	-126	-115	-104	-94	-83	-72
80	20.00	bu	-130	-118	-106	-93	-81	-68	-56	-43	-31	-18	-6
			-158	-146	-133	-121	-108	-96	-83	-71	-58	-46	-33
90	22.50	bu	-108	-94	-80	-66	-52	-38	-24	-10	3	17	31
			-135	-121	-107	-93	-79	-65	-51	-37	-23	-9	4
100	25.00	bu	-85	-70	-54	-38	-23	-7	7	23	39	54	70
			-113	-97	-82	-66	-50	-35	-19	-4	11	26	42
110	27.50	bu	-62	-45	-28	-11	5	22	39	57	74	91	108
			-90	-73	-56	-39	-21	-4	12	29	46	63	80
120	30.00	bu	-40	-21	-2	15	34	53	71	90	109	128	146
			-67	-49	-30	-11	6	25	44	63	81	100	119
130	32.50	bu	-17	2	22	43	63	83	103	124	144	164	184
			-45	-24	-4	15	35	56	76	96	116	137	157
140	35.00	bu	5	26	48	70	92	114	135	157	179	201	223
			-22	-0	21	42	64	86	108	130	151	173	195
150	37.50	bu	27	51	74	97	121	144	168	191	214	238	261
			0	23	46	70	93	117	140	163	187	210	233

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 2021 input prices.

Table 21.A Estimated costs per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2022

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	5.60	0.2000	1.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	1.9570	54.31	_____
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
Fert 10-34-0	gal	3.68	4.0000	14.72	_____
Zinc Plus	pt	3.40	2.0000	6.80	_____
UAN + Sulfur (28%)	gal	2.05	32.1712	65.95	_____
UAN (32%)	gal	2.10	30.0000	63.00	_____
Urea, Solid (46% N)	cwt	28.63	1.0000	28.63	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	34.0000	127.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4484	6.85	_____
Harvesters	hour	15.27	0.1277	1.95	_____
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	0.1462	1.33	_____
UNALLOCATED LABOR	hour	15.29	0.4478	6.85	_____
DIESEL FUEL					
Tractors	gal	2.36	5.0106	11.83	_____
Harvesters	gal	2.36	1.7419	4.11	_____
Roll-Out Pipe Irr.	gal	2.36	10.5901	25.00	_____
REPAIR & MAINTENANCE					
Implements	acre	10.28	1.0000	10.28	_____
Tractors	acre	3.32	1.0000	3.32	_____
Harvesters	acre	5.20	1.0000	5.20	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____

TOTAL DIRECT EXPENSES				681.56	_____
FIXED EXPENSES					
Implements	acre	14.92	1.0000	14.92	_____
Tractors	acre	19.58	1.0000	19.58	_____
Harvesters	acre	19.30	1.0000	19.30	_____
Roll-Out Pipe Irr.	acre	49.28	1.0000	49.28	_____

TOTAL FIXED EXPENSES				103.08	_____

TOTAL SPECIFIED EXPENSES				784.64	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 21.B Summary of estimated costs and returns per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____

TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.12	1.0000	8.12	_____
FERTILIZERS	acre	272.86	1.0000	272.86	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	1.10	1.0000	1.10	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	127.50	1.0000	127.50	_____
CUSTOM FERTILIZE	acre	15.00	1.0000	15.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1462	1.33	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	15.27	0.5761	8.80	_____
UNALLOCATED LABOR	hour	15.29	0.4478	6.85	_____
DIESEL FUEL	gal	2.36	17.3427	40.94	_____
REPAIR & MAINTENANCE	acre	25.96	1.0000	25.96	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____

TOTAL DIRECT EXPENSES				681.56	_____
RETURNS ABOVE DIRECT EXPENSES				455.84	_____
TOTAL FIXED EXPENSES				103.08	_____

TOTAL SPECIFIED EXPENSES				784.64	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				352.76	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 21.C Estimated resource use for field operations, per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2022

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	16R-30	MFWD 225	0.050	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-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN (32%)	gal					30.0000				
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
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							0.57	0.57	1.10	0.44

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 21.D Estimated costs for field operations, per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60		0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	54.31					1.90	56.21		56.21
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81		0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Clarity	pt	5.50					0.13	5.63		5.63
Select Max	pt	12.73					0.30	13.03		13.03
Plant & Pre-Folding	16R-30		1.39	2.79	1.94		0.12	6.24	6.57	12.81
Corn Seed BtRR	thous	127.50					2.60	130.10		130.10
Fert 10-34-0	gal	14.72					0.30	15.02		15.02
Zinc Plus	pt	6.80					0.14	6.94		6.94
Custom Apply Fert	acre	7.50					0.13	7.63		7.63
UAN + Sulfur (28%)	gal	65.95					1.15	67.10		67.10
Spray (Broadcast)	60'		0.77	0.41	0.95		0.04	2.17	1.51	3.68
Atrazine 4L	pt	6.68					0.12	6.80		6.80
Halex GT	pt	20.95					0.37	21.32		21.32
App by Air (3 gal)	appl	1.12					0.02	1.14		1.14
Bifenthrin	oz	1.10					0.02	1.12		1.12
Corn Consultant	acre	6.00					0.09	6.09		6.09
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64		0.10	6.86	5.02	11.88
UAN (32%)	gal	63.00					0.92	63.92		63.92
App Fert by Air	cwt	7.50					0.09	7.59		7.59
Urea, Solid (46% N)	cwt	28.63					0.33	28.96		28.96
Header - Corn	8R-30		4.11	7.47	3.71		0.04	15.33	22.49	37.82
Grain Cart Corn	700 bu		0.69	0.51	0.74		0.01	1.95	1.65	3.60
Haul Corn	bu	50.60					0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39		0.02	7.69	5.11	12.80
Roll-Out Pipe Irr.	acre	7.92	26.72	7.83	4.73		0.55	47.75	53.36	101.11
TOTALS		581.10	40.94	25.96	20.51	0.00	13.05	681.56	103.08	784.64

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 21.E Estimated monthly income and expense flows per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goa
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00
FERTILIZERS	93.76	0.00	0.00	0.00	0.00	21.52	65.95	63.00	28.63	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	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	1.10	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	127.50	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	7.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	39.29	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	3.99	0.00	0.00	0.00	0.00	1.94	0.95	2.87	3.06	0.23	0.63	6.84
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.74	0.00	0.00	0.00	0.00	1.39	0.77	2.15	19.20	6.25	0.39	7.05
REPAIR & MAINTENANCE	2.27	0.00	0.00	0.00	0.00	2.79	0.41	1.97	6.29	1.05	0.17	11.01
INTEREST ON OP. CAP.	5.13	0.00	0.00	0.00	0.67	3.16	1.81	1.15	0.84	0.06	0.01	0.22
TOTAL DIRECT EXPENSES	151.51	0.00	0.00	0.00	29.42	158.30	105.02	79.36	73.44	7.59	1.20	75.72
NET INCOME	-151.51	0.00	0.00	0.00	-29.42	-158.30	-105.02	-79.36	-73.44	-7.59	-1.20	1061.68
NET INCOME TO DATE	-151.51	-151.51	-151.51	-151.51	-180.93	-339.23	-444.25	-523.61	-597.05	-604.64	-605.84	455.84

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 21.F Estimated returns for various price/yield combinations, per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-229	-201	-172	-144	-115	-87	-59	-30	-2	26	54
			-332	-304	-275	-247	-219	-190	-162	-133	-105	-76	-48
60	132.00	bu	-149	-115	-81	-47	-12	21	55	89	123	157	191
			-252	-218	-184	-150	-116	-81	-47	-13	20	54	88
70	154.00	bu	-69	-29	10	50	90	129	169	209	249	289	328
			-172	-132	-92	-52	-13	26	66	106	146	186	225
80	176.00	bu	11	56	102	147	193	238	284	329	374	420	465
			-92	-46	-1	44	89	135	180	226	271	317	362
90	198.00	bu	91	142	193	244	295	347	398	449	500	551	603
			-11	39	90	141	192	244	295	346	397	448	500
100	220.00	bu	171	228	285	342	398	455	512	569	626	683	740
			68	125	182	239	295	352	409	466	523	580	637
110	242.00	bu	251	314	376	439	501	564	627	689	752	814	877
			148	211	273	336	398	461	523	586	649	711	774
120	264.00	bu	331	400	468	536	604	673	741	809	877	946	1014
			228	297	365	433	501	570	638	706	774	843	911
130	286.00	bu	412	486	560	633	707	781	855	929	1003	1077	1151
			309	383	456	530	604	678	752	826	900	974	1048
140	308.00	bu	492	572	651	731	810	890	970	1049	1129	1208	1288
			389	468	548	628	707	787	867	946	1026	1105	1185
150	330.00	bu	572	657	743	828	913	999	1084	1169	1255	1340	1425
			469	554	640	725	810	896	981	1066	1152	1237	1322

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 2021 input prices.

Table 22.A Estimated costs per acre
Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
170 bu yield goal, Delta Area, Mississippi, 2022

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	5.60	0.2000	1.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	1.6300	45.23	_____
Potash (60% K2O)	cwt	26.30	1.2500	32.88	_____
Fert 10-34-0	gal	3.68	4.0000	14.72	_____
Zinc Plus	pt	3.40	2.0000	6.80	_____
UAN + Sulfur (28%)	gal	2.05	19.3063	39.58	_____
UAN (32%)	gal	2.10	36.7200	77.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	28.0000	105.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.3457	5.28	_____
Harvesters	hour	15.27	0.1009	1.54	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR	hour	15.27	0.4020	6.14	_____
DIESEL FUEL					
Tractors	gal	2.36	4.0040	9.44	_____
Harvesters	gal	2.36	1.3770	3.25	_____
REPAIR & MAINTENANCE					
Implements	acre	8.56	1.0000	8.56	_____
Tractors	acre	2.68	1.0000	2.68	_____
Harvesters	acre	4.11	1.0000	4.11	_____
INTEREST ON OP. CAP.	acre	10.73	1.0000	10.73	_____

TOTAL DIRECT EXPENSES				528.09	_____
FIXED EXPENSES					
Implements	acre	11.40	1.0000	11.40	_____
Tractors	acre	15.80	1.0000	15.80	_____
Harvesters	acre	15.26	1.0000	15.26	_____

TOTAL FIXED EXPENSES				42.46	_____

TOTAL SPECIFIED EXPENSES				570.55	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 22.B Summary of estimated costs and returns per acre
Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
170 bu yield goal, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	170.0000	878.90	_____
TOTAL INCOME				878.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.12	1.0000	8.12	_____
FERTILIZERS	acre	216.32	1.0000	216.32	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	1.10	1.0000	1.10	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.4466	6.82	_____
UNALLOCATED LABOR	hour	15.27	0.4020	6.14	_____
DIESEL FUEL	gal	2.36	5.3810	12.69	_____
REPAIR & MAINTENANCE	acre	15.35	1.0000	15.35	_____
INTEREST ON OP. CAP.	acre	10.73	1.0000	10.73	_____
TOTAL DIRECT EXPENSES				528.09	_____
RETURNS ABOVE DIRECT EXPENSES				350.81	_____
TOTAL FIXED EXPENSES				42.46	_____
TOTAL SPECIFIED EXPENSES				570.55	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				308.35	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 22.C Estimated resource use for field operations, per acre
Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
170 bu yield goal, Delta Area, Mississippi, 2022

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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 22.D Estimated costs for field operations, per acre
Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
170 bu yield goal, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60		0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	45.23					1.58	46.81		46.81
Potash (60% K2O)	cwt	32.88					1.15	34.03		34.03
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81		0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Clarity	pt	5.50					0.13	5.63		5.63
Select Max	pt	12.73					0.30	13.03		13.03
Plant & Pre-Folding	12R-38		1.46	2.30	2.03		0.12	5.91	5.79	11.70
Corn Seed BtRR	thous	105.00					2.14	107.14		107.14
Fert 10-34-0	gal	14.72					0.30	15.02		15.02
Zinc Plus	pt	6.80					0.14	6.94		6.94
Custom Apply Fert	acre	7.50					0.13	7.63		7.63
UAN + Sulfur (28%)	gal	39.58					0.69	40.27		40.27
Spray (Broadcast)	60'		0.77	0.41	0.95		0.04	2.17	1.51	3.68
Atrazine 4L	pt	6.68					0.12	6.80		6.80
Halex GT	pt	20.95					0.37	21.32		21.32
App by Air (3 gal)	appl	1.12					0.02	1.14		1.14
Bifenthrin	oz	1.10					0.02	1.12		1.12
Corn Consultant	acre	6.00					0.09	6.09		6.09
Fert Appl (Liquid)	12R-38		1.41	1.22	1.73		0.06	4.42	3.22	7.64
UAN (32%)	gal	77.11					1.12	78.23		78.23
Header - Corn	8R-38		3.25	5.93	2.93		0.04	12.15	17.81	29.96
Grain Cart Corn	700 bu		0.69	0.51	0.74		0.01	1.95	1.65	3.60
Haul Corn	bu	39.10					0.11	39.21		39.21
Stalk Shredder Flex	20'		2.25	3.03	2.39		0.02	7.69	5.11	12.80
TOTALS		475.14	12.69	15.35	14.18	0.00	10.73	528.09	42.46	570.55

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 22.E Estimated monthly income and expense flows per acre
Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
170 bu yield goal, Delta Area, Mississippi, 2022

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	878.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00
FERTILIZERS	78.11	0.00	0.00	0.00	0.00	21.52	39.58	77.11	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	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	1.10	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	39.29	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	3.41	0.00	0.00	0.00	0.00	2.03	0.95	1.73	0.00	0.00	0.00	6.06
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	2.86	0.00	0.00	0.00	0.00	1.46	0.77	1.41	0.00	0.00	0.00	6.19
REPAIR & MAINTENANCE	1.95	0.00	0.00	0.00	0.00	2.30	0.41	1.22	0.00	0.00	0.00	9.47
INTEREST ON OP. CAP.	4.52	0.00	0.00	0.00	0.67	2.70	1.35	1.31	0.00	0.00	0.00	0.18
TOTAL DIRECT EXPENSES	133.47	0.00	0.00	0.00	29.42	135.01	78.19	91.00	0.00	0.00	0.00	61.00
NET INCOME	-133.47	0.00	0.00	0.00	-29.42	-135.01	-78.19	-91.00	0.00	0.00	0.00	817.90
NET INCOME TO DATE	-133.47	-133.47	-133.47	-133.47	-162.89	-297.90	-376.09	-467.09	-467.09	-467.09	-467.09	350.81

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 22.F Estimated returns for various price/yield combinations, per acre
Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
170 bu yield goal, Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-178	-156	-134	-112	-91	-69	-47	-25	-3	18	40
			-221	-199	-177	-155	-133	-111	-89	-67	-45	-23	-1
60	102.00	bu	-116	-90	-64	-37	-11	14	41	67	94	120	146
			-159	-132	-106	-80	-53	-27	-1	25	51	77	104
70	119.00	bu	-54	-24	6	37	68	98	129	160	191	221	252
			-97	-66	-35	-5	25	56	87	117	148	179	210
80	136.00	bu	7	42	77	112	147	182	218	253	288	323	358
			-35	-0	34	70	105	140	175	210	245	281	316
90	153.00	bu	69	108	148	187	227	266	306	345	385	425	464
			26	66	105	145	184	224	263	303	343	382	422
100	170.00	bu	131	175	218	262	306	350	394	438	482	526	570
			88	132	176	220	264	308	352	396	440	484	528
110	187.00	bu	193	241	289	338	386	434	483	531	579	628	676
			150	198	247	295	343	392	440	488	537	585	634
120	204.00	bu	255	307	360	413	466	518	571	624	676	729	782
			212	265	318	370	423	476	529	581	634	687	739
130	221.00	bu	317	374	431	488	545	602	659	716	774	831	888
			274	331	388	446	503	560	617	674	731	788	845
140	238.00	bu	379	440	502	563	625	686	748	809	871	932	994
			336	398	459	521	582	644	705	767	828	890	951
150	255.00	bu	441	506	572	638	704	770	836	902	968	1034	1100
			398	464	530	596	662	728	794	860	925	991	1057

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 2021 input prices.

Table 23.A Estimated costs per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2022

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	5.60	0.2000	1.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	1.9570	54.31	_____
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
Fert 10-34-0	gal	3.68	4.0000	14.72	_____
Zinc Plus	pt	3.40	2.0000	6.80	_____
UAN + Sulfur (28%)	gal	2.05	32.1712	65.95	_____
UAN (32%)	gal	2.10	30.0000	63.00	_____
Urea, Solid (46% N)	cwt	28.63	1.0000	28.63	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	34.0000	127.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.3699	5.65	_____
Harvesters	hour	15.27	0.1277	1.95	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1462	1.33	_____
UNALLOCATED LABOR	hour	15.29	0.4478	6.85	_____
DIESEL FUEL					
Tractors	gal	2.36	4.2843	10.11	_____
Harvesters	gal	2.36	1.7419	4.11	_____
1/4-mi. Pivot Irr.	gal	2.36	11.2011	26.43	_____
REPAIR & MAINTENANCE					
Implements	acre	10.06	1.0000	10.06	_____
Tractors	acre	2.87	1.0000	2.87	_____
Harvesters	acre	5.20	1.0000	5.20	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	13.14	1.0000	13.14	_____

TOTAL DIRECT EXPENSES				684.67	_____
FIXED EXPENSES					
Implements	acre	13.51	1.0000	13.51	_____
Tractors	acre	16.91	1.0000	16.91	_____
Harvesters	acre	19.30	1.0000	19.30	_____
1/4-mi. Pivot Irr.	acre	68.70	1.0000	68.70	_____

TOTAL FIXED EXPENSES				118.42	_____

TOTAL SPECIFIED EXPENSES				803.09	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 23.B Summary of estimated costs and returns per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____
TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.12	1.0000	8.12	_____
FERTILIZERS	acre	272.86	1.0000	272.86	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	1.10	1.0000	1.10	_____
SEED/PLANTS	acre	127.50	1.0000	127.50	_____
CUSTOM FERTILIZE	acre	15.00	1.0000	15.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1462	1.33	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	15.27	0.4976	7.60	_____
UNALLOCATED LABOR	hour	15.29	0.4478	6.85	_____
DIESEL FUEL	gal	2.36	17.2274	40.65	_____
REPAIR & MAINTENANCE	acre	40.08	1.0000	40.08	_____
INTEREST ON OP. CAP.	acre	13.14	1.0000	13.14	_____
TOTAL DIRECT EXPENSES				684.67	_____
RETURNS ABOVE DIRECT EXPENSES				452.73	_____
TOTAL FIXED EXPENSES				118.42	_____
TOTAL SPECIFIED EXPENSES				803.09	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				334.31	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 23.C Estimated resource use for field operations, per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2022

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	16R-30	MFWD 225	0.050	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-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN (32%)	gal					30.0000				
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
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
1/4-mi. Pivot Irr.	acre				Jul	1.0000			0.20	
TOTALS							0.49	0.49	0.84	0.44

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 23.D Estimated costs for field operations, per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60		0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	54.31					1.90	56.21		56.21
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81		0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Clarity	pt	5.50					0.13	5.63		5.63
Select Max	pt	12.73					0.30	13.03		13.03
Plant & Pre-Folding	16R-30		1.39	2.79	1.94		0.12	6.24	6.57	12.81
Corn Seed BtRR	thous	127.50					2.60	130.10		130.10
Fert 10-34-0	gal	14.72					0.30	15.02		15.02
Zinc Plus	pt	6.80					0.14	6.94		6.94
Custom Apply Fert	acre	7.50					0.13	7.63		7.63
UAN + Sulfur (28%)	gal	65.95					1.15	67.10		67.10
Spray (Broadcast)	60'		0.77	0.41	0.95		0.04	2.17	1.51	3.68
Atrazine 4L	pt	6.68					0.12	6.80		6.80
Halex GT	pt	20.95					0.37	21.32		21.32
App by Air (3 gal)	appl	1.12					0.02	1.14		1.14
Bifenthrin	oz	1.10					0.02	1.12		1.12
Corn Consultant	acre	6.00					0.09	6.09		6.09
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64		0.10	6.86	5.02	11.88
UAN (32%)	gal	63.00					0.92	63.92		63.92
App Fert by Air	cwt	7.50					0.09	7.59		7.59
Urea, Solid (46% N)	cwt	28.63					0.33	28.96		28.96
Header - Corn	8R-30		4.11	7.47	3.71		0.04	15.33	22.49	37.82
Grain Cart Corn	700 bu		0.69	0.51	0.74		0.01	1.95	1.65	3.60
Haul Corn	bu	50.60					0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39		0.02	7.69	5.11	12.80
1/4-mi. Pivot Irr.	acre		26.43	21.95	1.84		0.64	50.86	68.70	119.56
TOTALS		573.18	40.65	40.08	17.62	0.00	13.14	684.67	118.42	803.09

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 23.E Estimated monthly income and expense flows per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00
FERTILIZERS	93.76	0.00	0.00	0.00	0.00	21.52	65.95	63.00	28.63	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	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	1.10	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	127.50	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	7.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	39.29	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	3.41	0.00	0.00	0.00	0.00	1.94	2.29	2.79	0.20	0.15	0.00	6.84
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	2.86	0.00	0.00	0.00	0.00	1.39	0.77	10.08	10.57	7.93	0.00	7.05
REPAIR & MAINTENANCE	1.95	0.00	0.00	0.00	0.00	2.79	0.41	20.44	1.99	1.49	0.00	11.01
INTEREST ON OP. CAP.	5.07	0.00	0.00	0.00	0.67	3.16	1.83	1.54	0.57	0.08	0.00	0.22
TOTAL DIRECT EXPENSES	149.67	0.00	0.00	0.00	29.42	158.30	106.38	106.07	49.46	9.65	0.00	75.72
NET INCOME	-149.67	0.00	0.00	0.00	-29.42	-158.30	-106.38	-106.07	-49.46	-9.65	0.00	1061.68
NET INCOME TO DATE	-149.67	-149.67	-149.67	-149.67	-179.09	-337.39	-443.77	-549.84	-599.30	-608.95	-608.95	452.73

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 23.F Estimated returns for various price/yield combinations, per acre
Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goa
Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-232	-204	-175	-147	-119	-90	-62	-33	-5	23	51
			-351	-322	-294	-265	-237	-209	-180	-152	-123	-95	-66
60	132.00	bu	-152	-118	-84	-50	-16	18	52	86	120	154	188
			-270	-236	-202	-168	-134	-100	-66	-32	2	36	70
70	154.00	bu	-72	-32	7	47	86	126	166	206	246	285	325
			-190	-150	-111	-71	-31	8	48	87	127	167	207
80	176.00	bu	7	53	98	144	189	235	280	326	371	417	462
			-110	-65	-19	25	71	116	162	207	253	298	344
90	198.00	bu	88	139	190	241	292	344	395	446	497	548	599
			-30	20	72	123	174	225	276	328	379	430	481
100	220.00	bu	168	225	282	338	395	452	509	566	623	680	737
			49	106	163	220	277	334	391	448	504	561	618
110	242.00	bu	248	311	373	436	498	561	623	686	749	811	874
			130	192	255	317	380	442	505	568	630	693	755
120	264.00	bu	328	397	465	533	601	670	738	806	874	943	1011
			210	278	346	415	483	551	619	688	756	824	892
130	286.00	bu	409	483	556	630	704	778	852	926	1000	1074	1148
			290	364	438	512	586	660	734	808	882	956	1029
140	308.00	bu	489	568	648	728	807	887	967	1046	1126	1205	1285
			370	450	530	609	689	768	848	928	1007	1087	1167
150	330.00	bu	569	654	740	825	910	996	1081	1166	1251	1337	1422
			451	536	621	707	792	877	962	1048	1133	1218	1304

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 2021 input prices.

Table 24.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, 2022

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	5.60	1.2000	6.72	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	1.9570	54.31	_____
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN + Sulfur (28%)	gal	2.05	32.1712	65.95	_____
UAN (32%)	gal	2.10	30.0000	63.00	_____
Urea, Solid (46% N)	cwt	28.63	1.0000	28.63	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
Intrepid 2F	oz	1.91	4.0000	7.64	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.25	34.0000	110.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.6423	9.81	_____
Harvesters	hour	15.27	0.1009	1.54	_____
Self-Propelled	hour	15.27	0.0176	0.27	_____
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	15.25	0.6141	9.37	_____
DIESEL FUEL					
Tractors	gal	2.36	7.2557	17.12	_____
Harvesters	gal	2.36	1.3770	3.25	_____
Self-Propelled	gal	2.36	0.1586	0.37	_____
Roll-Out Pipe Irr.	gal	2.36	10.5901	25.00	_____
REPAIR & MAINTENANCE					
Implements	acre	10.98	1.0000	10.98	_____
Tractors	acre	4.81	1.0000	4.81	_____
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	12.88	1.0000	12.88	_____

TOTAL DIRECT EXPENSES				667.36	_____
FIXED EXPENSES					
Implements	acre	17.95	1.0000	17.95	_____
Tractors	acre	28.44	1.0000	28.44	_____
Harvesters	acre	15.26	1.0000	15.26	_____
Self-Propelled	acre	1.26	1.0000	1.26	_____
Roll-Out Pipe Irr.	acre	49.28	1.0000	49.28	_____

TOTAL FIXED EXPENSES				112.19	_____

TOTAL SPECIFIED EXPENSES				779.55	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 24.B Summary of estimated costs and returns per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____

TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.72	1.0000	13.72	_____
FERTILIZERS	acre	251.34	1.0000	251.34	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	8.74	1.0000	8.74	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	110.50	1.0000	110.50	_____
CUSTOM FERTILIZE	acre	15.00	1.0000	15.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.7609	11.62	_____
UNALLOCATED LABOR	hour	15.25	0.6141	9.37	_____
DIESEL FUEL	gal	2.36	19.3816	45.74	_____
REPAIR & MAINTENANCE	acre	27.26	1.0000	27.26	_____
INTEREST ON OP. CAP.	acre	12.88	1.0000	12.88	_____

TOTAL DIRECT EXPENSES				667.36	_____
RETURNS ABOVE DIRECT EXPENSES				470.04	_____
TOTAL FIXED EXPENSES				112.19	_____

TOTAL SPECIFIED EXPENSES				779.55	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				357.85	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 24.C Estimated resource use for field operations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

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					30.0000				
Cultivate	12R-38	MFWD 225	0.054	1.00	May		0.05	0.05	0.05	0.04
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 24.D Estimated costs for field operations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Subsoiler	3 shank		2.79	1.01	2.96		0.24	7.00	5.17	12.17
Disk Harrow	42'		1.28	1.79	1.35		0.15	4.57	4.95	9.52
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60		0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	54.31					1.90	56.21		56.21
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81		0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Clarity	pt	5.50					0.13	5.63		5.63
Select Max	pt	12.73					0.30	13.03		13.03
Row Cond./Roll-Fold.	40'		1.28	0.76	1.36		0.07	3.47	3.12	6.59
Plant - Folding	12R-38		1.36	1.94	1.89		0.11	5.30	5.04	10.34
Corn Seed RR2	thous	110.50					2.26	112.76		112.76
Custom Apply Fert	acre	7.50					0.13	7.63		7.63
UAN + Sulfur (28%)	gal	65.95					1.15	67.10		67.10
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.59		0.02	1.18	1.26	2.44
Atrazine 4L	pt	6.68					0.12	6.80		6.80
Halex GT	pt	20.95					0.37	21.32		21.32
Corn Consultant	acre	6.00					0.09	6.09		6.09
App by Air (3 gal)	appl	1.12					0.02	1.14		1.14
Bifenthrin	oz	1.10					0.02	1.12		1.12
Fert Appl (Liquid)	12R-38		1.41	1.22	1.73		0.06	4.42	3.22	7.64
UAN (32%)	gal	63.00					0.92	63.92		63.92
Cultivate	12R-38		1.48	1.09	1.58		0.06	4.21	4.13	8.34
App Fert by Air	cwt	7.50					0.09	7.59		7.59
Urea, Solid (46% N)	cwt	28.63					0.33	28.96		28.96
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Intrepid 2F	oz	7.64					0.09	7.73		7.73
Header - Corn	8R-38		3.25	5.93	2.93		0.04	12.15	17.81	29.96
Grain Cart Corn	700 bu		0.69	0.51	0.74		0.01	1.95	1.65	3.60
Haul Corn	bu	50.60					0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39		0.02	7.69	5.11	12.80
Roll-Out Pipe Irr.	acre	7.92	26.72	7.83	4.73		0.55	47.75	53.36	101.11
TOTALS		555.82	45.74	27.26	25.66	0.00	12.88	667.36	112.19	779.55

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 24.E Estimated monthly income and expense flows per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	5.60	0.00	0.00	0.00
FERTILIZERS	93.76	0.00	0.00	0.00	0.00	0.00	65.95	63.00	28.63	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	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	1.10	7.64	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	110.50	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	7.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	39.29	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	8.30	0.00	0.00	0.00	0.00	3.25	0.59	3.54	3.06	0.23	0.63	6.06
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	7.81	0.00	0.00	0.00	0.00	2.64	0.37	2.89	19.20	6.25	0.39	6.19
REPAIR & MAINTENANCE	5.07	0.00	0.00	0.00	0.00	2.70	0.20	2.31	6.29	1.05	0.17	9.47
INTEREST ON OP. CAP.	5.52	0.00	0.00	0.00	0.67	2.44	1.79	1.17	1.00	0.06	0.01	0.22
TOTAL DIRECT EXPENSES	163.08	0.00	0.00	0.00	29.42	121.53	104.03	81.13	86.84	7.59	1.20	72.54
NET INCOME	-163.08	0.00	0.00	0.00	-29.42	-121.53	-104.03	-81.13	-86.84	-7.59	-1.20	1064.86
NET INCOME TO DATE	-163.08	-163.08	-163.08	-163.08	-192.50	-314.03	-418.06	-499.19	-586.03	-593.62	-594.82	470.04

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 24.F Estimated returns for various price/yield combinations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-215	-187	-158	-130	-101	-73	-44	-16	12	40	68
			-327	-299	-270	-242	-213	-185	-157	-128	-100	-71	-43
60	132.00	bu	-135	-101	-66	-32	1	35	69	103	137	171	205
			-247	-213	-179	-145	-110	-76	-42	-8	25	59	93
70	154.00	bu	-55	-15	24	64	104	144	183	223	263	303	343
			-167	-127	-87	-47	-7	31	71	111	151	191	230
80	176.00	bu	25	70	116	161	207	252	298	343	389	434	480
			-86	-41	4	49	95	140	186	231	277	322	368
90	198.00	bu	105	156	207	259	310	361	412	463	514	566	617
			-6	44	95	146	198	249	300	351	402	453	505
100	220.00	bu	185	242	299	356	413	470	526	583	640	697	754
			73	130	187	244	300	357	414	471	528	585	642
110	242.00	bu	265	328	391	453	516	578	641	703	766	828	891
			153	216	278	341	403	466	529	591	654	716	779
120	264.00	bu	346	414	482	550	619	687	755	823	892	960	1028
			233	302	370	438	506	575	643	711	779	848	916
130	286.00	bu	426	500	574	648	722	796	869	943	1017	1091	1165
			314	388	462	535	609	683	757	831	905	979	1053
140	308.00	bu	506	586	665	745	825	904	984	1063	1143	1223	1302
			394	474	553	633	712	792	872	951	1031	1110	1190
150	330.00	bu	586	672	757	842	928	1013	1098	1183	1269	1354	1439
			474	559	645	730	815	901	986	1071	1157	1242	1327

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 2021 input prices.

Table 25.A Estimated costs per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

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	5.60	1.2000	6.72	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	1.6300	45.23	_____
Potash (60% K2O)	cwt	26.30	1.2500	32.88	_____
UAN + Sulfur (28%)	gal	2.05	19.3063	39.58	_____
UAN (32%)	gal	2.10	36.7200	77.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2804	1.10	_____
Intrepid 2F	oz	1.91	4.0000	7.64	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.25	28.0000	91.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4903	7.48	_____
Harvesters	hour	15.27	0.1009	1.54	_____
Self-Propelled	hour	15.27	0.0176	0.27	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR	hour	15.25	0.5480	8.36	_____
DIESEL FUEL					
Tractors	gal	2.36	5.6788	13.40	_____
Harvesters	gal	2.36	1.3770	3.25	_____
Self-Propelled	gal	2.36	0.1586	0.37	_____
REPAIR & MAINTENANCE					
Implements	acre	9.84	1.0000	9.84	_____
Tractors	acre	3.80	1.0000	3.80	_____
Harvesters	acre	4.11	1.0000	4.11	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	10.55	1.0000	10.55	_____

TOTAL DIRECT EXPENSES				517.17	_____
FIXED EXPENSES					
Implements	acre	14.79	1.0000	14.79	_____
Tractors	acre	22.41	1.0000	22.41	_____
Harvesters	acre	15.26	1.0000	15.26	_____
Self-Propelled	acre	1.26	1.0000	1.26	_____

TOTAL FIXED EXPENSES				53.72	_____

TOTAL SPECIFIED EXPENSES				570.89	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 25.B Summary of estimated costs and returns per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	170.0000	878.90	_____
TOTAL INCOME				878.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.72	1.0000	13.72	_____
FERTILIZERS	acre	194.80	1.0000	194.80	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	8.74	1.0000	8.74	_____
SEED/PLANTS	acre	91.00	1.0000	91.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.6089	9.29	_____
UNALLOCATED LABOR	hour	15.25	0.5480	8.36	_____
DIESEL FUEL	gal	2.36	7.2145	17.02	_____
REPAIR & MAINTENANCE	acre	17.95	1.0000	17.95	_____
INTEREST ON OP. CAP.	acre	10.55	1.0000	10.55	_____
TOTAL DIRECT EXPENSES				517.17	_____
RETURNS ABOVE DIRECT EXPENSES				361.73	_____
TOTAL FIXED EXPENSES				53.72	_____
TOTAL SPECIFIED EXPENSES				570.89	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				308.01	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 25.C Estimated resource use for field operations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 25.D Estimated costs for field operations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Subsoiler	3 shank		2.79	1.01	2.96		0.24	7.00	5.17	12.17
Disk Harrow	42'		1.28	1.79	1.35		0.15	4.57	4.95	9.52
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60		0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	45.23					1.58	46.81		46.81
Potash (60% K2O)	cwt	32.88					1.15	34.03		34.03
Bed/Disk (Hipper)	12R-38		1.35	1.01	1.43		0.13	3.92	3.81	7.73
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Clarity	pt	5.50					0.13	5.63		5.63
Select Max	pt	12.73					0.30	13.03		13.03
Row Cond Folding	38'		1.12	0.64	1.18		0.06	3.00	3.14	6.14
Plant - Folding	12R-38		1.36	1.94	1.89		0.11	5.30	5.04	10.34
Corn Seed RR2	thous	91.00					1.86	92.86		92.86
Custom Apply Fert	acre	7.50					0.13	7.63		7.63
UAN + Sulfur (28%)	gal	39.58					0.69	40.27		40.27
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.59		0.02	1.18	1.26	2.44
Atrazine 4L	pt	6.68					0.12	6.80		6.80
Halex GT	pt	20.95					0.37	21.32		21.32
Corn Consultant	acre	6.00					0.09	6.09		6.09
App by Air (3 gal)	appl	1.12					0.02	1.14		1.14
Bifenthrin	oz	1.10					0.02	1.12		1.12
Fert Appl (Liquid)	12R-38		1.41	1.22	1.73		0.06	4.42	3.22	7.64
UAN (32%)	gal	77.11					1.12	78.23		78.23
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Intrepid 2F	oz	7.64					0.09	7.73		7.73
Header - Corn	8R-38		3.25	5.93	2.93		0.04	12.15	17.81	29.96
Grain Cart Corn	700 bu		0.69	0.51	0.74		0.01	1.95	1.65	3.60
Haul Corn	bu	39.10					0.11	39.21		39.21
Stalk Shredder Flex	20'		2.25	3.03	2.39		0.02	7.69	5.11	12.80
TOTALS		452.86	17.02	17.95	18.79	0.00	10.55	517.17	53.72	570.89

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 25.E Estimated monthly income and expense flows per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

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	878.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	5.60	0.00	0.00	0.00
FERTILIZERS	78.11	0.00	0.00	0.00	0.00	0.00	39.58	77.11	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	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	1.10	7.64	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	91.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	39.29	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	7.34	0.00	0.00	0.00	0.00	3.07	0.59	1.73	0.00	0.00	0.00	6.06
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	6.57	0.00	0.00	0.00	0.00	2.48	0.37	1.41	0.00	0.00	0.00	6.19
REPAIR & MAINTENANCE	4.48	0.00	0.00	0.00	0.00	2.58	0.20	1.22	0.00	0.00	0.00	9.47
INTEREST ON OP. CAP.	4.87	0.00	0.00	0.00	0.67	2.03	1.33	1.31	0.16	0.00	0.00	0.18
TOTAL DIRECT EXPENSES	143.99	0.00	0.00	0.00	29.42	101.16	77.20	91.00	13.40	0.00	0.00	61.00
NET INCOME	-143.99	0.00	0.00	0.00	-29.42	-101.16	-77.20	-91.00	-13.40	0.00	0.00	817.90
NET INCOME TO DATE	-143.99	-143.99	-143.99	-143.99	-173.41	-274.57	-351.77	-442.77	-456.17	-456.17	-456.17	361.73

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 25.F Estimated returns for various price/yield combinations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-167	-146	-124	-102	-80	-58	-36	-14	7	29	51
			-221	-199	-177	-155	-133	-111	-89	-67	-45	-23	-1
60	102.00	bu	-105	-79	-53	-26	-0	25	52	78	104	131	157
			-159	-133	-106	-80	-54	-27	-1	24	51	77	103
70	119.00	bu	-43	-13	17	48	79	109	140	171	202	232	263
			-97	-66	-36	-5	25	56	86	117	148	179	209
80	136.00	bu	18	53	88	123	158	193	228	264	299	334	369
			-35	-0	34	69	104	140	175	210	245	280	315
90	153.00	bu	80	119	159	198	238	277	317	356	396	435	475
			26	65	105	144	184	224	263	303	342	382	421
100	170.00	bu	142	185	229	273	317	361	405	449	493	537	581
			88	132	176	220	264	308	351	395	439	483	527
110	187.00	bu	204	252	300	349	397	445	494	542	590	639	687
			150	198	246	295	343	391	440	488	536	585	633
120	204.00	bu	265	318	371	424	476	529	582	635	687	740	793
			212	265	317	370	423	475	528	581	634	686	739
130	221.00	bu	327	385	442	499	556	613	670	727	785	842	899
			274	331	388	445	502	559	617	674	731	788	845
140	238.00	bu	389	451	513	574	636	697	759	820	882	943	1005
			336	397	459	520	582	643	705	766	828	889	951
150	255.00	bu	451	517	583	649	715	781	847	913	979	1045	1111
			398	464	530	596	661	727	793	859	925	991	1057

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 2021 input prices.

Table 26.A Estimated costs per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

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	5.60	1.2000	6.72	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	1.9570	54.31	_____
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN + Sulfur (28%)	gal	2.05	32.1712	65.95	_____
UAN (32%)	gal	2.10	30.0000	63.00	_____
Urea, Solid (46% N)	cwt	28.63	1.0000	28.63	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
Intrepid 2F	oz	1.91	4.0000	7.64	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.25	34.0000	110.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5637	8.61	_____
Harvesters	hour	15.27	0.1009	1.54	_____
Self-Propelled	hour	15.27	0.0176	0.27	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR	hour	15.25	0.6141	9.37	_____
DIESEL FUEL					
Tractors	gal	2.36	6.5294	15.40	_____
Harvesters	gal	2.36	1.3770	3.25	_____
Self-Propelled	gal	2.36	0.1586	0.37	_____
1/4-mi. Pivot Irr.	gal	2.36	11.2011	26.43	_____
REPAIR & MAINTENANCE					
Implements	acre	10.76	1.0000	10.76	_____
Tractors	acre	4.36	1.0000	4.36	_____
Harvesters	acre	4.11	1.0000	4.11	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	12.97	1.0000	12.97	_____

TOTAL DIRECT EXPENSES				670.47	_____
FIXED EXPENSES					
Implements	acre	16.54	1.0000	16.54	_____
Tractors	acre	25.77	1.0000	25.77	_____
Harvesters	acre	15.26	1.0000	15.26	_____
Self-Propelled	acre	1.26	1.0000	1.26	_____
1/4-mi. Pivot Irr.	acre	68.70	1.0000	68.70	_____

TOTAL FIXED EXPENSES				127.53	_____

TOTAL SPECIFIED EXPENSES				798.00	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 26.B Summary of estimated costs and returns per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____
TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.72	1.0000	13.72	_____
FERTILIZERS	acre	251.34	1.0000	251.34	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	8.74	1.0000	8.74	_____
SEED/PLANTS	acre	110.50	1.0000	110.50	_____
CUSTOM FERTILIZE	acre	15.00	1.0000	15.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	0.2036	1.84	_____
OPERATOR LABOR	hour	15.27	0.6823	10.42	_____
UNALLOCATED LABOR	hour	15.25	0.6141	9.37	_____
DIESEL FUEL	gal	2.36	19.2663	45.45	_____
REPAIR & MAINTENANCE	acre	41.38	1.0000	41.38	_____
INTEREST ON OP. CAP.	acre	12.97	1.0000	12.97	_____
TOTAL DIRECT EXPENSES				670.47	_____
RETURNS ABOVE DIRECT EXPENSES				466.93	_____
TOTAL FIXED EXPENSES				127.53	_____
TOTAL SPECIFIED EXPENSES				798.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				339.40	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 26.C Estimated resource use for field operations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

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					30.0000				
Cultivate	12R-38	MFWD 225	0.054	1.00	May		0.05	0.05	0.05	0.04
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
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
1/4-mi. Pivot Irr.	acre				Jul	1.0000			0.20	
							-------	-------	-------	-------
TOTALS							0.68	0.66	1.01	0.61

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 26.D Estimated costs for field operations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Subsoiler	3 shank		2.79	1.01	2.96		0.24	7.00	5.17	12.17
Disk Harrow	42'		1.28	1.79	1.35		0.15	4.57	4.95	9.52
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60		0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	54.31					1.90	56.21		56.21
Potash (60% K2O)	cwt	39.45					1.38	40.83		40.83
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81		0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
Clarity	pt	5.50					0.13	5.63		5.63
Select Max	pt	12.73					0.30	13.03		13.03
Row Cond./Roll-Fold.	40'		1.28	0.76	1.36		0.07	3.47	3.12	6.59
Plant - Folding	12R-38		1.36	1.94	1.89		0.11	5.30	5.04	10.34
Corn Seed RR2	thous	110.50					2.26	112.76		112.76
Custom Apply Fert	acre	7.50					0.13	7.63		7.63
UAN + Sulfur (28%)	gal	65.95					1.15	67.10		67.10
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.59		0.02	1.18	1.26	2.44
Atrazine 4L	pt	6.68					0.12	6.80		6.80
Halex GT	pt	20.95					0.37	21.32		21.32
Corn Consultant	acre	6.00					0.09	6.09		6.09
App by Air (3 gal)	appl	1.12					0.02	1.14		1.14
Bifenthrin	oz	1.10					0.02	1.12		1.12
Fert Appl (Liquid)	12R-38		1.41	1.22	1.73		0.06	4.42	3.22	7.64
UAN (32%)	gal	63.00					0.92	63.92		63.92
Cultivate	12R-38		1.48	1.09	1.58		0.06	4.21	4.13	8.34
App Fert by Air	cwt	7.50					0.09	7.59		7.59
Urea, Solid (46% N)	cwt	28.63					0.33	28.96		28.96
App by Air (3 gal)	appl	5.60					0.07	5.67		5.67
Intrepid 2F	oz	7.64					0.09	7.73		7.73
Header - Corn	8R-38		3.25	5.93	2.93		0.04	12.15	17.81	29.96
Grain Cart Corn	700 bu		0.69	0.51	0.74		0.01	1.95	1.65	3.60
Haul Corn	bu	50.60					0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39		0.02	7.69	5.11	12.80
1/4-mi. Pivot Irr.	acre		26.43	21.95	1.84		0.64	50.86	68.70	119.56
TOTALS		547.90	45.45	41.38	22.77	0.00	12.97	670.47	127.53	798.00

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 26.E Estimated monthly income and expense flows per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	5.60	0.00	0.00	0.00
FERTILIZERS	93.76	0.00	0.00	0.00	0.00	0.00	65.95	63.00	28.63	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	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	1.10	7.64	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	110.50	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	7.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	39.29	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	7.72	0.00	0.00	0.00	0.00	3.25	1.93	3.46	0.20	0.15	0.00	6.06
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	6.93	0.00	0.00	0.00	0.00	2.64	0.37	10.82	10.57	7.93	0.00	6.19
REPAIR & MAINTENANCE	4.75	0.00	0.00	0.00	0.00	2.70	0.20	20.78	1.99	1.49	0.00	9.47
INTEREST ON OP. CAP.	5.46	0.00	0.00	0.00	0.67	2.44	1.81	1.56	0.73	0.08	0.00	0.22
TOTAL DIRECT EXPENSES	161.24	0.00	0.00	0.00	29.42	121.53	105.39	107.84	62.86	9.65	0.00	72.54
NET INCOME	-161.24	0.00	0.00	0.00	-29.42	-121.53	-105.39	-107.84	-62.86	-9.65	0.00	1064.86
NET INCOME TO DATE	-161.24	-161.24	-161.24	-161.24	-190.66	-312.19	-417.58	-525.42	-588.28	-597.93	-597.93	466.93

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
* Lease costs are based on hourly usage costs.

Table 26.F Estimated returns for various price/yield combinations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-218	-190	-161	-133	-104	-76	-47	-19	8	37	65
			-346	-317	-289	-260	-232	-203	-175	-147	-118	-90	-61
60	132.00	bu	-138	-104	-70	-35	-1	32	66	100	134	168	202
			-265	-231	-197	-163	-129	-95	-61	-27	7	41	75
70	154.00	bu	-58	-18	21	61	101	140	180	220	260	300	339
			-185	-145	-106	-66	-26	13	53	93	132	172	212
80	176.00	bu	22	67	113	158	204	249	295	340	386	431	477
			-105	-59	-14	31	76	122	167	213	258	304	349
90	198.00	bu	102	153	204	255	307	358	409	460	511	562	614
			-25	26	77	128	179	230	281	333	384	435	486
100	220.00	bu	182	239	296	353	410	466	523	580	637	694	751
			55	111	168	225	282	339	396	453	510	566	623
110	242.00	bu	262	325	387	450	513	575	638	700	763	825	888
			135	197	260	322	385	448	510	573	635	698	760
120	264.00	bu	343	411	479	547	616	684	752	820	888	957	1025
			215	283	351	420	488	556	624	693	761	829	897
130	286.00	bu	423	497	571	645	718	792	866	940	1014	1088	1162
			295	369	443	517	591	665	739	813	887	961	1035
140	308.00	bu	503	583	662	742	821	901	981	1060	1140	1220	1299
			375	455	535	614	694	774	853	933	1012	1092	1172
150	330.00	bu	583	669	754	839	924	1010	1095	1180	1266	1351	1436
			456	541	626	712	797	882	968	1053	1138	1223	1309

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 2021 input prices

Table 27.A Estimated costs per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2022

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	35.88	1.3000	46.64	_____
Potash (60% K2O)	cwt	26.30	1.0000	26.30	_____
UAN + Sulfur (28%)	gal	2.05	38.2883	78.49	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Select Max	pt	12.73	1.0000	12.73	_____
Lexar	pt	6.79	6.0000	40.74	_____
INSECTICIDES					
Sivanto Prime	oz	3.24	8.0000	25.92	_____
Warrior II	oz	2.74	1.5000	4.11	_____
Prevathon	oz	1.12	14.0000	15.68	_____
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.72	4.5000	16.74	_____
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Sorghum Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.2915	4.45	_____
Harvesters	hour	15.27	0.1021	1.56	_____
Self-Propelled	hour	15.27	0.0661	1.00	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0330	0.30	_____
UNALLOCATED LABOR	hour	15.22	0.4138	6.30	_____
DIESEL FUEL					
Tractors	gal	2.36	3.3766	7.98	_____
Harvesters	gal	2.36	1.3935	3.29	_____
Self-Propelled	gal	2.36	0.8505	2.00	_____
REPAIR & MAINTENANCE					
Implements	acre	5.64	1.0000	5.64	_____
Tractors	acre	2.27	1.0000	2.27	_____
Harvesters	acre	4.16	1.0000	4.16	_____
Self-Propelled	acre	1.05	1.0000	1.05	_____
INTEREST ON OP. CAP.	acre	6.78	1.0000	6.78	_____

TOTAL DIRECT EXPENSES				405.85	_____
FIXED EXPENSES					
Implements	acre	10.13	1.0000	10.13	_____
Tractors	acre	13.31	1.0000	13.31	_____
Harvesters	acre	15.44	1.0000	15.44	_____
Self-Propelled	acre	6.55	1.0000	6.55	_____

TOTAL FIXED EXPENSES				45.43	_____

TOTAL SPECIFIED EXPENSES				451.28	_____

Note: Cost of production estimates are based on 2021 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 27.B Summary of estimated costs and returns per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	4.91	100.0000	491.00	_____
TOTAL INCOME				491.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_____
FERTILIZERS	acre	151.43	1.0000	151.43	_____
HERBICIDES	acre	62.27	1.0000	62.27	_____
INSECTICIDES	acre	45.71	1.0000	45.71	_____
SEED/PLANTS	acre	16.74	1.0000	16.74	_____
ADJUVANTS	acre	0.99	1.0000	0.99	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1772	1.61	_____
OPERATOR LABOR	hour	15.27	0.4598	7.01	_____
UNALLOCATED LABOR	hour	15.22	0.4138	6.30	_____
DIESEL FUEL	gal	2.36	5.6208	13.27	_____
REPAIR & MAINTENANCE	acre	13.12	1.0000	13.12	_____
INTEREST ON OP. CAP.	acre	6.78	1.0000	6.78	_____
TOTAL DIRECT EXPENSES				405.85	_____
RETURNS ABOVE DIRECT EXPENSES				85.15	_____
TOTAL FIXED EXPENSES				45.43	_____
TOTAL SPECIFIED EXPENSES				451.28	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				39.72	_____

Note: Cost of production estimates are based on 2021 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 27.C Estimated resource use for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2022

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
Warrior II	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 2021 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 27.D Estimated costs for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Lime (Spread)	ton	39.29					1.38	40.67		40.67
Disk Harrow	32'		1.68	1.55	1.78		0.16	5.17	4.90	10.07
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52					0.08	3.60		3.60
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Select Max	pt	12.73					0.30	13.03		13.03
Surfactant	pt	0.99					0.02	1.01		1.01
Spin Spreader	5 ton		1.15	0.67	1.60		0.06	3.48	2.56	6.04
DAP	cwt	46.64					0.82	47.46		47.46
Potash (60% K2O)	cwt	26.30					0.46	26.76		26.76
Field Cultivate Fld	32'		1.28	0.88	1.35		0.06	3.57	4.17	7.74
Plant - Folding	12R-30		1.72	2.19	2.39		0.11	6.41	5.88	12.29
Sorghum Concept+ Po	lb	16.74					0.29	17.03		17.03
Sprayer 800gal	80' 250hp		0.40	0.21	0.44		0.02	1.07	1.31	2.38
Lexar	pt	40.74					0.71	41.45		41.45
Sorghum Consultant	acre	6.00					0.09	6.09		6.09
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64		0.10	6.86	5.02	11.88
UAN + Sulfur (28%)	gal	78.49					1.14	79.63		79.63
Sprayer 800gal	80' 250hp		0.40	0.21	0.44		0.01	1.06	1.31	2.37
Sivanto Prime	oz	12.96					0.15	13.11		13.11
Sprayer 800gal	80' 250hp		0.40	0.21	0.44		0.01	1.06	1.31	2.37
Warrior II	oz	4.11					0.04	4.15		4.15
Sprayer 800gal	80' 250hp		0.40	0.21	0.44		0.01	1.06	1.31	2.37
Prevathon	oz	15.68					0.14	15.82		15.82
Sprayer 800gal	80' 250hp		0.40	0.21	0.44		0.01	1.06	1.31	2.37
Sivanto Prime	oz	12.96					0.11	13.07		13.07
Header Wheat/Sorghum	25' Rigid		3.29	4.81	2.96		0.03	11.09	16.35	27.44
Haul Sorghum	bu	25.00					0.07	25.07		25.07
TOTALS		357.76	13.27	13.12	14.92	0.00	6.78	405.85	45.43	451.28

Note: Cost of production estimates are based on 2021 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 27.E Estimated monthly income and expense flows per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2022

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	491.00
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	72.94	78.49	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.53	0.00	40.74	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	12.96	32.75	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	16.74	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	39.29	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	1.78	0.00	0.00	0.00	0.00	5.78	2.64	0.44	1.32	0.00	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	1.68	0.00	0.00	0.00	0.00	4.55	2.15	0.40	1.20	0.00	3.29
REPAIR & MAINTENANCE	0.00	1.55	0.00	0.00	0.00	0.00	3.95	1.97	0.21	0.63	0.00	4.81
INTEREST ON OP. CAP.	1.50	0.16	0.00	0.00	0.68	0.00	2.53	1.33	0.16	0.32	0.00	0.10
TOTAL DIRECT EXPENSES	44.12	5.17	0.00	0.00	30.20	0.00	147.23	92.58	14.17	36.22	0.00	36.16
NET INCOME	-44.12	-5.17	0.00	0.00	-30.20	0.00	-147.23	-92.58	-14.17	-36.22	0.00	454.84
NET INCOME TO DATE	-44.12	-49.29	-49.29	-49.29	-79.49	-79.49	-226.72	-319.30	-333.47	-369.69	-369.69	85.15

Note: Cost of production estimates are based on 2021 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 27.F Estimated returns for various price/yield combinations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Grain Sorghum			3.68	3.92	4.17	4.41	4.66	4.91	5.15	5.40	5.64	5.89	6.13
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu	-209	-196	-184	-172	-160	-147	-135	-123	-110	-98	-86
			-254	-242	-230	-217	-205	-193	-180	-168	-156	-144	-131
60	60.00	bu	-174	-160	-145	-130	-115	-101	-86	-71	-57	-42	-27
			-220	-205	-190	-176	-161	-146	-131	-117	-102	-87	-73
70	70.00	bu	-140	-123	-106	-88	-71	-54	-37	-20	-3	14	31
			-185	-168	-151	-134	-117	-100	-82	-65	-48	-31	-14
80	80.00	bu	-106	-86	-66	-47	-27	-8	11	31	50	70	90
			-151	-132	-112	-92	-73	-53	-33	-14	5	25	44
90	90.00	bu	-71	-49	-27	-5	16	38	60	82	104	126	149
			-117	-95	-73	-51	-28	-6	15	37	59	81	103
100	100.00	bu	-37	-13	11	36	60	85	109	134	158	183	207
			-83	-58	-33	-9	15	39	64	88	113	137	162
110	110.00	bu	-3	23	50	77	104	131	158	185	212	239	266
			-48	-21	5	32	59	86	113	140	167	194	221
120	120.00	bu	31	60	89	119	148	178	207	237	266	296	325
			-14	15	44	73	103	132	162	191	221	250	280
130	130.00	bu	65	97	129	161	193	224	256	288	320	352	384
			19	51	83	115	147	179	211	243	275	307	339
140	140.00	bu	99	134	168	202	237	271	305	340	374	409	443
			54	88	122	157	191	226	260	294	329	363	397
150	150.00	bu	133	170	207	244	281	318	354	391	428	465	502
			88	125	162	199	235	272	309	346	383	419	456

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 2021 input prices.

Table 28.A Estimated costs per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2022

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	5.60	1.0000	5.60	_____
FERTILIZERS					
DAP	cwt	35.88	1.0000	35.88	_____
Potash (60% K2O)	cwt	26.30	0.7500	19.73	_____
Fert 41-0-0-4	cwt	18.22	3.0480	55.53	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	4.5000	20.70	_____
Prosaro	oz	2.36	8.0000	18.88	_____
HERBICIDES					
Axiom	oz	2.06	10.0000	20.60	_____
Harmony Extra SG	oz	10.86	0.7500	8.15	_____
Axial XL	oz	1.10	16.4000	18.04	_____
INSECTICIDES					
Warrior II	oz	2.74	1.5000	4.11	_____
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	59.00	0.6660	39.29	_____
CROP CONSULTANT					
Wheat Consultant	acre	5.50	1.0000	5.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.2129	3.25	_____
Harvesters	hour	15.27	0.1021	1.56	_____
HAND LABOR					
Implements	hour	9.06	0.1049	0.95	_____
UNALLOCATED LABOR	hour	15.27	0.2521	3.85	_____
DIESEL FUEL					
Tractors	gal	2.36	2.4667	5.83	_____
Harvesters	gal	2.36	1.3935	3.29	_____
REPAIR & MAINTENANCE					
Implements	acre	4.20	1.0000	4.20	_____
Tractors	acre	1.66	1.0000	1.66	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	7.21	1.0000	7.21	_____

TOTAL DIRECT EXPENSES				371.57	_____
FIXED EXPENSES					
Implements	acre	8.57	1.0000	8.57	_____
Tractors	acre	9.72	1.0000	9.72	_____
Harvesters	acre	15.44	1.0000	15.44	_____

TOTAL FIXED EXPENSES				33.73	_____

TOTAL SPECIFIED EXPENSES				405.30	_____

Note: Cost of production estimates are based on 2021 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 28.B Summary of estimated costs and returns per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	7.28	70.0000	509.60	_____
TOTAL INCOME				509.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.60	1.0000	19.60	_____
FERTILIZERS	acre	111.15	1.0000	111.15	_____
FUNGICIDES	acre	39.58	1.0000	39.58	_____
HERBICIDES	acre	46.79	1.0000	46.79	_____
INSECTICIDES	acre	4.11	1.0000	4.11	_____
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	39.29	1.0000	39.29	_____
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	15.27	0.3151	4.81	_____
UNALLOCATED LABOR	hour	15.27	0.2521	3.85	_____
DIESEL FUEL	gal	2.36	3.8602	9.12	_____
REPAIR & MAINTENANCE	acre	10.02	1.0000	10.02	_____
INTEREST ON OP. CAP.	acre	7.21	1.0000	7.21	_____
TOTAL DIRECT EXPENSES				371.57	_____
RETURNS ABOVE DIRECT EXPENSES				138.03	_____
TOTAL FIXED EXPENSES				33.73	_____
TOTAL SPECIFIED EXPENSES				405.30	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				104.30	_____

Note: Cost of production estimates are based on 2021 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 28.C Estimated resource use for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2022

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				
Warrior II	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 2021 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 28.D Estimated costs for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.10	3.43		3.43
Lime (Spread)	ton	39.29					1.15	40.44		40.44
Disk Harrow	32'		1.68	1.55	1.69		0.14	5.06	4.90	9.96
Spin Spreader	5 ton		1.15	0.67	1.53		0.10	3.45	2.56	6.01
DAP	cwt	35.88					1.05	36.93		36.93
Potash (60% K2O)	cwt	19.73					0.58	20.31		20.31
Field Cultivate Fld	32'		1.28	0.88	1.28		0.10	3.54	4.17	7.71
Grain Drill	30'		1.72	2.11	2.30		0.16	6.29	5.75	12.04
Wheat Seed Private	lb	25.20					0.66	25.86		25.86
CruiserMaxx Vibrance	oz	20.70					0.54	21.24		21.24
Wheat Consultant	acre	5.50					0.14	5.64		5.64
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Axiom	oz	20.60					0.48	21.08		21.08
App by Air (3 gal)	appl	5.60					0.08	5.68		5.68
Warrior II	oz	4.11					0.06	4.17		4.17
Harmony Extra SG	oz	8.15					0.12	8.27		8.27
Axial XL	oz	18.04					0.26	18.30		18.30
App Fert by Air	cwt	11.43					0.17	11.60		11.60
Fert 41-0-0-4	cwt	27.77					0.40	28.17		28.17
App Fert by Air	cwt	11.43					0.13	11.56		11.56
Fert 41-0-0-4	cwt	27.77					0.32	28.09		28.09
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Prosaro	oz	18.88					0.17	19.05		19.05
Header Wheat/Sorghum	25' Rigid		3.29	4.81	2.81		0.03	10.94	16.35	27.29
Haul Wheat	bu	18.20					0.05	18.25		18.25
TOTALS		335.61	9.12	10.02	9.61	0.00	7.21	371.57	33.73	405.30

Note: Cost of production estimates are based on 2021 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 28.E Estimated monthly income and expense flows per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2022

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	509.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	5.60	0.00	7.00	0.00	0.00
FERTILIZERS	0.00	0.00	55.61	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	20.70	0.00	0.00	0.00	0.00	0.00	18.88	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	20.60	0.00	0.00	26.19	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.11	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	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	39.29	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	4.50	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.81
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	0.00	0.00	4.11	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29
REPAIR & MAINTENANCE	0.00	0.00	3.10	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.81
INTEREST ON OP. CAP.	0.00	0.00	3.22	1.50	0.64	0.00	0.00	1.09	0.45	0.23	0.00	0.08
TOTAL DIRECT EXPENSES	0.00	0.00	113.16	59.03	28.24	0.00	0.00	76.19	39.65	26.11	0.00	29.19
NET INCOME	0.00	0.00	-113.16	-59.03	-28.24	0.00	0.00	-76.19	-39.65	-26.11	0.00	480.41
NET INCOME TO DATE	0.00	0.00	-113.16	-172.19	-200.43	-200.43	-200.43	-276.62	-316.27	-342.38	-342.38	138.03

Note: Cost of production estimates are based on 2021 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 28.F Estimated returns for various price/yield combinations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Wheat			5.46	5.82	6.18	6.55	6.91	7.28	7.64	8.00	8.37	8.73	9.10
PERCENT	YIELD	UNIT	dollars										
50	35.00	bu	-171	-158	-145	-133	-120	-107	-94	-82	-69	-56	-43
			-205	-192	-179	-166	-154	-141	-128	-115	-103	-90	-77
60	42.00	bu	-134	-119	-104	-89	-73	-58	-43	-27	-12	2	17
			-168	-153	-138	-122	-107	-92	-76	-61	-46	-31	-15
70	49.00	bu	-98	-80	-62	-45	-27	-9	8	26	44	61	79
			-132	-114	-96	-78	-60	-43	-25	-7	10	28	46
80	56.00	bu	-62	-41	-21	-1	19	39	60	80	100	121	141
			-95	-75	-55	-34	-14	6	26	46	67	87	107
90	63.00	bu	-25	-2	20	43	65	88	111	134	157	180	203
			-59	-36	-13	9	32	55	78	101	123	146	169
100	70.00	bu	10	36	61	87	112	138	163	188	214	239	265
			-23	2	27	53	78	104	129	155	180	206	231
110	77.00	bu	47	75	103	131	159	187	215	243	271	299	327
			13	41	69	97	125	153	181	209	237	265	293
120	84.00	bu	83	113	144	175	205	236	266	297	328	358	389
			49	80	110	141	171	202	233	263	294	324	355
130	91.00	bu	119	152	186	219	252	285	318	351	384	417	451
			86	119	152	185	218	251	284	317	351	384	417
140	98.00	bu	156	191	227	263	298	334	370	405	441	477	512
			122	158	193	229	265	300	336	372	407	443	479
150	105.00	bu	192	230	269	307	345	383	421	460	498	536	574
			158	197	235	273	311	349	388	426	464	502	541

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 2021 input prices.

Table 29.A Estimated costs per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
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	4.75	0.5000	2.38	_____
MSO	pt	4.38	1.5000	6.57	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
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	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.2030	3.10	_____
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	15.24	0.5633	8.59	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	3.3975	8.02	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.64	1.0000	9.64	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	8.75	1.0000	8.75	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	10.17	1.0000	10.17	_____

TOTAL DIRECT EXPENSES				815.51	_____
FIXED EXPENSES					
Implements	acre	18.85	1.0000	18.85	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	32.48	1.0000	32.48	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____

TOTAL FIXED EXPENSES				114.50	_____

TOTAL SPECIFIED EXPENSES				930.01	_____

Note: Cost of production estimates are based on 2021 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
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	160.0000	928.00	_____
TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	12.49	1.0000	12.49	_____
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	15.27	0.7506	11.46	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.24	0.5633	8.59	_____
DIESEL FUEL	gal	2.36	36.2688	85.59	_____
REPAIR & MAINTENANCE	acre	36.61	1.0000	36.61	_____
INTEREST ON OP. CAP.	acre	10.17	1.0000	10.17	_____
TOTAL DIRECT EXPENSES				815.51	_____
RETURNS ABOVE DIRECT EXPENSES				112.49	_____
TOTAL FIXED EXPENSES				114.50	_____
TOTAL SPECIFIED EXPENSES				930.01	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-2.01	_____

Note: Cost of production estimates are based on 2021 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
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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					
RICE MGT. LABOR	hour								0.30	
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								0.50	
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				
Ameristar Top	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 2021 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
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.01	3.34		3.34
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Conv.	lb	24.00					0.42	24.42		24.42
Rice Seed Trt/Insect	lbseed	21.75					0.38	22.13		22.13
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
Class Act NG	pt	2.38					0.04	2.42		2.42
MSO	pt	2.19					0.04	2.23		2.23
Seed Levees										
Rice Seed Cv(Levees)	lb	4.35					0.08	4.43		4.43
Rice Seed Trt/Insect	lbseed	3.94					0.07	4.01		4.01
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Regiment	oz	22.75					0.33	23.08		23.08
Dyne-A-Pak	pt	2.07					0.03	2.10		2.10
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
Rice Management										
RICE MGT. LABOR	hour				2.72		0.04	2.76		2.76
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Facet L	pt	39.89					0.58	40.47		40.47
Permit	oz	16.47					0.24	16.71		16.71
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				4.53		0.05	4.58		4.58
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				4.53		0.04	4.57		4.57
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		8.02	12.20	5.89		0.15	26.26	37.48	63.74
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	56.00					0.33	56.33		56.33
Dry Rice	bu	64.00					0.37	64.37		64.37
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	4.50	66.01	15.10	33.87		1.59	121.07	44.56	165.63
TOTALS		614.56	85.59	36.61	68.58	0.00	10.17	815.51	114.50	930.01

Note: Cost of production estimates are based on 2021 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
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	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	4.57	3.21	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	16.29	9.52	11.33	11.33	11.90	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	9.27	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	12.69	3.56
INTEREST ON OP. CAP.	0.35	0.00	0.00	0.00	0.40	0.00	2.49	4.00	1.30	0.69	0.89	0.05
TOTAL DIRECT EXPENSES	10.13	0.00	0.00	0.00	17.96	0.00	144.29	278.75	113.50	80.66	154.75	15.47
NET INCOME	-10.13	0.00	0.00	0.00	-17.96	0.00	-144.29	-278.75	-113.50	-80.66	773.25	-15.47
NET INCOME TO DATE	-10.13	-10.13	-10.13	-10.13	-28.09	-28.09	-172.38	-451.13	-564.63	-645.29	127.96	112.49

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
* Lease costs are based on hourly usage costs

Table 29.F Estimated returns for various price/yield combinations, per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-407	-383	-360	-337	-314	-291	-267	-244	-221	-198	-175
			-521	-498	-475	-452	-428	-405	-382	-359	-336	-312	-289
60	96.00	bu	-349	-321	-293	-266	-238	-210	-182	-154	-126	-99	-71
			-464	-436	-408	-380	-352	-324	-297	-269	-241	-213	-185
70	112.00	bu	-292	-259	-227	-194	-162	-129	-97	-64	-32	0	32
			-406	-374	-341	-309	-276	-244	-211	-179	-146	-114	-81
80	128.00	bu	-234	-197	-160	-123	-86	-48	-11	25	62	99	136
			-349	-311	-274	-237	-200	-163	-126	-89	-52	-14	22
90	144.00	bu	-177	-135	-93	-51	-10	31	73	115	157	198	240
			-291	-249	-208	-166	-124	-82	-40	0	42	84	126
100	160.00	bu	-119	-73	-26	19	66	112	158	205	251	298	344
			-234	-187	-141	-94	-48	-2	44	90	137	183	229
110	176.00	bu	-61	-10	40	91	142	193	244	295	346	397	448
			-176	-125	-74	-23	27	78	129	180	231	282	333
120	192.00	bu	-4	51	106	162	218	273	329	385	440	496	552
			-118	-63	-7	48	103	159	215	270	326	382	437
130	208.00	bu	53	113	173	234	294	354	415	475	535	595	656
			-61	-1	59	119	179	240	300	360	421	481	541
140	224.00	bu	110	175	240	305	370	435	500	565	630	695	760
			-3	61	126	190	255	320	385	450	515	580	645
150	240.00	bu	168	237	307	376	446	516	585	655	724	794	864
			53	123	192	262	332	401	471	540	610	680	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 2021 input prices.

Table 30.A Estimated costs per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2022

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	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
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	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	9.83	1.0000	9.83	_____

TOTAL DIRECT EXPENSES				778.21	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____

TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				907.53	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 30.B Summary of estimated costs and returns per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	160.0000	928.00	_____

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	12.49	1.0000	12.49	_____
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	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	9.83	1.0000	9.83	_____

TOTAL DIRECT EXPENSES				778.21	_____
RETURNS ABOVE DIRECT EXPENSES				149.79	_____
TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				907.53	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				20.47	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 30.C Estimated resource use for field operations, per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 30.D Estimated costs for field operations, per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Conv.	lb	24.00					0.42	24.42		24.42
Rice Seed Trt/Insect	lbseed	21.75					0.38	22.13		22.13
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed Cv(Levees)	lb	4.35					0.08	4.43		4.43
Rice Seed Trt/Insect	lbseed	3.94					0.07	4.01		4.01
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Regiment	oz	22.75					0.33	23.08		23.08
Dyne-A-Pak	pt	2.07					0.03	2.10		2.10
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Facet L	pt	39.89					0.58	40.47		40.47
Permit	oz	16.47					0.24	16.71		16.71
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	56.00					0.33	56.33		56.33
Dry Rice	bu	64.00					0.37	64.37		64.37
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	2.25	53.51	14.79	22.70		1.24	94.49	64.38	158.87
TOTALS		612.31	72.02	34.67	49.38	0.00	9.83	778.21	129.32	907.53

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 30.E Estimated monthly income and expense flows per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2022

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	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	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	4.57	3.21	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	2.36	3.88	1.19	0.62	0.87	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	137.46	270.60	104.45	71.65	150.38	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-137.46	-270.60	-104.45	-71.65	777.62	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-169.00	-439.60	-544.05	-615.70	161.92	149.79

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs

Table 30.F Estimated returns for various price/yield combinations, per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-369	-346	-323	-300	-277	-253	-230	-207	-184	-161	-137
			-499	-475	-452	-429	-406	-383	-359	-336	-313	-290	-267
60	96.00	bu	-312	-284	-256	-228	-200	-173	-145	-117	-89	-61	-33
			-441	-413	-385	-358	-330	-302	-274	-246	-218	-191	-163
70	112.00	bu	-254	-222	-189	-157	-124	-92	-59	-27	5	37	70
			-384	-351	-319	-286	-254	-221	-189	-156	-124	-91	-59
80	128.00	bu	-197	-160	-123	-85	-48	-11	25	62	99	136	173
			-326	-289	-252	-215	-178	-140	-103	-66	-29	7	44
90	144.00	bu	-139	-97	-56	-14	27	69	110	152	194	236	277
			-269	-227	-185	-143	-102	-60	-18	23	65	106	148
100	160.00	bu	-82	-35	10	56	103	149	196	242	288	335	381
			-211	-165	-118	-72	-25	20	66	113	159	206	252
110	176.00	bu	-24	26	77	128	179	230	281	332	383	434	485
			-154	-102	-51	-0	50	101	152	203	254	305	356
120	192.00	bu	32	88	144	199	255	311	366	422	478	533	589
			-96	-40	14	70	126	181	237	293	348	404	460
130	208.00	bu	90	150	211	271	331	391	452	512	572	633	693
			-38	21	81	142	202	262	322	383	443	503	564
140	224.00	bu	147	212	277	342	407	472	537	602	667	732	797
			18	83	148	213	278	343	408	473	538	603	668
150	240.00	bu	205	275	344	414	483	553	623	692	762	831	901
			76	145	215	284	354	424	493	563	632	702	772

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 2021 input prices.

Table 31.A Estimated costs per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

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	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
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	4.75	0.5000	2.38	_____
MSO	pt	4.38	1.5000	6.57	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
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	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	9.74	1.0000	9.74	_____

TOTAL DIRECT EXPENSES				768.53	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____

TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				899.11	_____

Note: Cost of production estimates are based on 2021 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
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	160.0000	928.00	_____
TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	12.78	1.0000	12.78	_____
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	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	9.74	1.0000	9.74	_____
TOTAL DIRECT EXPENSES				768.53	_____
RETURNS ABOVE DIRECT EXPENSES				159.47	_____
TOTAL FIXED EXPENSES				130.58	_____
TOTAL SPECIFIED EXPENSES				899.11	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				28.89	_____

Note: Cost of production estimates are based on 2021 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
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 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
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Conv.	lb	24.00					0.42	24.42		24.42
Rice Seed Trt/Insect	lbseed	21.75					0.38	22.13		22.13
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
Class Act NG	pt	2.38					0.04	2.42		2.42
MSO	pt	2.19					0.04	2.23		2.23
Seed Levees										
Rice Seed Cv(Levees)	lb	4.35					0.08	4.43		4.43
Rice Seed Trt/Insect	lbseed	3.94					0.07	4.01		4.01
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Regiment	oz	22.75					0.33	23.08		23.08
Dyne-A-Pak	pt	2.07					0.03	2.10		2.10
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Facet L	pt	39.89					0.58	40.47		40.47
Permit	oz	16.47					0.24	16.71		16.71
Crop Oil Conc.(Pet.)	pt	1.43					0.02	1.45		1.45
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	56.00					0.33	56.33		56.33
Dry Rice	bu	64.00					0.37	64.37		64.37
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	10.17	46.40	14.67	12.13		1.15	84.52	65.64	150.16
TOTALS		620.52	64.91	34.55	38.81	0.00	9.74	768.53	130.58	899.11

Note: Cost of production estimates are based on 2021 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
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

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	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	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	4.57	3.50	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	2.44	3.81	1.14	0.58	0.86	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	141.89	266.10	99.68	66.89	150.30	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-141.89	-266.10	-99.68	-66.89	777.70	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-173.43	-439.53	-539.21	-606.10	171.60	159.47

Note: Cost of production estimates are based on 2021 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
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-360	-336	-313	-290	-267	-244	-220	-197	-174	-151	-128
			-490	-467	-444	-421	-397	-374	-351	-328	-305	-281	-258
60	96.00	bu	-302	-274	-246	-219	-191	-163	-135	-107	-79	-52	-24
			-433	-405	-377	-349	-321	-294	-266	-238	-210	-182	-154
70	112.00	bu	-245	-212	-180	-147	-115	-82	-50	-17	14	47	79
			-375	-343	-310	-278	-245	-213	-180	-148	-115	-83	-50
80	128.00	bu	-187	-150	-113	-76	-39	-1	35	72	109	146	183
			-318	-281	-243	-206	-169	-132	-95	-58	-21	15	53
90	144.00	bu	-130	-88	-46	-4	36	78	120	162	204	245	287
			-260	-218	-177	-135	-93	-51	-10	31	73	115	156
100	160.00	bu	-72	-26	20	66	113	159	205	252	298	345	391
			-203	-156	-110	-63	-17	28	75	121	168	214	260
110	176.00	bu	-15	36	87	138	189	240	291	342	393	444	495
			-145	-94	-43	7	58	109	160	211	262	313	364
120	192.00	bu	42	98	153	209	265	320	376	432	487	543	599
			-88	-32	23	78	134	190	246	301	357	413	468
130	208.00	bu	100	160	220	281	341	401	461	522	582	642	703
			-30	29	90	150	210	271	331	391	452	512	572
140	224.00	bu	157	222	287	352	417	482	547	612	677	742	807
			27	91	156	221	286	351	416	481	546	611	676
150	240.00	bu	215	284	354	423	493	563	632	702	771	841	911
			84	154	223	293	362	432	502	571	641	710	780

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 2021 input prices.

Table 32.A Estimated costs per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2022

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	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
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	4.75	0.5000	2.38	_____
MSO	pt	4.38	1.5000	6.57	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
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	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	9.21	1.0000	9.21	_____

TOTAL DIRECT EXPENSES				734.19	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____

TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				860.16	_____

Note: Cost of production estimates are based on 2021 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
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	160.0000	928.00	_____
TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	45.75	1.0000	45.75	_____
ADJUVANTS	acre	12.78	1.0000	12.78	_____
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	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	9.21	1.0000	9.21	_____
TOTAL DIRECT EXPENSES				734.19	_____
RETURNS ABOVE DIRECT EXPENSES				193.81	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				860.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				67.84	_____

Note: Cost of production estimates are based on 2021 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
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 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
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Conv.	lb	24.00					0.42	24.42		24.42
Rice Seed Trt/Insect	lbseed	21.75					0.38	22.13		22.13
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
Class Act NG	pt	2.38					0.04	2.42		2.42
MSO	pt	2.19					0.04	2.23		2.23
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Regiment	oz	22.75					0.33	23.08		23.08
Dyne-A-Pak	pt	2.07					0.03	2.10		2.10
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Facet L	pt	39.89					0.58	40.47		40.47
Permit	oz	16.47					0.24	16.71		16.71
Crop Oil Conc.(Pet.)	pt	1.43					0.02	1.45		1.45
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	56.00					0.33	56.33		56.33
Dry Rice	bu	64.00					0.37	64.37		64.37
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre		36.52	11.80	9.53		0.77	58.62	61.03	119.65
TOTALS		602.06	55.03	31.68	36.21	0.00	9.21	734.19	125.97	860.16

Note: Cost of production estimates are based on 2021 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
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2022

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	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	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	4.57	3.50	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	2.00	3.77	1.12	0.56	0.85	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	115.59	264.04	97.64	64.85	148.40	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-115.59	-264.04	-97.64	-64.85	779.60	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-147.13	-411.17	-508.81	-573.66	205.94	193.81

Note: Cost of production estimates are based on 2021 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
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-325	-302	-279	-256	-233	-209	-186	-163	-140	-117	-93
			-451	-428	-405	-382	-359	-335	-312	-289	-266	-243	-219
60	96.00	bu	-268	-240	-212	-184	-156	-129	-101	-73	-45	-17	10
			-394	-366	-338	-310	-282	-255	-227	-199	-171	-143	-115
70	112.00	bu	-210	-178	-145	-113	-80	-48	-15	16	49	81	114
			-336	-304	-271	-239	-206	-174	-141	-109	-76	-44	-11
80	128.00	bu	-153	-116	-79	-41	-4	32	69	106	143	180	217
			-279	-242	-204	-167	-130	-93	-56	-19	17	54	91
90	144.00	bu	-95	-53	-12	29	71	113	154	196	238	280	321
			-221	-179	-138	-96	-54	-12	28	70	112	154	195
100	160.00	bu	-38	8	54	101	147	193	240	286	333	379	425
			-164	-117	-71	-24	21	67	114	160	207	253	299
110	176.00	bu	19	70	121	172	223	274	325	376	427	478	529
			-106	-55	-4	46	97	148	199	250	301	352	403
120	192.00	bu	76	132	188	243	299	355	410	466	522	577	633
			-49	6	62	117	173	229	284	340	396	452	507
130	208.00	bu	134	194	255	315	375	436	496	556	616	677	737
			8	68	129	189	249	310	370	430	490	551	611
140	224.00	bu	191	256	321	386	451	516	581	646	711	776	841
			65	130	195	260	325	390	455	520	585	650	715
150	240.00	bu	249	319	388	458	527	597	667	736	806	875	945
			123	193	262	332	401	471	541	610	680	749	819

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 2021 input prices.

Table 33.A Estimated costs per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.60	23.0000	151.80	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
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	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.18	1.0000	9.18	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	11.61	1.0000	11.61	_____

TOTAL DIRECT EXPENSES				872.11	_____
FIXED EXPENSES					
Implements	acre	18.18	1.0000	18.18	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____

TOTAL FIXED EXPENSES				109.50	_____

TOTAL SPECIFIED EXPENSES				981.61	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 33.B Summary of estimated costs and returns per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	180.0000	1044.00	_____
TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.90	1.0000	39.90	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	161.23	1.0000	161.23	_____
ADJUVANTS	acre	12.16	1.0000	12.16	_____
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	15.27	0.7235	11.05	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	35.8158	84.52	_____
REPAIR & MAINTENANCE	acre	34.98	1.0000	34.98	_____
INTEREST ON OP. CAP.	acre	11.61	1.0000	11.61	_____
TOTAL DIRECT EXPENSES				872.11	_____
RETURNS ABOVE DIRECT EXPENSES				171.89	_____
TOTAL FIXED EXPENSES				109.50	_____
TOTAL SPECIFIED EXPENSES				981.61	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				62.39	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 33.C Estimated resource use for field operations, per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 33.D Estimated costs for field operations, per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Conv Hyb Trt	lb	151.80					2.66	154.46		154.46
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.14	8.34		8.34
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Regiment	oz	22.75					0.33	23.08		23.08
Dyne-A-Pak	pt	2.07					0.03	2.10		2.10
App Fert by Air	cwt	20.02					0.29	20.31		20.31
Urea, Solid (46% N)	cwt	76.44					1.11	77.55		77.55
NBPT	pt	10.34					0.15	10.49		10.49
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Facet L	pt	39.89					0.58	40.47		40.47
Permit	oz	16.47					0.24	16.71		16.71
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.06	4.95		4.95
Urea, Solid (46% N)	cwt	18.67					0.22	18.89		18.89
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	63.00					0.37	63.37		63.37
Dry Rice	bu	72.00					0.42	72.42		72.42
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	4.50	66.01	15.10	33.87		1.59	121.07	44.56	165.63
TOTALS		680.45	84.52	34.98	60.55	0.00	11.61	872.11	109.50	981.61

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 33.E Estimated monthly income and expense flows per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	161.23	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	16.29	7.71	8.61	8.61	11.12	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	8.20	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	11.06	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.36	4.07	0.92	0.39	0.96	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	253.35	283.78	79.76	45.21	166.34	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-253.35	-283.78	-79.76	-45.21	877.66	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-284.89	-568.67	-648.43	-693.64	184.02	171.89

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs

Table 33.F Estimated returns for various price/yield combinations, per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-412	-386	-360	-334	-308	-282	-256	-230	-203	-177	-151
			-522	-496	-470	-443	-417	-391	-365	-339	-313	-287	-261
60	108.00	bu	-347	-316	-285	-254	-222	-191	-160	-128	-97	-66	-34
			-457	-426	-394	-363	-332	-300	-269	-238	-206	-175	-144
70	126.00	bu	-283	-246	-210	-173	-137	-100	-64	-27	9	45	82
			-392	-356	-319	-283	-246	-210	-173	-136	-100	-63	-27
80	144.00	bu	-218	-176	-135	-93	-51	-9	32	73	115	157	199
			-328	-286	-244	-202	-161	-119	-77	-35	6	47	89
90	162.00	bu	-153	-106	-59	-12	34	81	128	175	222	268	315
			-263	-216	-169	-122	-75	-28	18	65	112	159	206
100	180.00	bu	-89	-36	15	67	119	171	224	276	328	380	432
			-198	-146	-94	-42	10	62	114	166	218	271	323
110	198.00	bu	-24	33	90	147	205	262	320	377	434	492	549
			-133	-76	-19	38	95	153	210	268	325	382	440
120	216.00	bu	40	102	165	228	290	353	416	478	541	604	666
			-69	-6	56	118	181	244	306	369	431	494	557
130	234.00	bu	105	172	240	308	376	444	512	580	647	715	783
			-4	63	131	199	266	334	402	470	538	606	674
140	252.00	bu	169	242	315	389	462	535	608	681	754	827	900
			60	133	206	279	352	425	498	571	644	717	791
150	270.00	bu	234	312	391	469	547	625	704	782	860	939	1017
			124	203	281	359	438	516	594	673	751	829	907

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 2021 input prices.

Table 34.A Estimated costs per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.60	23.0000	151.80	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
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	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	11.26	1.0000	11.26	_____

TOTAL DIRECT EXPENSES				845.53	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____

TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				974.85	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 34.B Summary of estimated costs and returns per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	180.0000	1044.00	_____

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.90	1.0000	39.90	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	161.23	1.0000	161.23	_____
ADJUVANTS	acre	12.16	1.0000	12.16	_____
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	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	11.26	1.0000	11.26	_____

TOTAL DIRECT EXPENSES				845.53	_____
RETURNS ABOVE DIRECT EXPENSES				198.47	_____
TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				974.85	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				69.15	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 34.C Estimated resource use for field operations, per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 34.D Estimated costs for field operations, per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Conv Hyb Trt	lb	151.80					2.66	154.46		154.46
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.14	8.34		8.34
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Regiment	oz	22.75					0.33	23.08		23.08
Dyne-A-Pak	pt	2.07					0.03	2.10		2.10
App Fert by Air	cwt	20.02					0.29	20.31		20.31
Urea, Solid (46% N)	cwt	76.44					1.11	77.55		77.55
NBPT	pt	10.34					0.15	10.49		10.49
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Facet L	pt	39.89					0.58	40.47		40.47
Permit	oz	16.47					0.24	16.71		16.71
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.06	4.95		4.95
Urea, Solid (46% N)	cwt	18.67					0.22	18.89		18.89
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	63.00					0.37	63.37		63.37
Dry Rice	bu	72.00					0.42	72.42		72.42
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	2.25	53.51	14.79	22.70		1.24	94.49	64.38	158.87
TOTALS		678.20	72.02	34.67	49.38	0.00	11.26	845.53	129.32	974.85

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 34.E Estimated monthly income and expense flows per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	161.23	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.23	3.98	0.84	0.34	0.96	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	246.52	277.47	73.46	38.94	165.47	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-246.52	-277.47	-73.46	-38.94	878.53	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-278.06	-555.53	-628.99	-667.93	210.60	198.47

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs.

Table 34.F Estimated returns for various price/yield combinations, per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-386	-360	-333	-307	-281	-255	-229	-203	-177	-151	-125
			-515	-489	-463	-437	-411	-384	-358	-332	-306	-280	-254
60	108.00	bu	-321	-290	-258	-227	-196	-164	-133	-102	-70	-39	-8
			-450	-419	-388	-356	-325	-294	-262	-231	-200	-168	-137
70	126.00	bu	-256	-220	-183	-147	-110	-73	-37	-0	35	72	108
			-386	-349	-312	-276	-239	-203	-166	-130	-93	-57	-20
80	144.00	bu	-191	-150	-108	-66	-24	16	58	100	142	183	225
			-321	-279	-237	-196	-154	-112	-70	-28	12	54	96
90	162.00	bu	-127	-80	-33	13	60	107	154	201	248	295	342
			-256	-209	-162	-115	-68	-21	25	72	119	166	213
100	180.00	bu	-62	-10	41	94	146	198	250	302	355	407	459
			-191	-139	-87	-35	16	69	121	173	225	277	330
110	198.00	bu	2	59	117	174	231	289	346	404	461	518	576
			-127	-69	-12	45	102	159	217	274	332	389	447
120	216.00	bu	66	129	192	254	317	380	442	505	568	630	693
			-62	0	62	125	188	250	313	376	438	501	563
130	234.00	bu	131	199	267	335	403	470	538	606	674	742	810
			2	70	138	205	273	341	409	477	545	613	680
140	252.00	bu	196	269	342	415	488	561	634	707	780	854	927
			67	140	213	286	359	432	505	578	651	724	797
150	270.00	bu	261	339	417	495	574	652	730	809	887	965	1044
			131	210	288	366	444	523	601	679	758	836	914

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 2021 input prices.

Table 35.A Estimated costs per acre
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.60	23.0000	151.80	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
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	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	11.17	1.0000	11.17	_____

TOTAL DIRECT EXPENSES				835.56	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____

TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				966.14	_____

Note: Cost of production estimates are based on 2021 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
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	180.0000	1044.00	_____
TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.90	1.0000	39.90	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	161.23	1.0000	161.23	_____
ADJUVANTS	acre	12.16	1.0000	12.16	_____
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	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	11.17	1.0000	11.17	_____
TOTAL DIRECT EXPENSES				835.56	_____
RETURNS ABOVE DIRECT EXPENSES				208.44	_____
TOTAL FIXED EXPENSES				130.58	_____
TOTAL SPECIFIED EXPENSES				966.14	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				77.86	_____

Note: Cost of production estimates are based on 2021 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
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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 2021 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
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Conv Hyb Trt	lb	151.80					2.66	154.46		154.46
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.14	8.34		8.34
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Regiment	oz	22.75					0.33	23.08		23.08
Dyne-A-Pak	pt	2.07					0.03	2.10		2.10
App Fert by Air	cwt	20.02					0.29	20.31		20.31
Urea, Solid (46% N)	cwt	76.44					1.11	77.55		77.55
NBPT	pt	10.34					0.15	10.49		10.49
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Facet L	pt	39.89					0.58	40.47		40.47
Permit	oz	16.47					0.24	16.71		16.71
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.06	4.95		4.95
Urea, Solid (46% N)	cwt	18.67					0.22	18.89		18.89
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	63.00					0.37	63.37		63.37
Dry Rice	bu	72.00					0.42	72.42		72.42
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	10.17	46.40	14.67	12.13		1.15	84.52	65.64	150.16
TOTALS		686.12	64.91	34.55	38.81	0.00	11.17	835.56	130.58	966.14

Note: Cost of production estimates are based on 2021 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
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	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	161.23	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.31	3.91	0.79	0.30	0.95	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	250.95	272.68	68.69	34.18	165.39	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-250.95	-272.68	-68.69	-34.18	878.61	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-282.49	-555.17	-623.86	-658.04	220.57	208.44

Note: Cost of production estimates are based on 2021 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
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-376	-350	-323	-297	-271	-245	-219	-193	-167	-141	-115
			-506	-480	-454	-428	-402	-376	-350	-324	-297	-271	-245
60	108.00	bu	-311	-280	-248	-217	-186	-154	-123	-92	-60	-29	1
			-442	-410	-379	-348	-316	-285	-254	-222	-191	-160	-128
70	126.00	bu	-246	-210	-173	-137	-100	-64	-27	9	45	82	118
			-377	-340	-304	-267	-231	-194	-158	-121	-84	-48	-11
80	144.00	bu	-182	-140	-98	-56	-14	26	68	110	152	193	235
			-312	-270	-229	-187	-145	-103	-62	-20	21	63	105
90	162.00	bu	-117	-70	-23	23	70	117	164	211	258	305	352
			-247	-200	-153	-106	-59	-12	34	80	127	174	221
100	180.00	bu	-52	-0	51	104	156	208	260	312	365	417	469
			-183	-130	-78	-26	25	77	130	182	234	286	338
110	198.00	bu	12	69	127	184	241	299	356	414	471	528	586
			-118	-60	-3	53	111	168	226	283	340	398	455
120	216.00	bu	76	139	202	264	327	390	452	515	578	640	703
			-53	8	71	134	196	259	322	384	447	510	572
130	234.00	bu	141	209	277	345	413	480	548	616	684	752	820
			11	78	146	214	282	350	418	486	553	621	689
140	252.00	bu	206	279	352	425	498	571	644	717	790	864	937
			75	148	221	294	368	441	514	587	660	733	806
150	270.00	bu	271	349	427	505	584	662	740	819	897	975	1054
			140	218	297	375	453	531	610	688	766	845	923

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 2021 input prices.

Table 36.A Estimated costs per acre
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.60	23.0000	151.80	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
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	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	10.79	1.0000	10.79	_____

TOTAL DIRECT EXPENSES				809.66	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____

TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				935.63	_____

Note: Cost of production estimates are based on 2021 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
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	180.0000	1044.00	_____
TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.90	1.0000	39.90	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	161.23	1.0000	161.23	_____
ADJUVANTS	acre	12.16	1.0000	12.16	_____
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	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	10.79	1.0000	10.79	_____
TOTAL DIRECT EXPENSES				809.66	_____
RETURNS ABOVE DIRECT EXPENSES				234.34	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				935.63	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				108.37	_____

Note: Cost of production estimates are based on 2021 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
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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 2021 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
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Conv Hyb Trt	lb	151.80					2.66	154.46		154.46
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.14	8.34		8.34
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Regiment	oz	22.75					0.33	23.08		23.08
Dyne-A-Pak	pt	2.07					0.03	2.10		2.10
App Fert by Air	cwt	20.02					0.29	20.31		20.31
Urea, Solid (46% N)	cwt	76.44					1.11	77.55		77.55
NBPT	pt	10.34					0.15	10.49		10.49
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	7.00					0.10	7.10		7.10
Facet L	pt	39.89					0.58	40.47		40.47
Permit	oz	16.47					0.24	16.71		16.71
Crop Oil Conc.(Pet.)	pt	1.14					0.02	1.16		1.16
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.06	4.95		4.95
Urea, Solid (46% N)	cwt	18.67					0.22	18.89		18.89
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	63.00					0.37	63.37		63.37
Dry Rice	bu	72.00					0.42	72.42		72.42
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre		36.52	11.80	9.53		0.77	58.62	61.03	119.65
TOTALS		675.95	55.03	31.68	36.21	0.00	10.79	809.66	125.97	935.63

Note: Cost of production estimates are based on 2021 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
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	161.23	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.02	3.87	0.77	0.28	0.94	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	233.09	270.62	66.65	32.14	163.49	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-233.09	-270.62	-66.65	-32.14	880.51	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-264.63	-535.25	-601.90	-634.04	246.47	234.34

Note: Cost of production estimates are based on 2021 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
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-350	-324	-298	-271	-245	-219	-193	-167	-141	-115	-89
			-476	-450	-424	-397	-371	-345	-319	-293	-267	-241	-215
60	108.00	bu	-285	-254	-222	-191	-160	-128	-97	-66	-34	-3	27
			-411	-380	-348	-317	-286	-254	-223	-192	-160	-129	-98
70	126.00	bu	-220	-184	-147	-111	-74	-38	-1	34	71	108	144
			-346	-310	-273	-237	-200	-164	-127	-91	-54	-17	18
80	144.00	bu	-156	-114	-72	-30	10	52	94	136	177	219	261
			-282	-240	-198	-156	-115	-73	-31	10	52	93	135
90	162.00	bu	-91	-44	2	49	96	143	190	237	284	331	378
			-217	-170	-123	-76	-29	17	64	111	158	205	252
100	180.00	bu	-26	25	77	129	182	234	286	338	390	443	495
			-152	-100	-48	3	56	108	160	212	264	317	369
110	198.00	bu	38	95	152	210	267	325	382	440	497	554	612
			-87	-30	26	84	141	199	256	314	371	428	486
120	216.00	bu	102	165	228	290	353	415	478	541	603	666	729
			-23	39	102	164	227	290	352	415	477	540	603
130	234.00	bu	167	235	303	371	438	506	574	642	710	778	846
			41	109	177	245	312	380	448	516	584	652	720
140	252.00	bu	232	305	378	451	524	597	670	743	816	889	963
			106	179	252	325	398	471	544	617	690	763	837
150	270.00	bu	296	375	453	531	610	688	766	845	923	1001	1079
			170	249	327	405	484	562	640	719	797	875	953

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 2021 input prices.

Table 37.A Estimated costs per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Clearpath	oz	4.06	9.6000	38.98	_____
Newpath	oz	3.84	6.0000	23.04	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.03	65.0000	66.95	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.03	12.0000	12.36	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	4.38	1.5000	6.57	_____
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	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.2030	3.10	_____
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	15.24	0.5633	8.59	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	3.3975	8.02	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.64	1.0000	9.64	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	8.75	1.0000	8.75	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	11.30	1.0000	11.30	_____

TOTAL DIRECT EXPENSES				866.37	_____
FIXED EXPENSES					
Implements	acre	18.85	1.0000	18.85	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	32.48	1.0000	32.48	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____

TOTAL FIXED EXPENSES				114.50	_____

TOTAL SPECIFIED EXPENSES				980.87	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 37.B Summary of estimated costs and returns per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	160.0000	928.00	_____
TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	133.97	1.0000	133.97	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
ADJUVANTS	acre	20.72	1.0000	20.72	_____
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	15.27	0.7506	11.46	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.24	0.5633	8.59	_____
DIESEL FUEL	gal	2.36	36.2688	85.59	_____
REPAIR & MAINTENANCE	acre	36.61	1.0000	36.61	_____
INTEREST ON OP. CAP.	acre	11.30	1.0000	11.30	_____
TOTAL DIRECT EXPENSES				866.37	_____
RETURNS ABOVE DIRECT EXPENSES				61.63	_____
TOTAL FIXED EXPENSES				114.50	_____
TOTAL SPECIFIED EXPENSES				980.87	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-52.87	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 37.C Estimated resource use for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 37.D Estimated costs for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Clearfield	lb	66.95					1.17	68.12		68.12
Rice Seed Trt/Insect	lbseed	18.85					0.33	19.18		19.18
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
Class Act NG	pt	2.38					0.04	2.42		2.42
MSO	pt	2.19					0.04	2.23		2.23
Seed Levees										
Rice Seed CF(Levees)	lb	12.36					0.22	12.58		12.58
Rice Seed Trt/Insect	lbseed	3.48					0.06	3.54		3.54
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Clearpath	oz	38.98					0.68	39.66		39.66
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Newpath	oz	23.04					0.34	23.38		23.38
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Aim	oz	8.69					0.13	8.82		8.82
Rice Management										
RICE MGT. LABOR	hour				2.72		0.04	2.76		2.76
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				4.53		0.05	4.58		4.58
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				4.53		0.04	4.57		4.57
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		8.02	12.20	5.89		0.15	26.26	37.48	63.74
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	56.00					0.33	56.33		56.33
Dry Rice	bu	64.00					0.37	64.37		64.37
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	4.50	66.01	15.10	33.87		1.59	121.07	44.56	165.63
TOTALS		664.29	85.59	36.61	68.58	0.00	11.30	866.37	114.50	980.87

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 37.E Estimated monthly income and expense flows per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	72.48	31.73	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	101.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	16.29	9.52	11.33	11.33	11.90	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	9.27	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	12.69	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.22	3.29	1.30	0.69	0.89	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	245.32	228.47	113.50	80.66	154.75	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-245.32	-228.47	-113.50	-80.66	773.25	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-276.86	-505.33	-618.83	-699.49	73.76	61.63

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs.

Table 37.F Estimated returns for various price/yield combinations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-458	-434	-411	-388	-365	-342	-318	-295	-272	-249	-226
			-572	-549	-526	-502	-479	-456	-433	-410	-386	-363	-340
60	96.00	bu	-400	-372	-344	-316	-289	-261	-233	-205	-177	-149	-122
			-514	-487	-459	-431	-403	-375	-347	-320	-292	-264	-236
70	112.00	bu	-342	-310	-278	-245	-213	-180	-148	-115	-83	-50	-18
			-457	-424	-392	-360	-327	-295	-262	-230	-197	-165	-132
80	128.00	bu	-285	-248	-211	-174	-136	-99	-62	-25	11	48	85
			-399	-362	-325	-288	-251	-214	-177	-140	-102	-65	-28
90	144.00	bu	-227	-186	-144	-102	-60	-19	22	64	106	147	189
			-342	-300	-258	-217	-175	-133	-91	-50	-8	33	75
100	160.00	bu	-170	-123	-77	-31	15	61	108	154	200	247	293
			-284	-238	-192	-145	-99	-52	-6	39	86	132	179
110	176.00	bu	-112	-61	-10	40	91	142	193	244	295	346	397
			-227	-176	-125	-74	-23	27	78	129	180	232	283
120	192.00	bu	-55	0	56	111	167	223	278	334	390	445	501
			-169	-114	-58	-2	52	108	164	219	275	331	386
130	208.00	bu	2	62	122	183	243	303	364	424	484	545	605
			-112	-51	8	68	129	189	249	309	370	430	490
140	224.00	bu	59	124	189	254	319	384	449	514	579	644	709
			-54	10	75	140	205	270	335	399	464	529	594
150	240.00	bu	117	186	256	326	395	465	534	604	674	743	813
			2	72	141	211	281	350	420	489	559	629	698

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 2021 input prices..

Table 38.A Estimated costs per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Clearpath	oz	4.06	9.6000	38.98	_____
Newpath	oz	3.84	6.0000	23.04	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.03	65.0000	66.95	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.03	12.0000	12.36	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
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	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	10.85	1.0000	10.85	_____

TOTAL DIRECT EXPENSES				828.96	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____

TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				958.28	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 38.B Summary of estimated costs and returns per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	160.0000	928.00	_____

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	133.97	1.0000	133.97	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
ADJUVANTS	acre	20.72	1.0000	20.72	_____
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	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	10.85	1.0000	10.85	_____

TOTAL DIRECT EXPENSES				828.96	_____
RETURNS ABOVE DIRECT EXPENSES				99.04	_____
TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				958.28	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-30.28	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 38.C Estimated resource use for field operations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 38.D Estimated costs for field operations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Clearfield	lb	66.95					1.17	68.12		68.12
Rice Seed Trt/Insect	lbseed	18.85					0.33	19.18		19.18
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed CF(Levees)	lb	12.36					0.22	12.58		12.58
Rice Seed Trt/Insect	lbseed	3.48					0.06	3.54		3.54
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Clearpath	oz	38.98					0.68	39.66		39.66
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Newpath	oz	23.04					0.34	23.38		23.38
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Aim	oz	8.69					0.13	8.82		8.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	56.00					0.33	56.33		56.33
Dry Rice	bu	64.00					0.37	64.37		64.37
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	2.25	53.51	14.79	22.70		1.24	94.49	64.38	158.87
TOTALS		662.04	72.02	34.67	49.38	0.00	10.85	828.96	129.32	958.28

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 38.E Estimated monthly income and expense flows per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	72.48	31.73	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	101.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.09	3.17	1.19	0.62	0.87	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	238.49	220.32	104.45	71.65	150.38	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-238.49	-220.32	-104.45	-71.65	777.62	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-270.03	-490.35	-594.80	-666.45	111.17	99.04

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs

Table 38.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-420	-397	-374	-351	-327	-304	-281	-258	-235	-211	-188
			-549	-526	-503	-480	-457	-433	-410	-387	-364	-341	-317
60	96.00	bu	-363	-335	-307	-279	-251	-223	-196	-168	-140	-112	-84
			-492	-464	-436	-408	-381	-353	-325	-297	-269	-241	-214
70	112.00	bu	-305	-273	-240	-208	-175	-143	-110	-78	-45	-13	19
			-434	-402	-369	-337	-304	-272	-239	-207	-175	-142	-110
80	128.00	bu	-248	-210	-173	-136	-99	-62	-25	11	48	86	123
			-377	-340	-303	-265	-228	-191	-154	-117	-80	-43	-6
90	144.00	bu	-190	-148	-106	-65	-23	18	60	101	143	185	227
			-319	-278	-236	-194	-152	-111	-69	-27	14	56	97
100	160.00	bu	-132	-86	-40	6	52	99	145	191	238	284	331
			-262	-215	-169	-123	-76	-30	16	62	108	155	201
110	176.00	bu	-75	-24	26	77	128	179	230	281	332	383	434
			-204	-153	-102	-51	-0	50	101	152	203	254	305
120	192.00	bu	-17	37	93	149	204	260	316	371	427	483	538
			-147	-91	-35	19	75	131	186	242	298	353	409
130	208.00	bu	39	99	160	220	280	341	401	461	522	582	642
			-89	-29	30	91	151	211	272	332	392	453	513
140	224.00	bu	97	162	227	292	357	421	486	551	616	681	746
			-32	32	97	162	227	292	357	422	487	552	617
150	240.00	bu	154	224	293	363	433	502	572	641	711	781	850
			25	94	164	234	303	373	442	512	582	651	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 2021 input prices.

Table 39.A Estimated costs per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Clearpath	oz	4.06	9.6000	38.98	_____
Newpath	oz	3.84	6.0000	23.04	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.03	65.0000	66.95	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.03	12.0000	12.36	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
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	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	10.76	1.0000	10.76	_____

TOTAL DIRECT EXPENSES				818.99	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____

TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				949.57	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 39.B Summary of estimated costs and returns per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	160.0000	928.00	_____

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	133.97	1.0000	133.97	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
ADJUVANTS	acre	20.72	1.0000	20.72	_____
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	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	10.76	1.0000	10.76	_____

TOTAL DIRECT EXPENSES				818.99	_____
RETURNS ABOVE DIRECT EXPENSES				109.01	_____
TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				949.57	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-21.57	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 39.C Estimated resource use for field operations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 39.D Estimated costs for field operations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Clearfield	lb	66.95					1.17	68.12		68.12
Rice Seed Trt/Insect	lbseed	18.85					0.33	19.18		19.18
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed CF(Levees)	lb	12.36					0.22	12.58		12.58
Rice Seed Trt/Insect	lbseed	3.48					0.06	3.54		3.54
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Clearpath	oz	38.98					0.68	39.66		39.66
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Newpath	oz	23.04					0.34	23.38		23.38
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Aim	oz	8.69					0.13	8.82		8.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	56.00					0.33	56.33		56.33
Dry Rice	bu	64.00					0.37	64.37		64.37
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	10.17	46.40	14.67	12.13		1.15	84.52	65.64	150.16
TOTALS		669.96	64.91	34.55	38.81	0.00	10.76	818.99	130.58	949.57

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 39.E Estimated monthly income and expense flows per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	72.48	31.73	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	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	101.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.17	3.10	1.14	0.58	0.86	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	242.92	215.53	99.68	66.89	150.30	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-242.92	-215.53	-99.68	-66.89	777.70	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-274.46	-489.99	-589.67	-656.56	121.14	109.01

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs.

Table 39.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-410	-387	-364	-341	-317	-294	-271	-248	-225	-201	-178
			-541	-518	-494	-471	-448	-425	-402	-378	-355	-332	-309
60	96.00	bu	-353	-325	-297	-269	-241	-213	-186	-158	-130	-102	-74
			-483	-455	-428	-400	-372	-344	-316	-288	-260	-233	-205
70	112.00	bu	-295	-263	-230	-198	-165	-133	-100	-68	-35	-3	29
			-426	-393	-361	-328	-296	-263	-231	-198	-166	-133	-101
80	128.00	bu	-238	-200	-163	-126	-89	-52	-15	21	58	96	133
			-368	-331	-294	-257	-220	-183	-145	-108	-71	-34	2
90	144.00	bu	-180	-138	-97	-55	-13	28	70	111	153	195	237
			-311	-269	-227	-185	-144	-102	-60	-18	22	64	106
100	160.00	bu	-122	-76	-30	16	62	109	155	201	248	294	341
			-253	-207	-160	-114	-67	-21	24	71	117	164	210
110	176.00	bu	-65	-14	36	87	138	189	240	291	342	393	444
			-196	-145	-93	-42	8	59	110	161	212	263	314
120	192.00	bu	-7	47	103	159	214	270	326	381	437	493	548
			-138	-82	-27	28	84	139	195	251	306	362	418
130	208.00	bu	49	109	170	230	290	351	411	471	532	592	652
			-80	-20	39	99	160	220	280	341	401	461	522
140	224.00	bu	107	172	237	302	366	431	496	561	626	691	756
			-23	41	106	171	236	301	366	431	496	561	626
150	240.00	bu	164	234	303	373	443	512	582	651	721	791	860
			34	103	173	242	312	382	451	521	590	660	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 2021 input prices.

Table 40.A Estimated costs per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Clearpath	oz	4.06	9.6000	38.98	_____
Newpath	oz	3.84	6.0000	23.04	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.03	65.0000	66.95	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.03	12.0000	12.36	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
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	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	10.38	1.0000	10.38	_____

TOTAL DIRECT EXPENSES				793.09	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____

TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				919.06	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 40.B Summary of estimated costs and returns per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	160.0000	928.00	_____
TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	133.97	1.0000	133.97	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
ADJUVANTS	acre	20.72	1.0000	20.72	_____
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	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	10.38	1.0000	10.38	_____
TOTAL DIRECT EXPENSES				793.09	_____
RETURNS ABOVE DIRECT EXPENSES				134.91	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				919.06	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				8.94	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 40.C Estimated resource use for field operations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 40.D Estimated costs for field operations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Clearfield	lb	66.95					1.17	68.12		68.12
Rice Seed Trt/Insect	lbseed	18.85					0.33	19.18		19.18
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed CF(Levees)	lb	12.36					0.22	12.58		12.58
Rice Seed Trt/Insect	lbseed	3.48					0.06	3.54		3.54
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Clearpath	oz	38.98					0.68	39.66		39.66
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Newpath	oz	23.04					0.34	23.38		23.38
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Aim	oz	8.69					0.13	8.82		8.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	56.00					0.33	56.33		56.33
Dry Rice	bu	64.00					0.37	64.37		64.37
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre		36.52	11.80	9.53		0.77	58.62	61.03	119.65
TOTALS		659.79	55.03	31.68	36.21	0.00	10.38	793.09	125.97	919.06

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 40.E Estimated monthly income and expense flows per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	72.48	31.73	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	101.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	3.88	3.06	1.12	0.56	0.85	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	225.06	213.47	97.64	64.85	148.40	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-225.06	-213.47	-97.64	-64.85	779.60	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-256.60	-470.07	-567.71	-632.56	147.04	134.91

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs

Table 40.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-384	-361	-338	-315	-291	-268	-245	-222	-199	-175	-152
			-510	-487	-464	-441	-417	-394	-371	-348	-325	-301	-278
60	96.00	bu	-327	-299	-271	-243	-215	-188	-160	-132	-104	-76	-48
			-453	-425	-397	-369	-341	-313	-286	-258	-230	-202	-174
70	112.00	bu	-269	-237	-204	-172	-139	-107	-74	-42	-9	22	55
			-395	-363	-330	-298	-265	-233	-200	-168	-135	-103	-70
80	128.00	bu	-212	-175	-137	-100	-63	-26	10	47	84	121	159
			-338	-301	-263	-226	-189	-152	-115	-78	-41	-4	33
90	144.00	bu	-154	-112	-71	-29	12	54	95	137	179	221	262
			-280	-238	-197	-155	-113	-71	-30	11	53	95	137
100	160.00	bu	-97	-50	-4	42	88	134	181	227	274	320	366
			-223	-176	-130	-83	-37	8	55	101	148	194	240
110	176.00	bu	-39	11	62	113	164	215	266	317	368	419	470
			-165	-114	-63	-12	38	89	140	191	242	293	344
120	192.00	bu	17	73	129	185	240	296	352	407	463	519	574
			-108	-52	3	59	114	170	226	281	337	393	448
130	208.00	bu	75	135	196	256	316	377	437	497	558	618	678
			-50	9	70	130	190	251	311	371	432	492	552
140	224.00	bu	133	197	262	327	392	457	522	587	652	717	782
			7	72	136	201	266	331	396	461	526	591	656
150	240.00	bu	190	260	329	399	468	538	608	677	747	816	886
			64	134	203	273	342	412	482	551	621	690	760

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 2021 input prices.

Table 41.A Estimated costs per acre
Fullpage hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	14.83	2.0000	29.66	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.37	23.0000	169.51	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
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	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.18	1.0000	9.18	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	12.55	1.0000	12.55	_____

TOTAL DIRECT EXPENSES				918.57	_____
FIXED EXPENSES					
Implements	acre	18.18	1.0000	18.18	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____

TOTAL FIXED EXPENSES				109.50	_____

TOTAL SPECIFIED EXPENSES				1028.07	_____

Note: Cost of production estimates are based on 2021 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
Fullpage hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	180.0000	1044.00	_____
TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.20	1.0000	42.20	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	156.50	1.0000	156.50	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	182.09	1.0000	182.09	_____
ADJUVANTS	acre	20.39	1.0000	20.39	_____
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	15.27	0.7235	11.05	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	35.8158	84.52	_____
REPAIR & MAINTENANCE	acre	34.98	1.0000	34.98	_____
INTEREST ON OP. CAP.	acre	12.55	1.0000	12.55	_____
TOTAL DIRECT EXPENSES				918.57	_____
RETURNS ABOVE DIRECT EXPENSES				125.43	_____
TOTAL FIXED EXPENSES				109.50	_____
TOTAL SPECIFIED EXPENSES				1028.07	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				15.93	_____

Note: Cost of production estimates are based on 2021 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
Fullpage hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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 2021 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
Fullpage hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Fullpage Hyb Tr	lb	169.51					2.97	172.48		172.48
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed FPH(Levee)	lb	11.35					0.20	11.55		11.55
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Preface	oz	24.95					0.44	25.39		25.39
Facet L	pt	29.66					0.52	30.18		30.18
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	20.02					0.29	20.31		20.31
Urea, Solid (46% N)	cwt	76.44					1.11	77.55		77.55
NBPT	pt	10.34					0.15	10.49		10.49
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Preface	oz	29.94					0.44	30.38		30.38
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Aim	oz	8.69					0.13	8.82		8.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.06	4.95		4.95
Urea, Solid (46% N)	cwt	18.67					0.22	18.89		18.89
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	63.00					0.37	63.37		63.37
Dry Rice	bu	72.00					0.42	72.42		72.42
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	4.50	66.01	15.10	33.87		1.59	121.07	44.56	165.63
TOTALS		725.97	84.52	34.98	60.55	0.00	12.55	918.57	109.50	1028.07

Note: Cost of production estimates are based on 2021 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
Fullpage hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	88.11	38.63	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	182.09	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	16.29	7.71	8.61	8.61	11.12	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	8.20	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	11.06	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	5.91	3.46	0.92	0.39	0.96	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	343.09	240.50	79.76	45.21	166.34	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-343.09	-240.50	-79.76	-45.21	877.66	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-374.63	-615.13	-694.89	-740.10	137.56	125.43

Note: Cost of production estimates are based on 2021 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
Fullpage hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-459	-433	-406	-380	-354	-328	-302	-276	-250	-224	-198
			-568	-542	-516	-490	-464	-438	-412	-385	-359	-333	-307
60	108.00	bu	-394	-363	-331	-300	-269	-237	-206	-175	-143	-112	-81
			-503	-472	-441	-409	-378	-347	-316	-284	-253	-222	-190
70	126.00	bu	-329	-293	-256	-220	-183	-147	-110	-73	-37	-0	35
			-439	-402	-366	-329	-293	-256	-219	-183	-146	-110	-73
80	144.00	bu	-265	-223	-181	-139	-97	-56	-14	27	69	110	152
			-374	-332	-290	-249	-207	-165	-123	-82	-40	1	43
90	162.00	bu	-200	-153	-106	-59	-12	34	81	128	175	222	269
			-309	-262	-215	-168	-121	-74	-27	19	66	113	160
100	180.00	bu	-135	-83	-31	21	73	125	177	229	282	334	386
			-245	-192	-140	-88	-36	15	68	120	172	224	276
110	198.00	bu	-70	-13	43	101	158	216	273	331	388	445	503
			-180	-122	-65	-8	49	106	164	221	279	336	393
120	216.00	bu	-6	56	119	181	244	307	369	432	494	557	620
			-115	-52	9	72	134	197	260	322	385	448	510
130	234.00	bu	58	126	194	262	330	397	465	533	601	669	737
			-50	16	84	152	220	288	356	424	491	559	627
140	252.00	bu	123	196	269	342	415	488	561	634	707	781	854
			13	86	159	233	306	379	452	525	598	671	744
150	270.00	bu	188	266	344	422	501	579	657	736	814	892	971
			78	156	235	313	391	470	548	626	704	783	861

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 2021 input prices.

Table 42.A Estimated costs per acre
Fullpage hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	14.83	2.0000	29.66	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.37	23.0000	169.51	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
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	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	12.20	1.0000	12.20	_____

TOTAL DIRECT EXPENSES				891.99	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____

TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				1021.31	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 42.B Summary of estimated costs and returns per acre
Fullpage hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	180.0000	1044.00	_____

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.20	1.0000	42.20	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	156.50	1.0000	156.50	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	182.09	1.0000	182.09	_____
ADJUVANTS	acre	20.39	1.0000	20.39	_____
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	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	12.20	1.0000	12.20	_____

TOTAL DIRECT EXPENSES				891.99	_____
RETURNS ABOVE DIRECT EXPENSES				152.01	_____
TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				1021.31	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				22.69	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 42.C Estimated resource use for field operations, per acre
Fullpage hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 42.D Estimated costs for field operations, per acre
Fullpage hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Fullpage Hyb Tr	lb	169.51					2.97	172.48		172.48
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed FPH(Levee)	lb	11.35					0.20	11.55		11.55
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Preface	oz	24.95					0.44	25.39		25.39
Facet L	pt	29.66					0.52	30.18		30.18
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	20.02					0.29	20.31		20.31
Urea, Solid (46% N)	cwt	76.44					1.11	77.55		77.55
NBPT	pt	10.34					0.15	10.49		10.49
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Preface	oz	29.94					0.44	30.38		30.38
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Aim	oz	8.69					0.13	8.82		8.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.06	4.95		4.95
Urea, Solid (46% N)	cwt	18.67					0.22	18.89		18.89
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	63.00					0.37	63.37		63.37
Dry Rice	bu	72.00					0.42	72.42		72.42
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	2.25	53.51	14.79	22.70		1.24	94.49	64.38	158.87
TOTALS		723.72	72.02	34.67	49.38	0.00	12.20	891.99	129.32	1021.31

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 42.E Estimated monthly income and expense flows per acre
Fullpage hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	88.11	38.63	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	182.09	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	5.78	3.37	0.84	0.34	0.96	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	336.26	234.19	73.46	38.94	165.47	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-336.26	-234.19	-73.46	-38.94	878.53	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-367.80	-601.99	-675.45	-714.39	164.14	152.01

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs.

Table 42.F Estimated returns for various price/yield combinations, per acre
Fullpage hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-432	-406	-380	-354	-328	-302	-275	-249	-223	-197	-171
			-561	-535	-509	-483	-457	-431	-405	-379	-353	-327	-300
60	108.00	bu	-367	-336	-305	-273	-242	-211	-179	-148	-117	-85	-54
			-497	-465	-434	-403	-371	-340	-309	-277	-246	-215	-183
70	126.00	bu	-303	-266	-230	-193	-156	-120	-83	-47	-10	25	62
			-432	-395	-359	-322	-286	-249	-213	-176	-140	-103	-67
80	144.00	bu	-238	-196	-154	-113	-71	-29	12	53	95	137	179
			-367	-325	-284	-242	-200	-158	-117	-75	-33	8	49
90	162.00	bu	-173	-126	-79	-32	14	61	108	155	202	249	296
			-303	-256	-209	-162	-115	-68	-21	25	72	119	166
100	180.00	bu	-108	-56	-4	47	99	152	204	256	308	360	413
			-238	-186	-133	-81	-29	22	74	127	179	231	283
110	198.00	bu	-44	13	70	127	185	242	300	357	415	472	529
			-173	-116	-58	-1	56	113	170	228	285	343	400
120	216.00	bu	20	83	145	208	271	333	396	458	521	584	646
			-108	-46	16	79	141	204	266	329	392	454	517
130	234.00	bu	85	153	220	288	356	424	492	560	628	695	763
			-44	23	91	159	227	295	363	430	498	566	634
140	252.00	bu	149	222	296	369	442	515	588	661	734	807	880
			20	93	166	239	312	385	459	532	605	678	751
150	270.00	bu	214	292	371	449	527	606	684	762	841	919	997
			85	163	241	320	398	476	555	633	711	789	868

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 2021 input prices.

Table 43.A Estimated costs per acre
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	14.83	2.0000	29.66	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.37	23.0000	169.51	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
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	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	12.11	1.0000	12.11	_____

TOTAL DIRECT EXPENSES				882.02	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____

TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				1012.60	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 43.B Summary of estimated costs and returns per acre
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	180.0000	1044.00	_____

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.20	1.0000	42.20	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	156.50	1.0000	156.50	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	182.09	1.0000	182.09	_____
ADJUVANTS	acre	20.39	1.0000	20.39	_____
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	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	12.11	1.0000	12.11	_____

TOTAL DIRECT EXPENSES				882.02	_____
RETURNS ABOVE DIRECT EXPENSES				161.98	_____
TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				1012.60	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				31.40	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 43.C Estimated resource use for field operations, per acre
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 43.D Estimated costs for field operations, per acre
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Fullpage Hyb Tr	lb	169.51					2.97	172.48		172.48
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed FPH(Levee)	lb	11.35					0.20	11.55		11.55
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Preface	oz	24.95					0.44	25.39		25.39
Facet L	pt	29.66					0.52	30.18		30.18
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	20.02					0.29	20.31		20.31
Urea, Solid (46% N)	cwt	76.44					1.11	77.55		77.55
NBPT	pt	10.34					0.15	10.49		10.49
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Preface	oz	29.94					0.44	30.38		30.38
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Aim	oz	8.69					0.13	8.82		8.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.06	4.95		4.95
Urea, Solid (46% N)	cwt	18.67					0.22	18.89		18.89
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	63.00					0.37	63.37		63.37
Dry Rice	bu	72.00					0.42	72.42		72.42
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	10.17	46.40	14.67	12.13		1.15	84.52	65.64	150.16
TOTALS		731.64	64.91	34.55	38.81	0.00	12.11	882.02	130.58	1012.60

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 43.E Estimated monthly income and expense flows per acre
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	88.11	38.63	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	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	182.09	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	5.86	3.30	0.79	0.30	0.95	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	340.69	229.40	68.69	34.18	165.39	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-340.69	-229.40	-68.69	-34.18	878.61	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-372.23	-601.63	-670.32	-704.50	174.11	161.98

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs.

Table 43.F Estimated returns for various price/yield combinations, per acre
Fullpage hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-422	-396	-370	-344	-318	-292	-266	-239	-213	-187	-161
			-553	-527	-501	-474	-448	-422	-396	-370	-344	-318	-292
60	108.00	bu	-357	-326	-295	-263	-232	-201	-169	-138	-107	-76	-44
			-488	-457	-425	-394	-363	-331	-300	-269	-237	-206	-175
70	126.00	bu	-293	-256	-220	-183	-147	-110	-73	-37	-0	35	72
			-423	-387	-350	-314	-277	-241	-204	-167	-131	-94	-58
80	144.00	bu	-228	-186	-144	-103	-61	-19	22	63	105	147	189
			-359	-317	-275	-233	-192	-150	-108	-66	-24	16	58
90	162.00	bu	-163	-116	-69	-22	24	71	118	165	212	259	306
			-294	-247	-200	-153	-106	-59	-12	34	81	128	175
100	180.00	bu	-99	-46	5	57	109	161	214	266	318	370	422
			-229	-177	-125	-73	-20	31	83	135	188	240	292
110	198.00	bu	-34	23	80	137	195	252	310	367	425	482	539
			-164	-107	-50	7	64	122	179	237	294	351	409
120	216.00	bu	30	93	155	218	280	343	406	468	531	594	656
			-100	-37	25	87	150	213	275	338	400	463	526
130	234.00	bu	95	163	230	298	366	434	502	570	638	705	773
			-35	32	100	168	236	303	371	439	507	575	643
140	252.00	bu	159	232	306	379	452	525	598	671	744	817	890
			29	102	175	248	321	394	467	540	613	687	760
150	270.00	bu	224	302	381	459	537	616	694	772	850	929	1007
			94	172	250	328	407	485	563	642	720	798	877

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 2021 input prices.

Table 44.A Estimated costs per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	14.83	2.0000	29.66	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.37	23.0000	169.51	_____
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	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
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	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	11.73	1.0000	11.73	_____

TOTAL DIRECT EXPENSES				856.12	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____

TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				982.09	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 44.B Summary of estimated costs and returns per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	180.0000	1044.00	_____
TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.20	1.0000	42.20	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	156.50	1.0000	156.50	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	182.09	1.0000	182.09	_____
ADJUVANTS	acre	20.39	1.0000	20.39	_____
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	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	11.73	1.0000	11.73	_____
TOTAL DIRECT EXPENSES				856.12	_____
RETURNS ABOVE DIRECT EXPENSES				187.88	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				982.09	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				61.91	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 44.C Estimated resource use for field operations, per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 44.D Estimated costs for field operations, per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Fullpage Hyb Tr	lb	169.51					2.97	172.48		172.48
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed FPH(Levee)	lb	11.35					0.20	11.55		11.55
Rice Seed Trt/Insect	lbseed	1.23					0.02	1.25		1.25
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Preface	oz	24.95					0.44	25.39		25.39
Facet L	pt	29.66					0.52	30.18		30.18
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	20.02					0.29	20.31		20.31
Urea, Solid (46% N)	cwt	76.44					1.11	77.55		77.55
NBPT	pt	10.34					0.15	10.49		10.49
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Preface	oz	29.94					0.44	30.38		30.38
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Aim	oz	8.69					0.13	8.82		8.82
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Clincher SF	oz	19.20					0.22	19.42		19.42
MSO	pt	4.38					0.05	4.43		4.43
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	4.89					0.06	4.95		4.95
Urea, Solid (46% N)	cwt	18.67					0.22	18.89		18.89
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	63.00					0.37	63.37		63.37
Dry Rice	bu	72.00					0.42	72.42		72.42
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre		36.52	11.80	9.53		0.77	58.62	61.03	119.65
TOTALS		721.47	55.03	31.68	36.21	0.00	11.73	856.12	125.97	982.09

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 44.E Estimated monthly income and expense flows per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	88.11	38.63	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	182.09	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	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	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	5.57	3.26	0.77	0.28	0.94	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	322.83	227.34	66.65	32.14	163.49	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-322.83	-227.34	-66.65	-32.14	880.51	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-354.37	-581.71	-648.36	-680.50	200.01	187.88

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs.

Table 44.F Estimated returns for various price/yield combinations, per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-396	-370	-344	-318	-292	-266	-240	-214	-187	-161	-135
			-522	-496	-470	-444	-418	-392	-366	-339	-313	-287	-261
60	108.00	bu	-332	-300	-269	-238	-206	-175	-144	-112	-81	-50	-18
			-457	-426	-395	-364	-332	-301	-270	-238	-207	-176	-144
70	126.00	bu	-267	-230	-194	-157	-121	-84	-48	-11	25	61	98
			-393	-356	-320	-283	-247	-210	-174	-137	-100	-64	-27
80	144.00	bu	-202	-160	-119	-77	-35	6	47	89	131	173	215
			-328	-286	-245	-203	-161	-119	-77	-36	5	47	89
90	162.00	bu	-137	-90	-43	3	50	97	144	191	237	284	331
			-263	-216	-169	-122	-75	-28	18	65	112	159	205
100	180.00	bu	-73	-20	31	83	135	187	240	292	344	396	448
			-199	-146	-94	-42	9	61	114	166	218	270	322
110	198.00	bu	-8	49	106	163	221	278	336	393	450	508	565
			-134	-76	-19	37	95	152	210	267	324	382	439
120	216.00	bu	56	118	181	244	306	369	432	494	557	620	682
			-69	-7	55	118	180	243	306	368	431	494	556
130	234.00	bu	121	188	256	324	392	460	528	596	663	731	799
			-4	62	130	198	266	334	402	470	537	605	673
140	252.00	bu	185	258	331	405	478	551	624	697	770	843	916
			59	132	205	279	352	425	498	571	644	717	790
150	270.00	bu	250	328	407	485	563	641	720	798	876	955	1033
			124	202	281	359	437	516	594	672	750	829	907

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 2021 input prices.

Table 45.A Estimated costs per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Provisia	oz	0.76	31.0000	23.56	_____
Aim	oz	5.79	1.0000	5.79	_____
Permit	oz	21.96	0.7500	16.47	_____
Regiment	oz	45.50	0.2500	11.38	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.25	77.0000	96.25	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	4.38	0.5000	2.19	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	4.13	0.2500	1.03	_____
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	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.2030	3.10	_____
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	15.24	0.5633	8.59	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	3.3975	8.02	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.64	1.0000	9.64	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	8.75	1.0000	8.75	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	11.06	1.0000	11.06	_____

TOTAL DIRECT EXPENSES				844.01	_____
FIXED EXPENSES					
Implements	acre	18.85	1.0000	18.85	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	32.48	1.0000	32.48	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____

TOTAL FIXED EXPENSES				114.50	_____

TOTAL SPECIFIED EXPENSES				958.51	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 45.B Summary of estimated costs and returns per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	156.0000	904.80	_____

TOTAL INCOME				904.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	101.26	1.0000	101.26	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	118.58	1.0000	118.58	_____
ADJUVANTS	acre	17.37	1.0000	17.37	_____
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	15.27	0.7506	11.46	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.24	0.5633	8.59	_____
DIESEL FUEL	gal	2.36	36.2688	85.59	_____
REPAIR & MAINTENANCE	acre	36.61	1.0000	36.61	_____
INTEREST ON OP. CAP.	acre	11.06	1.0000	11.06	_____

TOTAL DIRECT EXPENSES				844.01	_____
RETURNS ABOVE DIRECT EXPENSES				60.79	_____
TOTAL FIXED EXPENSES				114.50	_____

TOTAL SPECIFIED EXPENSES				958.51	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-53.71	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 45.C Estimated resource use for field operations, per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 45.D Estimated costs for field operations, per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Provisia	lb	81.25					1.42	82.67		82.67
Rice Seed Trt/Insect	lbseed	18.85					0.33	19.18		19.18
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
Class Act NG	pt	2.38					0.04	2.42		2.42
MSO	pt	2.19					0.04	2.23		2.23
Seed Levees										
Rice Seed Provisia	lb	15.00					0.26	15.26		15.26
Rice Seed Trt/Insect	lbseed	3.48					0.06	3.54		3.54
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Provisia	oz	11.78					0.21	11.99		11.99
Aim	oz	5.79					0.10	5.89		5.89
Permit	oz	16.47					0.29	16.76		16.76
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Provisia	oz	11.78					0.17	11.95		11.95
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Rice Management										
RICE MGT. LABOR	hour				2.72		0.04	2.76		2.76
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Regiment	oz	11.38					0.13	11.51		11.51
Dyne-A-Pak	pt	1.03					0.01	1.04		1.04
Rice Management										
RICE MGT. LABOR	hour				4.53		0.05	4.58		4.58
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				4.53		0.04	4.57		4.57
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		8.02	12.20	5.89		0.15	26.26	37.48	63.74
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	54.60					0.32	54.92		54.92
Dry Rice	bu	62.40					0.36	62.76		62.76
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	4.50	66.01	15.10	33.87		1.59	121.07	44.56	165.63
TOTALS		642.17	85.59	36.61	68.58	0.00	11.06	844.01	114.50	958.51

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 45.E Estimated monthly income and expense flows per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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	904.80	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	67.54	11.78	11.38	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	118.58	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	1.03	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	3.82	0.00	0.00	0.00	0.00	0.00	16.29	9.52	11.33	11.33	11.90	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	9.27	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	12.69	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.43	2.99	1.17	0.69	0.87	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	257.53	208.22	102.20	80.66	151.73	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-257.53	-208.22	-102.20	-80.66	753.07	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-289.07	-497.29	-599.49	-680.15	72.92	60.79

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs.

Table 45.F Estimated returns for various price/yield combinations, per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-445	-423	-400	-378	-355	-332	-310	-287	-264	-242	-219
			-560	-537	-515	-492	-469	-447	-424	-402	-379	-356	-334
60	93.60	bu	-389	-362	-335	-308	-281	-254	-226	-199	-172	-145	-118
			-504	-477	-449	-422	-395	-368	-341	-314	-287	-259	-232
70	109.20	bu	-333	-302	-270	-238	-207	-175	-143	-112	-80	-48	-17
			-448	-416	-384	-353	-321	-289	-258	-226	-194	-163	-131
80	124.80	bu	-277	-241	-205	-169	-132	-96	-60	-24	11	48	84
			-392	-355	-319	-283	-247	-211	-174	-138	-102	-66	-30
90	140.40	bu	-221	-180	-140	-99	-58	-17	22	63	104	144	185
			-336	-295	-254	-213	-173	-132	-91	-50	-10	30	71
100	156.00	bu	-165	-120	-74	-29	15	60	106	151	196	241	286
			-279	-234	-189	-144	-98	-53	-8	36	82	127	172
110	171.60	bu	-109	-59	-9	39	89	139	189	239	288	338	388
			-223	-174	-124	-74	-24	25	74	124	174	224	273
120	187.20	bu	-53	1	55	109	163	218	272	326	381	435	489
			-167	-113	-59	-4	49	103	158	212	266	320	375
130	202.80	bu	2	61	120	179	238	296	355	414	473	532	590
			-111	-52	5	64	123	182	241	300	358	417	476
140	218.40	bu	58	122	185	248	312	375	438	502	565	628	692
			-55	7	71	134	197	261	324	387	451	514	577
150	234.00	bu	115	182	250	318	386	454	522	590	657	725	793
			0	68	136	204	271	339	407	475	543	611	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 2021 input prices.

Table 46.A Estimated costs per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Provisia	oz	0.76	31.0000	23.56	_____
Aim	oz	5.79	1.0000	5.79	_____
Permit	oz	21.96	0.7500	16.47	_____
Regiment	oz	45.50	0.2500	11.38	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.25	77.0000	96.25	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	4.38	0.5000	2.19	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	4.13	0.2500	1.03	_____
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	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	10.61	1.0000	10.61	_____

TOTAL DIRECT EXPENSES				806.60	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____

TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				935.92	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 46.B Summary of estimated costs and returns per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	156.0000	904.80	_____

TOTAL INCOME				904.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	101.26	1.0000	101.26	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	118.58	1.0000	118.58	_____
ADJUVANTS	acre	17.37	1.0000	17.37	_____
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	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	10.61	1.0000	10.61	_____

TOTAL DIRECT EXPENSES				806.60	_____
RETURNS ABOVE DIRECT EXPENSES				98.20	_____
TOTAL FIXED EXPENSES				129.32	_____

TOTAL SPECIFIED EXPENSES				935.92	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-31.12	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 46.C Estimated resource use for field operations, per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 46.D Estimated costs for field operations, per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Provisia	lb	81.25					1.42	82.67		82.67
Rice Seed Trt/Insect	lbseed	18.85					0.33	19.18		19.18
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed Provisia	lb	15.00					0.26	15.26		15.26
Rice Seed Trt/Insect	lbseed	3.48					0.06	3.54		3.54
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Provisia	oz	11.78					0.21	11.99		11.99
Aim	oz	5.79					0.10	5.89		5.89
Permit	oz	16.47					0.29	16.76		16.76
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Provisia	oz	11.78					0.17	11.95		11.95
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Regiment	oz	11.38					0.13	11.51		11.51
Dyne-A-Pak	pt	1.03					0.01	1.04		1.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	54.60					0.32	54.92		54.92
Dry Rice	bu	62.40					0.36	62.76		62.76
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	2.25	53.51	14.79	22.70		1.24	94.49	64.38	158.87
TOTALS		639.92	72.02	34.67	49.38	0.00	10.61	806.60	129.32	935.92

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 46.E Estimated monthly income and expense flows per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

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	904.80	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	67.54	11.78	11.38	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	118.58	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	1.03	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	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.30	2.87	1.06	0.62	0.85	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	250.70	200.07	93.15	71.65	147.36	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-250.70	-200.07	-93.15	-71.65	757.44	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-282.24	-482.31	-575.46	-647.11	110.33	98.20

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
* Lease costs are based on hourly usage costs.

Table 46.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-408	-385	-363	-340	-317	-295	-272	-250	-227	-204	-182
			-537	-515	-492	-469	-447	-424	-402	-379	-356	-334	-311
60	93.60	bu	-352	-325	-298	-270	-243	-216	-189	-162	-135	-108	-80
			-481	-454	-427	-400	-373	-345	-318	-291	-264	-237	-210
70	109.20	bu	-296	-264	-232	-201	-169	-137	-106	-74	-42	-11	20
			-425	-393	-362	-330	-298	-267	-235	-203	-172	-140	-108
80	124.80	bu	-240	-203	-167	-131	-95	-59	-23	13	49	85	121
			-369	-333	-297	-260	-224	-188	-152	-116	-79	-43	-7
90	140.40	bu	-184	-143	-102	-61	-21	19	60	100	141	182	223
			-313	-272	-231	-191	-150	-109	-69	-28	12	53	93
100	156.00	bu	-128	-82	-37	7	52	98	143	188	233	279	324
			-257	-212	-166	-121	-76	-31	14	59	104	149	195
110	171.60	bu	-71	-22	27	77	127	176	226	276	326	375	425
			-201	-151	-101	-51	-2	47	97	147	196	246	296
120	187.20	bu	-15	38	92	147	201	255	309	364	418	472	527
			-145	-90	-36	17	72	126	180	234	289	343	397
130	202.80	bu	40	99	157	216	275	334	393	451	510	569	628
			-89	-30	28	87	146	205	263	322	381	440	499
140	218.40	bu	96	159	223	286	349	413	476	539	603	666	729
			-32	30	93	157	220	283	347	410	473	537	600
150	234.00	bu	152	220	288	356	423	491	559	627	695	763	831
			23	91	158	226	294	362	430	498	566	633	701

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2021 input prices.

Table 47.A Estimated costs per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Provisia	oz	0.76	31.0000	23.56	_____
Aim	oz	5.79	1.0000	5.79	_____
Permit	oz	21.96	0.7500	16.47	_____
Regiment	oz	45.50	0.2500	11.38	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.25	77.0000	96.25	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	4.38	0.5000	2.19	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	4.13	0.2500	1.03	_____
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	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	10.52	1.0000	10.52	_____

TOTAL DIRECT EXPENSES				796.63	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____

TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				927.21	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 47.B Summary of estimated costs and returns per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	156.0000	904.80	_____

TOTAL INCOME				904.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	101.26	1.0000	101.26	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	118.58	1.0000	118.58	_____
ADJUVANTS	acre	17.37	1.0000	17.37	_____
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	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	10.52	1.0000	10.52	_____

TOTAL DIRECT EXPENSES				796.63	_____
RETURNS ABOVE DIRECT EXPENSES				108.17	_____
TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				927.21	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-22.41	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 47.C Estimated resource use for field operations, per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 47.D Estimated costs for field operations, per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Provisia	lb	81.25					1.42	82.67		82.67
Rice Seed Trt/Insect	lbseed	18.85					0.33	19.18		19.18
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed Provisia	lb	15.00					0.26	15.26		15.26
Rice Seed Trt/Insect	lbseed	3.48					0.06	3.54		3.54
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Provisia	oz	11.78					0.21	11.99		11.99
Aim	oz	5.79					0.10	5.89		5.89
Permit	oz	16.47					0.29	16.76		16.76
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Provisia	oz	11.78					0.17	11.95		11.95
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Regiment	oz	11.38					0.13	11.51		11.51
Dyne-A-Pak	pt	1.03					0.01	1.04		1.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	54.60					0.32	54.92		54.92
Dry Rice	bu	62.40					0.36	62.76		62.76
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre	10.17	46.40	14.67	12.13		1.15	84.52	65.64	150.16
TOTALS		647.84	64.91	34.55	38.81	0.00	10.52	796.63	130.58	927.21

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 47.E Estimated monthly income and expense flows per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

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	904.80	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	67.54	11.78	11.38	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	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	118.58	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	1.03	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	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.38	2.80	1.01	0.58	0.84	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	255.13	195.28	88.38	66.89	147.28	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-255.13	-195.28	-88.38	-66.89	757.52	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-286.67	-481.95	-570.33	-637.22	120.30	108.17

Note: Cost of production estimates are based on 2021 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 47.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-398	-375	-353	-330	-308	-285	-262	-240	-217	-194	-172
			-529	-506	-483	-461	-438	-415	-393	-370	-348	-325	-302
60	93.60	bu	-342	-315	-288	-260	-233	-206	-179	-152	-125	-98	-70
			-472	-445	-418	-391	-364	-337	-310	-282	-255	-228	-201
70	109.20	bu	-286	-254	-222	-191	-159	-127	-96	-64	-32	-1	30
			-416	-385	-353	-321	-290	-258	-226	-195	-163	-131	-100
80	124.80	bu	-230	-194	-157	-121	-85	-49	-13	23	59	95	131
			-360	-324	-288	-252	-216	-179	-143	-107	-71	-35	1
90	140.40	bu	-174	-133	-92	-51	-11	29	70	110	151	192	233
			-304	-263	-223	-182	-141	-101	-60	-19	21	61	102
100	156.00	bu	-118	-72	-27	17	62	108	153	198	243	289	334
			-248	-203	-158	-112	-67	-22	22	68	113	158	203
110	171.60	bu	-61	-12	37	87	137	186	236	286	336	385	435
			-192	-142	-92	-43	6	56	106	155	205	255	305
120	187.20	bu	-5	48	102	157	211	265	319	374	428	482	537
			-136	-82	-27	26	80	135	189	243	297	352	406
130	202.80	bu	50	109	167	226	285	344	403	461	520	579	638
			-80	-21	37	96	154	213	272	331	390	448	507
140	218.40	bu	106	169	233	296	359	423	486	549	613	676	739
			-24	39	102	165	229	292	355	419	482	545	609
150	234.00	bu	162	230	298	366	433	501	569	637	705	773	841
			31	99	167	235	303	371	439	506	574	642	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 2021 input prices.

Table 48.A Estimated costs per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Provisia	oz	0.76	31.0000	23.56	_____
Aim	oz	5.79	1.0000	5.79	_____
Permit	oz	21.96	0.7500	16.47	_____
Regiment	oz	45.50	0.2500	11.38	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.25	77.0000	96.25	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	4.38	0.5000	2.19	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	4.13	0.2500	1.03	_____
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	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
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	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	10.14	1.0000	10.14	_____

TOTAL DIRECT EXPENSES				770.73	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____

TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				896.70	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 48.B Summary of estimated costs and returns per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.80	156.0000	904.80	_____

TOTAL INCOME				904.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	101.26	1.0000	101.26	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	118.58	1.0000	118.58	_____
ADJUVANTS	acre	17.37	1.0000	17.37	_____
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	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	10.14	1.0000	10.14	_____

TOTAL DIRECT EXPENSES				770.73	_____
RETURNS ABOVE DIRECT EXPENSES				134.07	_____
TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				896.70	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				8.10	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 48.C Estimated resource use for field operations, per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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				
Ameristar Top	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 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 48.D Estimated costs for field operations, per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.12	3.45		3.45
Field Cultivate Fld	32'		2.55	1.76	2.70		0.25	7.26	8.33	15.59
Harrow - Folding	40'		1.06	0.59	1.12		0.10	2.87	2.18	5.05
App by Air (5 gal)	appl	7.00					0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	5.28					0.12	5.40		5.40
2,4-D Amine 4	pt	5.28					0.12	5.40		5.40
Grain Drill	24'		2.15	2.59	2.99		0.14	7.87	7.10	14.97
Rice Seed Provisia	lb	81.25					1.42	82.67		82.67
Rice Seed Trt/Insect	lbseed	18.85					0.33	19.18		19.18
Roller/Cultipacker	30'		1.36	0.59	1.44		0.06	3.45	2.52	5.97
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Glyphosate 3lbs a.e	oz	3.52					0.06	3.58		3.58
Command 3ME	pt	18.00					0.32	18.32		18.32
Sharpen	oz	11.98					0.21	12.19		12.19
MSO	pt	2.19					0.04	2.23		2.23
Class Act NG	pt	2.38					0.04	2.42		2.42
Seed Levees										
Rice Seed Provisia	lb	15.00					0.26	15.26		15.26
Rice Seed Trt/Insect	lbseed	3.48					0.06	3.54		3.54
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Provisia	oz	11.78					0.21	11.99		11.99
Aim	oz	5.79					0.10	5.89		5.89
Permit	oz	16.47					0.29	16.76		16.76
Crop Oil Conc.(Pet.)	pt	5.72					0.10	5.82		5.82
App Fert by Air	cwt	7.50					0.11	7.61		7.61
Amm Sulfate (21% N)	cwt	9.94					0.14	10.08		10.08
DAP	cwt	17.94					0.26	18.20		18.20
Rice Consultant	acre	8.00					0.12	8.12		8.12
App Fert by Air	cwt	18.75					0.27	19.02		19.02
Urea, Solid (46% N)	cwt	71.58					1.04	72.62		72.62
NBPT	pt	9.70					0.14	9.84		9.84
App by Air (10 gal)	appl	9.30					0.14	9.44		9.44
Provisia	oz	11.78					0.17	11.95		11.95
Crop Oil Conc.(Pet.)	pt	5.72					0.08	5.80		5.80
Rice Management										
RICE MGT. LABOR	hour				0.91		0.01	0.92		0.92
App by Air (5 gal)	appl	3.50					0.04	3.54		3.54
Regiment	oz	11.38					0.13	11.51		11.51
Dyne-A-Pak	pt	1.03					0.01	1.04		1.04
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App Fert by Air	cwt	11.25					0.13	11.38		11.38
Urea, Solid (46% N)	cwt	42.95					0.50	43.45		43.45
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Ameristar Top	oz	25.10					0.22	25.32		25.32
Surfactant	pt	0.33						0.33		0.33
App by Air (3 gal)	appl	8.40					0.07	8.47		8.47
Warrior ZT	oz	8.22					0.07	8.29		8.29
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		6.95	10.57	5.11		0.13	22.76	32.48	55.24
Grain Cart Rice	700 bu		0.30	0.22	0.32			0.84	0.71	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.01	2.28		2.28
Haul Rice	bu	54.60					0.32	54.92		54.92
Dry Rice	bu	62.40					0.36	62.76		62.76
Disk Heavy	28'		4.14	3.56	4.39		0.04	12.13	11.62	23.75
Flood Irr.	acre		36.52	11.80	9.53		0.77	58.62	61.03	119.65
TOTALS		637.67	55.03	31.68	36.21	0.00	10.14	770.73	125.97	896.70

Note: Cost of production estimates are based on 2021 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 48.E Estimated monthly income and expense flows per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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	904.80	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	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	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	67.54	11.78	11.38	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	118.58	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	1.03	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	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.09	2.76	0.99	0.56	0.83	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	237.27	193.22	86.34	64.85	145.38	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-237.27	-193.22	-86.34	-64.85	759.42	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-268.81	-462.03	-548.37	-613.22	146.20	134.07

Note: Cost of production estimates are based on 2021 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 48.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-372	-349	-327	-304	-282	-259	-236	-214	-191	-169	-146
			-498	-475	-453	-430	-408	-385	-362	-340	-317	-294	-272
60	93.60	bu	-316	-289	-262	-235	-207	-180	-153	-126	-99	-72	-45
			-442	-415	-388	-361	-333	-306	-279	-252	-225	-198	-171
70	109.20	bu	-260	-228	-197	-165	-133	-102	-70	-38	-7	24	56
			-386	-354	-323	-291	-259	-228	-196	-164	-133	-101	-69
80	124.80	bu	-204	-168	-131	-95	-59	-23	12	49	85	121	157
			-330	-294	-257	-221	-185	-149	-113	-76	-40	-4	31
90	140.40	bu	-148	-107	-66	-26	14	55	96	136	177	218	258
			-274	-233	-192	-152	-111	-70	-29	10	51	92	132
100	156.00	bu	-92	-46	-1	43	88	134	179	224	269	315	360
			-218	-172	-127	-82	-37	8	53	98	143	189	234
110	171.60	bu	-36	13	63	113	163	212	262	312	362	411	461
			-162	-112	-62	-12	37	86	136	186	236	285	335
120	187.20	bu	20	74	128	182	237	291	345	400	454	508	562
			-105	-51	2	56	111	165	219	274	328	382	436
130	202.80	bu	76	134	193	252	311	370	429	487	546	605	664
			-49	8	67	126	185	244	303	361	420	479	538
140	218.40	bu	132	195	258	322	385	448	512	575	638	702	765
			6	69	132	196	259	322	386	449	512	576	639
150	234.00	bu	188	256	324	391	459	527	595	663	731	799	866
			62	130	198	265	333	401	469	537	605	673	740

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 2021 input prices.

Table 49.A Estimated costs per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.96	48.0000	94.08	_____
Bravo Weather Stick	pt	4.12	5.5000	22.66	_____
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.81	4.0000	7.24	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
Valor SX	oz	3.60	3.0000	10.80	_____
Storm	pt	11.16	1.5000	16.74	_____
Cadre	oz	3.33	4.0000	13.32	_____
Butyrac 200 (2,4-DB)	pt	2.90	2.0000	5.80	_____
Select Max	pt	12.73	1.0000	12.73	_____
INSECTICIDES					
Admire Pro	oz	1.57	9.0000	14.13	_____
Acephate 90%	lb	9.87	0.1375	1.36	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	_____
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	59.00	0.3330	19.65	_____
INOCULANT					
Optimize LIFT	oz	0.50	14.8000	7.40	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	1.6246	24.80	_____
Self-Propelled	hour	15.27	0.1983	3.04	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	15.30	1.4583	22.32	_____
DIESEL FUEL					
Tractors	gal	2.36	17.7898	41.98	_____
Self-Propelled	gal	2.36	1.7850	4.16	_____
REPAIR & MAINTENANCE					
Implements	acre	13.47	1.0000	13.47	_____
Tractors	acre	11.85	1.0000	11.85	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	5.58	1.0000	5.58	_____

TOTAL DIRECT EXPENSES				574.15	_____
FIXED EXPENSES					
Implements	acre	40.01	1.0000	40.01	_____
Tractors	acre	69.83	1.0000	69.83	_____
Self-Propelled	acre	14.18	1.0000	14.18	_____

TOTAL FIXED EXPENSES				124.02	_____

TOTAL SPECIFIED EXPENSES				698.17	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 49.B Summary of estimated costs and returns per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	430.00	2.0000	860.00	_____

TOTAL INCOME				860.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	120.27	1.0000	120.27	_____
HERBICIDES	acre	76.65	1.0000	76.65	_____
INSECTICIDES	acre	15.49	1.0000	15.49	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
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	19.65	1.0000	19.65	_____
INOCULANT	acre	7.40	1.0000	7.40	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	15.27	1.8229	27.84	_____
UNALLOCATED LABOR	hour	15.30	1.4583	22.32	_____
DIESEL FUEL	gal	2.36	19.5748	46.14	_____
REPAIR & MAINTENANCE	acre	27.57	1.0000	27.57	_____
INTEREST ON OP. CAP.	acre	5.58	1.0000	5.58	_____

TOTAL DIRECT EXPENSES				574.15	_____
RETURNS ABOVE DIRECT EXPENSES				285.85	_____
TOTAL FIXED EXPENSES				124.02	_____

TOTAL SPECIFIED EXPENSES				698.17	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				161.83	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 49.C Estimated resource use for field operations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2022

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					150.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Abound	oz					12.0000				
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 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 49.D Estimated costs for field operations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.06	3.39		3.39
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.02	1.16	1.26	2.42
Glyphosate 3lbs a.e	pt	7.24					0.13	7.37		7.37
Lime (Spread)	ton	19.65					0.34	19.99		19.99
Bed-Rip/Disk Fold.	8R-38		1.69	0.65	2.01		0.06	4.41	3.53	7.94
Peanut Plt&Pre Rigid	8R-38		3.30	2.93	4.41		0.16	10.80	9.04	19.84
Peanut Seed	lb	126.00					1.84	127.84		127.84
Optimize LIFT	oz	7.40					0.11	7.51		7.51
Admire Pro	oz	14.13					0.21	14.34		14.34
Abound	oz	23.52					0.34	23.86		23.86
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.02	1.16	1.26	2.42
Dual Magnum	pt	10.02					0.15	10.17		10.17
Valor SX	oz	10.80					0.16	10.96		10.96
Sprayer 600-750gal	60' 175hp		0.09	0.05	0.14			0.28	0.32	0.60
Acephate 90%	lb	1.36					0.02	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Storm	pt	16.74					0.20	16.94		16.94
Cadre	oz	13.32					0.16	13.48		13.48
Butyrac 200 (2,4-DB)	pt	2.90					0.03	2.93		2.93
Crop Oil Conc.(Veg.)	pt	5.80					0.07	5.87		5.87
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	6.18					0.07	6.25		6.25
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Abound	oz	35.28					0.31	35.59		35.59
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Butyrac 200 (2,4-DB)	pt	2.90					0.03	2.93		2.93
Crop Oil Conc.(Veg.)	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Select Max	pt	12.73					0.11	12.84		12.84
Crop Oil Conc.(Veg.)	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	4.12					0.04	4.16		4.16
Tebuconazole 3.6	oz	3.53					0.03	3.56		3.56
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Abound	oz	35.28					0.21	35.49		35.49
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	6.18					0.04	6.22		6.22
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57			1.14	1.26	2.40
Bravo Weather Stick	pt	6.18					0.02	6.20		6.20
Peanut Dig/Invertor	4R-38		4.30	2.99	5.11		0.04	12.44	9.05	21.49
Peanut Harvester	4R-38		25.54	15.71	25.69		0.20	67.14	72.68	139.82
Dry Peanuts	ton	27.36					0.08	27.44		27.44
Cleaning Peanuts	ton	29.16					0.09	29.25		29.25
Peanut Dump Cart	6-Row		7.15	3.04	8.52		0.05	18.76	15.54	34.30
TOTALS		442.71	46.14	27.57	52.15	0.00	5.58	574.15	124.02	698.17

Note: Cost of production estimates are based on 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 49.E Estimated monthly income and expense flows per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2022

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	860.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.52	6.18	42.93	41.46	6.18
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.24	20.82	32.96	15.63	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.49	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	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	19.65	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.40	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	0.57	7.13	1.14	2.28	1.14	39.89
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	0.37	5.45	0.74	1.48	0.74	37.36
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.83	0.40	0.80	0.40	21.94
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.55	3.07	0.55	0.66	0.27	0.48
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	31.91	212.71	47.77	75.38	44.01	162.37
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-31.91	-212.71	-47.77	-75.38	-44.01	697.63
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-31.91	-244.62	-292.39	-367.77	-411.78	285.85

Note: Cost of production estimates are based on 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 49.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2022

PRODUCT			PERCENT 75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			322.50	344.00	365.50	387.00	408.50	430.00	451.50	473.00	494.50	516.00	537.50
PERCENT	YIELD	UNIT	dollars										
50	1.00	ton	-223	-201	-180	-158	-137	-115	-94	-72	-51	-29	-8
			-347	-325	-304	-282	-261	-239	-218	-196	-175	-153	-132
60	1.20	ton	-164	-138	-112	-87	-61	-35	-9	16	41	67	93
			-288	-262	-236	-211	-185	-159	-133	-107	-82	-56	-30
70	1.40	ton	-105	-75	-45	-15	14	44	74	105	135	165	195
			-229	-199	-169	-139	-109	-79	-49	-18	11	41	71
80	1.60	ton	-46	-12	21	56	90	125	159	193	228	262	297
			-170	-136	-102	-67	-33	1	35	69	104	138	173
90	1.80	ton	12	50	89	128	166	205	244	282	321	360	399
			-112	-73	-34	4	42	81	120	158	197	236	274
100	2.00	ton	70	113	156	199	242	285	328	371	414	457	500
			-53	-10	32	75	118	161	204	247	290	333	376
110	2.20	ton	129	176	224	271	318	366	413	460	508	555	602
			5	52	100	147	194	242	289	336	384	431	478
120	2.40	ton	188	240	291	343	394	446	498	549	601	652	704
			64	116	167	219	270	322	374	425	477	528	580
130	2.60	ton	247	303	359	415	470	526	582	638	694	750	806
			123	179	235	291	346	402	458	514	570	626	682
140	2.80	ton	306	366	426	486	546	607	667	727	787	847	908
			182	242	302	362	422	483	543	603	663	723	784
150	3.00	ton	365	429	494	558	623	687	752	816	881	945	1010
			240	305	369	434	498	563	627	692	756	821	885

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 2021 input prices.

Table 50.A Estimated costs per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.96	48.0000	94.08	_____
Bravo Weather Stick	pt	4.12	5.5000	22.66	_____
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.81	4.0000	7.24	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
Valor SX	oz	3.60	3.0000	10.80	_____
Storm	pt	11.16	1.5000	16.74	_____
Cadre	oz	3.33	4.0000	13.32	_____
Butyrac 200 (2,4-DB)	pt	2.90	2.0000	5.80	_____
Select Max	pt	12.73	1.0000	12.73	_____
INSECTICIDES					
Admire Pro	oz	1.57	9.0000	14.13	_____
Acephate 90%	lb	9.87	0.1375	1.36	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	_____
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	59.00	0.3330	19.65	_____
INOCULANT					
Optimize LIFT	oz	0.50	29.6000	14.80	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	1.6246	24.80	_____
Self-Propelled	hour	15.27	0.1983	3.04	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	15.30	1.4583	22.32	_____
DIESEL FUEL					
Tractors	gal	2.36	17.7898	41.98	_____
Self-Propelled	gal	2.36	1.7850	4.16	_____
REPAIR & MAINTENANCE					
Implements	acre	17.20	1.0000	17.20	_____
Tractors	acre	11.85	1.0000	11.85	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	5.74	1.0000	5.74	_____

TOTAL DIRECT EXPENSES				585.44	_____
FIXED EXPENSES					
Implements	acre	46.57	1.0000	46.57	_____
Tractors	acre	69.83	1.0000	69.83	_____
Self-Propelled	acre	14.18	1.0000	14.18	_____

TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				716.02	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 50.B Summary of estimated costs and returns per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	430.00	2.0000	860.00	_____

TOTAL INCOME				860.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	120.27	1.0000	120.27	_____
HERBICIDES	acre	76.65	1.0000	76.65	_____
INSECTICIDES	acre	15.49	1.0000	15.49	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
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	19.65	1.0000	19.65	_____
INOCULANT	acre	14.80	1.0000	14.80	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	15.27	1.8229	27.84	_____
UNALLOCATED LABOR	hour	15.30	1.4583	22.32	_____
DIESEL FUEL	gal	2.36	19.5748	46.14	_____
REPAIR & MAINTENANCE	acre	31.30	1.0000	31.30	_____
INTEREST ON OP. CAP.	acre	5.74	1.0000	5.74	_____

TOTAL DIRECT EXPENSES				585.44	_____
RETURNS ABOVE DIRECT EXPENSES				274.56	_____
TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				716.02	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				143.98	_____

Note: Cost of production estimates are based on 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning

Table 50.C Estimated resource use for field operations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Rigid	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Ptlt&PreTwin	8R-30/40	MFWD 225	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					150.0000				
Optimize LIFT	oz					29.6000				
Admire Pro	oz					9.0000				
Abound	oz					12.0000				
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 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 50.D Estimated costs for field operations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.06	3.39		3.39
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.02	1.16	1.26	2.42
Glyphosate 3lbs a.e	pt	7.24					0.13	7.37		7.37
Lime (Spread)	ton	19.65					0.34	19.99		19.99
Bed-Rip/Disk Rigid	8R-38		1.69	0.62	2.01		0.06	4.38	3.42	7.80
Peanut Ptlt&PreTwin	8R-30/40		3.30	6.69	4.41		0.21	14.61	15.71	30.32
Peanut Seed	lb	126.00					1.84	127.84		127.84
Optimize LIFT	oz	14.80					0.22	15.02		15.02
Admire Pro	oz	14.13					0.21	14.34		14.34
Abound	oz	23.52					0.34	23.86		23.86
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.02	1.16	1.26	2.42
Dual Magnum	pt	10.02					0.15	10.17		10.17
Valor SX	oz	10.80					0.16	10.96		10.96
Sprayer 600-750gal	60' 175hp		0.09	0.05	0.14			0.28	0.32	0.60
Acephate 90%	lb	1.36					0.02	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Storm	pt	16.74					0.20	16.94		16.94
Cadre	oz	13.32					0.16	13.48		13.48
Butyrac 200 (2,4-DB)	pt	2.90					0.03	2.93		2.93
Crop Oil Conc.(Veg.)	pt	5.80					0.07	5.87		5.87
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	6.18					0.07	6.25		6.25
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Abound	oz	35.28					0.31	35.59		35.59
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Butyrac 200 (2,4-DB)	pt	2.90					0.03	2.93		2.93
Crop Oil Conc.(Veg.)	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Select Max	pt	12.73					0.11	12.84		12.84
Crop Oil Conc.(Veg.)	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	4.12					0.04	4.16		4.16
Tebuconazole 3.6	oz	3.53					0.03	3.56		3.56
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Abound	oz	35.28					0.21	35.49		35.49
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	6.18					0.04	6.22		6.22
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57			1.14	1.26	2.40
Bravo Weather Stick	pt	6.18					0.02	6.20		6.20
Peanut Dig/Invertor	4R-38		4.30	2.99	5.11		0.04	12.44	9.05	21.49
Peanut Harvester	4R-38		25.54	15.71	25.69		0.20	67.14	72.68	139.82
Dry Peanuts	ton	27.36					0.08	27.44		27.44
Cleaning Peanuts	ton	29.16					0.09	29.25		29.25
Peanut Dump Cart	6-Row		7.15	3.04	8.52		0.05	18.76	15.54	34.30
TOTALS		450.11	46.14	31.30	52.15	0.00	5.74	585.44	130.58	716.02

Note: Cost of production estimates are based on 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.

Table 50.E Estimated monthly income and expense flows per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2022

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	860.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.52	6.18	42.93	41.46	6.18
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.24	20.82	32.96	15.63	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.49	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	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	19.65	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.80	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	0.57	7.13	1.14	2.28	1.14	39.89
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	0.37	5.45	0.74	1.48	0.74	37.36
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	7.56	0.40	0.80	0.40	21.94
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.55	3.23	0.55	0.66	0.27	0.48
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	31.91	224.00	47.77	75.38	44.01	162.37
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-31.91	-224.00	-47.77	-75.38	-44.01	697.63
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-31.91	-255.91	-303.68	-379.06	-423.07	274.56

Note: Cost of production estimates are based on 2021 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 50.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			322.50	344.00	365.50	387.00	408.50	430.00	451.50	473.00	494.50	516.00	537.50
PERCENT	YIELD	UNIT	dollars										
50	1.00	ton	-234	-213	-191	-170	-148	-127	-105	-84	-62	-41	-19
			-365	-343	-322	-300	-279	-257	-236	-214	-193	-171	-150
60	1.20	ton	-175	-149	-124	-98	-72	-46	-20	4	30	56	82
			-306	-280	-254	-228	-203	-177	-151	-125	-99	-74	-48
70	1.40	ton	-116	-86	-56	-26	3	33	63	93	123	153	184
			-247	-217	-187	-157	-127	-97	-66	-36	-6	23	53
80	1.60	ton	-58	-23	10	45	79	113	148	182	217	251	285
			-188	-154	-119	-85	-51	-16	17	52	86	120	155
90	1.80	ton	0	39	78	116	155	194	232	271	310	349	387
			-129	-91	-52	-13	24	63	102	141	179	218	257
100	2.00	ton	59	102	145	188	231	274	317	360	403	446	489
			-71	-28	14	57	100	143	186	229	272	315	358
110	2.20	ton	118	165	212	260	307	354	402	449	496	544	591
			-12	35	82	129	177	224	271	318	366	413	460
120	2.40	ton	177	228	280	332	383	435	486	538	590	641	693
			46	98	149	201	253	304	356	407	459	511	562
130	2.60	ton	236	291	347	403	459	515	571	627	683	739	795
			105	161	217	273	329	384	440	496	552	608	664
140	2.80	ton	294	355	415	475	535	595	656	716	776	836	896
			164	224	284	344	405	465	525	585	645	706	766
150	3.00	ton	353	418	482	547	611	676	740	805	869	934	998
			223	287	352	416	481	545	610	674	739	803	868

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 2021 input prices.

Table 51.A Estimated costs per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch
All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.96	48.0000	94.08	_____
Bravo Weather Stick	pt	4.12	5.5000	22.66	_____
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.81	4.0000	7.24	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
Valor SX	oz	3.60	3.0000	10.80	_____
Storm	pt	11.16	1.5000	16.74	_____
Cadre	oz	3.33	4.0000	13.32	_____
Butyrac 200 (2,4-DB)	pt	2.90	2.0000	5.80	_____
Select Max	pt	12.73	1.0000	12.73	_____
INSECTICIDES					
Admire Pro	oz	1.57	9.0000	14.13	_____
Acephate 90%	lb	9.87	0.1375	1.36	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	_____
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	59.00	0.3330	19.65	_____
INOCULANT					
Optimize LIFT	oz	0.50	14.8000	7.40	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	1.1856	18.10	_____
Self-Propelled	hour	15.27	0.1983	3.04	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	15.31	1.1072	16.96	_____
DIESEL FUEL					
Tractors	gal	2.36	12.9499	30.55	_____
Self-Propelled	gal	2.36	1.7850	4.16	_____
REPAIR & MAINTENANCE					
Implements	acre	10.52	1.0000	10.52	_____
Tractors	acre	8.62	1.0000	8.62	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	5.44	1.0000	5.44	_____

TOTAL DIRECT EXPENSES				543.98	_____
FIXED EXPENSES					
Implements	acre	33.29	1.0000	33.29	_____
Tractors	acre	50.82	1.0000	50.82	_____
Self-Propelled	acre	14.18	1.0000	14.18	_____

TOTAL FIXED EXPENSES				98.29	_____

TOTAL SPECIFIED EXPENSES				642.27	_____

Note: Cost of production estimates are based on 2021 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 51.B Summary of estimated costs and returns per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch
All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	430.00	2.0000	860.00	_____
TOTAL INCOME				860.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	120.27	1.0000	120.27	_____
HERBICIDES	acre	76.65	1.0000	76.65	_____
INSECTICIDES	acre	15.49	1.0000	15.49	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
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	19.65	1.0000	19.65	_____
INOCULANT	acre	7.40	1.0000	7.40	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	15.27	1.3840	21.14	_____
UNALLOCATED LABOR	hour	15.31	1.1072	16.96	_____
DIESEL FUEL	gal	2.36	14.7349	34.71	_____
REPAIR & MAINTENANCE	acre	21.39	1.0000	21.39	_____
INTEREST ON OP. CAP.	acre	5.44	1.0000	5.44	_____
TOTAL DIRECT EXPENSES				543.98	_____
RETURNS ABOVE DIRECT EXPENSES				316.02	_____
TOTAL FIXED EXPENSES				98.29	_____
TOTAL SPECIFIED EXPENSES				642.27	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				217.73	_____

Note: Cost of production estimates are based on 2021 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 51.C Estimated resource use for field operations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch
All Areas, Mississippi, 2022

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					150.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Abound	oz					12.0000				
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 2021 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 51.D Estimated costs for field operations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch
All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.06	3.39		3.39
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.02	1.16	1.26	2.42
Glyphosate 3lbs a.e	pt	7.24					0.13	7.37		7.37
Lime (Spread)	ton	19.65					0.34	19.99		19.99
Bed-Rip/Disk Fold.	12R-38		1.26	0.52	1.27		0.04	3.09	2.79	5.88
Peanut Plt&Pre Fold.	12R-38		2.20	3.46	2.94		0.13	8.73	8.71	17.44
Peanut Seed	lb	126.00					1.84	127.84		127.84
Optimize LIFT	oz	7.40					0.11	7.51		7.51
Admire Pro	oz	14.13					0.21	14.34		14.34
Abound	oz	23.52					0.34	23.86		23.86
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.02	1.16	1.26	2.42
Dual Magnum	pt	10.02					0.15	10.17		10.17
Valor SX	oz	10.80					0.16	10.96		10.96
Sprayer 600-750gal	60' 175hp		0.09	0.05	0.14			0.28	0.32	0.60
Acephate 90%	lb	1.36					0.02	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Storm	pt	16.74					0.20	16.94		16.94
Cadre	oz	13.32					0.16	13.48		13.48
Butyrac 200 (2,4-DB)	pt	2.90					0.03	2.93		2.93
Crop Oil Conc.(Veg.)	pt	5.80					0.07	5.87		5.87
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	6.18					0.07	6.25		6.25
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Abound	oz	35.28					0.31	35.59		35.59
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Butyrac 200 (2,4-DB)	pt	2.90					0.03	2.93		2.93
Crop Oil Conc.(Veg.)	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Select Max	pt	12.73					0.11	12.84		12.84
Crop Oil Conc.(Veg.)	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	4.12					0.04	4.16		4.16
Tebuconazole 3.6	oz	3.53					0.03	3.56		3.56
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Abound	oz	35.28					0.21	35.49		35.49
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	6.18					0.04	6.22		6.22
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57			1.14	1.26	2.40
Bravo Weather Stick	pt	6.18					0.02	6.20		6.20
Peanut Dig/Invertor	6R-38		2.86	1.99	3.41		0.02	8.28	6.58	14.86
Peanut Harvester	6R-38		17.08	10.13	17.18		0.13	44.52	50.49	95.01
Dry Peanuts	ton	27.36					0.08	27.44		27.44
Cleaning Peanuts	ton	29.16					0.09	29.25		29.25
Peanut Dump Cart	6-Row		7.15	3.04	8.52		0.05	18.76	15.54	34.30
TOTALS		442.71	34.71	21.39	39.73	0.00	5.44	543.98	98.29	642.27

Note: Cost of production estimates are based on 2021 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 51.E Estimated monthly income and expense flows per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch
All Areas, Mississippi, 2022

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	860.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.52	6.18	42.93	41.46	6.18
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.24	20.82	32.96	15.63	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.49	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	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	19.65	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.40	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	0.57	4.92	1.14	2.28	1.14	29.68
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	0.37	3.92	0.74	1.48	0.74	27.46
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	4.23	0.40	0.80	0.40	15.36
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.55	3.02	0.55	0.66	0.27	0.39
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	31.91	209.32	47.77	75.38	44.01	135.59
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-31.91	-209.32	-47.77	-75.38	-44.01	724.41
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-31.91	-241.23	-289.00	-364.38	-408.39	316.02

Note: Cost of production estimates are based on 2021 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 51.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch
All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			322.50	344.00	365.50	387.00	408.50	430.00	451.50	473.00	494.50	516.00	537.50
PERCENT	YIELD	UNIT	dollars										
50	1.00	ton	-193	-171	-150	-128	-107	-85	-64	-42	-21	0	21
			-291	-269	-248	-226	-205	-183	-162	-140	-119	-97	-76
60	1.20	ton	-134	-108	-82	-56	-31	-5	20	46	72	97	123
			-232	-206	-180	-155	-129	-103	-77	-51	-26	-0	25
70	1.40	ton	-75	-45	-15	14	44	75	105	135	165	195	225
			-173	-143	-113	-83	-53	-23	6	36	67	97	127
80	1.60	ton	-16	17	52	86	120	155	189	224	258	292	327
			-114	-80	-46	-11	22	57	91	125	160	194	229
90	1.80	ton	42	80	119	158	196	235	274	313	351	390	429
			-56	-17	21	59	98	137	176	214	253	292	330
100	2.00	ton	101	144	187	230	273	316	359	402	445	488	531
			2	45	88	131	174	217	260	303	346	389	432
110	2.20	ton	159	207	254	301	349	396	443	490	538	585	632
			61	108	156	203	250	298	345	392	439	487	534
120	2.40	ton	218	270	321	373	425	476	528	579	631	683	734
			120	171	223	275	326	378	429	481	533	584	636
130	2.60	ton	277	333	389	445	501	557	612	668	724	780	836
			179	235	291	346	402	458	514	570	626	682	738
140	2.80	ton	336	396	456	516	577	637	697	757	817	878	938
			238	298	358	418	478	539	599	659	719	779	840
150	3.00	ton	395	459	524	588	653	717	782	846	911	975	1040
			296	361	425	490	554	619	683	748	812	877	941

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 2021 input prices.

Table 52.A Estimated costs per acre
Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.96	48.0000	94.08	_____
Bravo Weather Stick	pt	4.12	5.5000	22.66	_____
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	1.81	4.0000	7.24	_____
Dual Magnum	pt	10.02	1.0000	10.02	_____
Valor SX	oz	3.60	3.0000	10.80	_____
Storm	pt	11.16	1.5000	16.74	_____
Cadre	oz	3.33	4.0000	13.32	_____
Butyrac 200 (2,4-DB)	pt	2.90	2.0000	5.80	_____
Select Max	pt	12.73	1.0000	12.73	_____
INSECTICIDES					
Admire Pro	oz	1.57	9.0000	14.13	_____
Acephate 90%	lb	9.87	0.1375	1.36	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	_____
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	59.00	0.3330	19.65	_____
INOCULANT					
Optimize LIFT	oz	0.50	14.8000	7.40	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	1.2642	19.30	_____
Self-Propelled	hour	15.27	0.1983	3.04	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	15.31	1.1072	16.96	_____
DIESEL FUEL					
Tractors	gal	2.36	13.6762	32.27	_____
Self-Propelled	gal	2.36	1.7850	4.16	_____
Irrigate Peanuts	gal	2.36	9.7755	23.08	_____
REPAIR & MAINTENANCE					
Implements	acre	10.74	1.0000	10.74	_____
Tractors	acre	9.07	1.0000	9.07	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
Irrigate Peanuts	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	5.98	1.0000	5.98	_____

TOTAL DIRECT EXPENSES				598.62	_____
FIXED EXPENSES					
Implements	acre	34.70	1.0000	34.70	_____
Tractors	acre	53.49	1.0000	53.49	_____
Self-Propelled	acre	14.18	1.0000	14.18	_____
Irrigate Peanuts	acre	49.28	1.0000	49.28	_____

TOTAL FIXED EXPENSES				151.65	_____

TOTAL SPECIFIED EXPENSES				750.27	_____

Note: Cost of production estimates are based on 2021 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 52.B Summary of estimated costs and returns per acre
Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	430.00	2.3000	989.00	_____
TOTAL INCOME				989.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	120.27	1.0000	120.27	_____
HERBICIDES	acre	76.65	1.0000	76.65	_____
INSECTICIDES	acre	15.49	1.0000	15.49	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
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	19.65	1.0000	19.65	_____
INOCULANT	acre	7.40	1.0000	7.40	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	15.27	1.4625	22.34	_____
UNALLOCATED LABOR	hour	15.31	1.1072	16.96	_____
DIESEL FUEL	gal	2.36	25.2367	59.51	_____
REPAIR & MAINTENANCE	acre	29.22	1.0000	29.22	_____
INTEREST ON OP. CAP.	acre	5.98	1.0000	5.98	_____
TOTAL DIRECT EXPENSES				598.62	_____
RETURNS ABOVE DIRECT EXPENSES				390.38	_____
TOTAL FIXED EXPENSES				151.65	_____
TOTAL SPECIFIED EXPENSES				750.27	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				238.73	_____

Note: Cost of production estimates are based on 2021 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 52.C Estimated resource use for field operations, per acre
Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2022

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					150.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Abound	oz					12.0000				
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 2021 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 52.D Estimated costs for field operations, per acre
Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.06	3.39		3.39
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.02	1.16	1.26	2.42
Glyphosate 3lbs a.e	pt	7.24					0.13	7.37		7.37
Lime (Spread)	ton	19.65					0.34	19.99		19.99
Bed-Rip/Disk Fold.	12R-38		1.26	0.52	1.27		0.04	3.09	2.79	5.88
Peanut Plt&Pre Fold.	12R-38		2.20	3.46	2.94		0.13	8.73	8.71	17.44
Peanut Seed	lb	126.00					1.84	127.84		127.84
Optimize LIFT	oz	7.40					0.11	7.51		7.51
Admire Pro	oz	14.13					0.21	14.34		14.34
Abound	oz	23.52					0.34	23.86		23.86
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.02	1.16	1.26	2.42
Dual Magnum	pt	10.02					0.15	10.17		10.17
Valor SX	oz	10.80					0.16	10.96		10.96
Sprayer 600-750gal	60' 175hp		0.09	0.05	0.14			0.28	0.32	0.60
Acephate 90%	lb	1.36					0.02	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Storm	pt	16.74					0.20	16.94		16.94
Cadre	oz	13.32					0.16	13.48		13.48
Butyrac 200 (2,4-DB)	pt	2.90					0.03	2.93		2.93
Crop Oil Conc.(Veg.)	pt	5.80					0.07	5.87		5.87
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	6.18					0.07	6.25		6.25
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Abound	oz	35.28					0.31	35.59		35.59
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Butyrac 200 (2,4-DB)	pt	2.90					0.03	2.93		2.93
Crop Oil Conc.(Veg.)	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Select Max	pt	12.73					0.11	12.84		12.84
Crop Oil Conc.(Veg.)	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	4.12					0.04	4.16		4.16
Tebuconazole 3.6	oz	3.53					0.03	3.56		3.56
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Abound	oz	35.28					0.21	35.49		35.49
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57		0.01	1.15	1.26	2.41
Bravo Weather Stick	pt	6.18					0.04	6.22		6.22
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.57			1.14	1.26	2.40
Bravo Weather Stick	pt	6.18					0.02	6.20		6.20
Peanut Dig/Invertor	6R-38		2.86	1.99	3.41		0.02	8.28	6.58	14.86
Peanut Harvester	6R-38		17.08	10.13	17.18		0.13	44.52	50.49	95.01
Dry Peanuts	ton	31.68					0.09	31.77		31.77
Cleaning Peanuts	ton	33.66					0.10	33.76		33.76
Peanut Dump Cart	6-Row		7.15	3.04	8.52		0.05	18.76	15.54	34.30
Irrigate Peanuts	acre	7.92	24.80	7.83	4.73		0.52	45.80	53.36	99.16
TOTALS		459.45	59.51	29.22	44.46	0.00	5.98	598.62	151.65	750.27

Note: Cost of production estimates are based on 2021 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 52.E Estimated monthly income and expense flows per acre
Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2022

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	989.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.52	6.18	42.93	41.46	6.18
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.24	20.82	32.96	15.63	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.49	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	126.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	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	19.65	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.40	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.58	0.00	0.00	0.00	0.00	0.00	0.80	7.29	1.37	2.74	2.00	29.68
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	0.88	0.00	0.00	0.00	0.00	0.00	0.37	4.37	6.51	13.02	6.90	27.46
REPAIR & MAINTENANCE	0.32	0.00	0.00	0.00	0.00	0.00	0.20	7.37	1.45	2.90	1.62	15.36
INTEREST ON OP. CAP.	0.06	0.00	0.00	0.00	0.00	0.00	0.55	3.23	0.63	0.78	0.32	0.41
TOTAL DIRECT EXPENSES	1.84	0.00	0.00	0.00	0.00	0.00	32.14	223.41	54.90	89.60	52.30	144.43
NET INCOME	-1.84	0.00	0.00	0.00	0.00	0.00	-32.14	-223.41	-54.90	-89.60	-52.30	844.57
NET INCOME TO DATE	-1.84	-1.84	-1.84	-1.84	-1.84	-1.84	-33.98	-257.39	-312.29	-401.89	-454.19	390.38

Note: Cost of production estimates are based on 2021 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 52.F Estimated returns for various price/yield combinations, per acre
Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			322.50	344.00	365.50	387.00	408.50	430.00	451.50	473.00	494.50	516.00	537.50
PERCENT	YIELD	UNIT	dollars										
50	1.15	ton	-194	-170	-145	-120	-96	-71	-46	-21	2	27	52
			-346	-321	-297	-272	-247	-223	-198	-173	-148	-124	-99
60	1.38	ton	-127	-97	-68	-38	-8	20	50	80	110	139	169
			-279	-249	-219	-189	-160	-130	-100	-71	-41	-11	17
70	1.61	ton	-59	-25	9	44	78	113	147	182	217	251	286
			-211	-176	-142	-107	-72	-38	-3	30	65	100	134
80	1.84	ton	7	47	87	126	166	205	245	284	324	363	403
			-143	-104	-64	-25	14	54	93	133	172	212	251
90	2.07	ton	75	120	164	209	253	298	342	387	431	476	520
			-76	-31	12	57	101	146	190	235	279	324	368
100	2.30	ton	143	192	242	291	340	390	439	489	538	588	637
			-8	40	90	139	189	238	288	337	387	436	485
110	2.53	ton	210	265	319	373	428	482	537	591	645	700	754
			59	113	167	222	276	331	385	439	494	548	603
120	2.76	ton	278	337	397	456	515	575	634	693	753	812	871
			126	186	245	304	364	423	482	542	601	660	720
130	2.99	ton	345	410	474	538	603	667	731	795	860	924	988
			194	258	322	387	451	515	580	644	708	772	837
140	3.22	ton	413	482	552	621	690	759	828	898	967	1036	1105
			261	331	400	469	538	608	677	746	815	885	954
150	3.45	ton	481	555	629	703	777	852	926	1000	1074	1148	1222
			329	403	477	552	626	700	774	848	922	997	1071

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 2021 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, 2022

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	15.27	32.19	40.72	88.18	151.14	239.33
Combine (300-349 hp)	325 hp	413,700	300	8	16.73	15.27	39.48	43.09	97.84	159.92	257.76
Combine (350-399 hp)	355 hp	437,900	300	8	18.27	15.27	43.11	45.61	104.00	169.27	273.27
Combine (400-449 hp)	425 hp	474,800	300	8	21.87	15.27	51.62	49.45	116.35	183.54	299.89
Combine (450-499hp)	475 hp	489,900	300	8	24.44	15.27	57.69	51.03	124.00	189.37	313.37
Tractor(20-39hp)CB	MFWD 30	28,600	600	8	1.54	15.27	3.64	0.89	19.80	5.01	24.81
Tractor(20-39hp)RB	MFWD 30	21,400	600	8	1.54	15.27	3.64	0.66	19.58	3.74	23.33
Tractor(40-59hp)CB	2WD 50	32,100	600	8	2.57	15.27	6.07	1.00	22.34	5.62	27.97
Tractor(40-59hp)CB	MFWD 50	42,600	600	8	2.57	15.27	6.07	1.33	22.67	7.46	30.13
Tractor(40-59hp)RB	2WD 50	23,300	600	8	2.57	15.27	6.07	0.72	22.07	4.08	26.15
Tractor(40-59hp)RB	MFWD 50	30,500	600	8	2.57	15.27	6.07	0.95	22.29	5.34	27.64
Tractor(60-89hp)CB	2WD 75	56,700	600	8	3.86	15.27	9.11	1.77	26.15	9.93	36.08
Tractor(60-89hp)CB	MFWD 75	60,500	600	8	3.86	15.27	9.11	1.89	26.27	10.59	36.87
Tractor(60-89hp)RB	2WD 75	43,100	600	8	3.86	15.27	9.11	1.34	25.72	7.55	33.27
Tractor(60-89hp)RB	MFWD 75	43,800	600	8	3.86	15.27	9.11	1.36	25.74	7.67	33.42
Tractor(90-119hp)CB	2WD 105	74,700	600	8	5.40	15.27	12.75	2.33	30.35	13.08	43.44
Tractor(90-119hp)CB	MFWD 105	94,500	600	8	5.40	15.27	12.75	2.95	30.97	16.55	47.53
Tractor(90-119hp)RB	2WD 105	67,100	600	8	5.40	15.27	12.75	2.09	30.12	11.75	41.87
Tractor(90-119hp)RB	MFWD 105	75,300	600	8	5.40	15.27	12.75	2.35	30.37	13.19	43.57
Tractor(120-139hp)CB	2WD 130	117,400	600	8	6.69	15.27	15.79	3.66	34.73	20.56	55.29
Tractor(120-139hp)CB	MFWD 130	131,100	600	8	6.69	15.27	15.79	4.09	35.15	22.96	58.12
Tractor(140-159hp)	2WD 150	116,100	600	8	7.72	15.27	18.22	3.62	37.11	20.34	57.45
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	15.27	18.22	4.46	37.96	25.05	63.01
Tractor(160-179hp)CB	MFWD 170	164,000	600	8	8.75	15.27	20.65	5.12	41.04	30.21	71.26
Tractor(180-199hp)CB	MFWD 190	206,000	600	8	9.77	15.27	23.08	6.43	44.78	37.95	82.74
Tractor(200-249hp)CB	MFWD 225	248,000	600	8	11.58	15.27	27.33	7.75	50.35	45.69	96.04
Tractor(250-349hp)CB	4WD 300	343,000	600	8	15.44	15.27	36.44	10.71	62.43	63.19	125.62
Tractor(250-349hp)CB	MFWD 300	324,000	600	8	15.44	15.27	36.44	10.12	61.83	59.69	121.53
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	15.27	36.44	10.28	61.99	60.61	122.60
Tractor(350-449hp)	Track 400	492,000	600	8	20.58	15.27	48.59	15.37	79.23	90.64	169.88
Tractor(350-449hp)CB	4WD 400	406,000	600	8	20.58	15.27	48.59	12.68	76.54	74.80	151.34
Tractor(450-550hp)CB	4WD 500	430,000	600	8	25.73	15.27	60.73	13.43	89.44	79.22	168.66
Tractor(450-550hp)CB	Track 500	496,000	600	8	25.73	15.27	60.73	15.50	91.50	91.38	182.88
Utility Vehicle	800 CC	12,200	200	8	0.70	15.27	1.96	1.90	19.14	7.07	26.21
Utility Vehicle	900 CC	15,800	200	8	1.00	15.27	2.81	2.46	20.54	9.16	29.71

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, 2022

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	6.27	7.82	10.79	24.89	40.05	64.95
Cotton Picker	4R-38(350)	351,000	200	8	18.01	0.257	6.27	10.95	14.13	31.36	52.46	83.83
Cotton Picker	4R2x1(350)	357,000	200	8	18.01	0.172	4.19	7.32	9.61	21.12	35.66	56.79
Cotton Picker	6R-30(355)	465,000	200	8	18.27	0.218	5.31	9.41	15.85	30.57	58.84	89.42
Cotton Picker	6R-38(355)	465,000	200	8	18.27	0.172	4.19	7.43	12.51	24.14	46.45	70.60
Cotton Picker/Modu	4R-38(365)	536,000	200	8	20.58	0.257	6.27	12.52	21.58	40.38	80.11	120.50
Cotton Picker/Module	6R-30(500)	854,000	200	8	25.73	0.218	5.31	13.25	29.12	47.68	108.07	155.76
Cotton Picker/Module	6R-38(500)	854,000	200	8	25.73	0.172	4.19	10.46	22.99	37.65	85.32	122.97
Dry Applicator SP	70'300cuft	365,000	350	8	16.98	0.015	0.29	0.60	0.29	1.20	1.82	3.02
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.34	0.37	0.20	0.92	1.26	2.18
Sprayer 600-825gal	80' 175hp	234,000	350	8	11.81	0.013	0.26	0.36	0.16	0.79	1.02	1.82
Sprayer 600-825gal	90' 250hp	328,000	350	8	12.73	0.011	0.23	0.35	0.20	0.79	1.27	2.06
Sprayer 800gal	100' 250hp	333,000	350	8	14.15	0.010	0.20	0.35	0.18	0.75	1.16	1.91
Sprayer 800gal	80' 250hp	300,000	350	8	12.86	0.013	0.26	0.40	0.21	0.87	1.31	2.18
Sprayer 1000-1400gal	90' 275hp	332,000	350	8	14.15	0.010	0.20	0.35	0.18	0.75	1.16	1.91
Sprayer 1000gal	100' 300hp	379,000	350	8	15.44	0.010	0.20	0.38	0.21	0.80	1.32	2.13
Sprayer 1200+gal	120' 300hp	401,000	350	8	15.44	0.008	0.17	0.32	0.18	0.68	1.17	1.85

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, 2022

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	3.12	5.58	1.37	1.58	11.66	2.20	9.33	23.20
Bed-Paratill w/ro	4R-38	MFWD 225	18,700	150	12	0.160	2.45	4.39	1.08	1.24	9.18	1.73	7.35	18.27
Bed-Paratill w/ro	6R-38	MFWD 225	25,500	150	12	0.107	1.64	2.93	0.99	0.83	6.40	1.58	4.91	12.90
Bed-Rip/Disk Fold.	8R-38	MFWD 190	49,200	300	20	0.073	1.11	1.68	0.17	0.47	3.45	0.76	2.77	6.98
Bed-Rip/Disk Fold.	12R-30	MFWD 225	69,800	300	20	0.061	0.94	1.68	0.21	0.47	3.31	0.91	2.81	7.04
Bed-Rip/Disk Fold.	12R-38	MFWD 225	69,800	300	20	0.046	0.70	1.26	0.16	0.35	2.48	0.68	2.11	5.28
Bed-Rip/Disk Rigid	4R-30	MFWD 190	22,600	300	20	0.184	2.82	4.26	0.20	1.19	8.48	0.88	7.01	16.38
Bed-Rip/Disk Rigid	4R-38	MFWD 190	22,600	300	20	0.146	2.24	3.38	0.16	0.94	6.73	0.70	5.56	13.00
Bed-Rip/Disk Rigid	6R-30	MFWD 190	31,200	300	20	0.123	1.88	2.84	0.19	0.79	5.71	0.81	4.67	11.20
Bed-Rip/Disk Rigid	6R-38	MFWD 190	31,200	300	20	0.097	1.48	2.24	0.15	0.62	4.50	0.64	3.69	8.84
Bed-Rip/Disk Rigid	8R-30	MFWD 190	41,700	300	20	0.139	2.12	3.20	0.28	0.89	6.51	1.22	5.27	13.01
Bed-Rip/Disk Rigid	8R-38	MFWD 190	41,700	300	20	0.073	1.11	1.68	0.15	0.47	3.42	0.64	2.77	6.84
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	24,800	150	12	0.107	1.64	2.93	0.96	0.83	6.37	1.53	4.91	12.83
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	33,000	150	12	0.080	1.23	2.20	0.96	0.62	5.02	1.53	3.69	10.25
Bed-Subsoil Fold	8R-38	MFWD 225	49,200	150	12	0.080	1.23	2.20	1.43	0.62	5.50	2.29	3.69	11.48
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	69,800	150	12	0.053	0.82	1.46	1.35	0.41	4.06	2.16	2.45	8.68
Bed-Subsoil Fold	12R-38	MFWD 225	69,800	150	12	0.053	0.82	1.46	1.35	0.41	4.06	2.16	2.45	8.68
Bed-Subsoil Rigid	4R-30	MFWD 225	17,500	150	12	0.204	3.12	5.58	1.29	1.58	11.57	2.06	9.33	22.97
Bed-Subsoil Rigid	4R-38	MFWD 225	16,800	150	12	0.160	2.45	4.39	0.97	1.24	9.07	1.56	7.35	17.98
Bed-Subsoil Rigid	6R-30	MFWD 225	24,300	150	12	0.136	2.08	3.72	1.19	1.05	8.05	1.91	6.22	16.18
Bed-Subsoil Rigid	6R-38	MFWD 225	25,300	150	12	0.107	1.64	2.93	0.98	0.83	6.39	1.57	4.91	12.88
Bed-Subsoil Rigid	8R-30	MFWD 225	32,500	150	12	0.102	1.56	2.79	1.19	0.79	6.34	1.91	4.66	12.92
Bed-Subsoil Rigid	8R-38	MFWD 225	33,600	150	12	0.080	1.23	2.20	0.97	0.62	5.04	1.56	3.69	10.30
Bed/Disk (Hipper)	4R-38	MFWD 150	10,500	160	10	0.147	2.25	2.69	0.38	0.65	5.99	0.95	3.69	10.64
Bed/Disk (Hipper)	6R-38	MFWD 170	16,200	160	10	0.098	1.50	2.03	0.39	0.50	4.45	0.98	2.98	8.41
Bed/Disk (Hipper)	8R-30	MFWD 190	20,800	160	10	0.093	1.43	2.16	0.48	0.60	4.68	1.19	3.55	9.44
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	51,400	160	10	0.049	0.75	1.13	0.63	0.31	2.84	1.55	1.87	6.27
Bed/Disk (Hipper)	12R-30	MFWD 225	40,100	160	10	0.062	0.95	1.70	0.62	0.48	3.77	1.53	2.85	8.16
Bed/Disk (Hipper)	12R-38	MFWD 225	51,400	160	10	0.049	0.75	1.34	0.63	0.38	3.11	1.55	2.25	6.93
Bed/Disk (Hipper)	16R40	MFWD 300	60,800	160	10	0.035	0.54	1.28	0.53	0.35	2.72	1.32	2.11	6.15
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	22,000	160	10	0.074	1.13	1.71	0.40	0.47	3.72	1.00	2.81	7.54
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	22,700	160	10	0.074	1.13	1.71	0.42	0.47	3.73	1.03	2.81	7.58
Bed/Disk w/roller	8R-30	MFWD 190	26,900	160	10	0.093	1.43	2.16	0.63	0.60	4.82	1.54	3.55	9.93
Bed/Disk w/roller	8R-38	MFWD 190	30,800	160	10	0.074	1.13	1.71	0.57	0.47	3.88	1.40	2.81	8.10
Bed/Disk w/roller	12R-30/40	MFWD 225	50,900	160	10	0.062	0.95	1.70	0.79	0.48	3.94	1.95	2.85	8.75
Bed/Lister	4R-38	MFWD 150	18,100	160	8	0.228	3.48	4.16	0.96	1.02	9.63	2.85	5.72	18.21
Bed/Lister	6R-38	MFWD 150	20,400	160	8	0.120	1.83	2.19	0.57	0.53	5.13	1.69	3.01	9.84
Bed/Lister	8R-30	MFWD 190	24,900	160	8	0.114	1.74	2.63	0.66	0.73	5.78	1.96	4.33	12.07
Bed/Lister	8R-38	MFWD 190	25,000	160	8	0.090	1.37	2.08	0.52	0.58	4.57	1.55	3.42	9.55
Bed/Lister	8R-38 2x1	MFWD 190	40,400	160	8	0.060	0.91	1.38	0.56	0.38	3.26	1.67	2.28	7.21
Bed/Lister	12R-38	MFWD 225	40,400	160	8	0.060	0.91	1.64	0.56	0.46	3.59	1.67	2.74	8.01
Bed/Lister	16R-30	MFWD 225	54,700	160	8	0.035	0.53	0.96	0.45	0.27	2.21	1.32	1.60	5.15
Bed/Lister	16R40	MFWD 300	56,900	160	8	0.043	0.65	1.57	0.57	0.43	3.23	1.69	2.57	7.50
Bed/Lister-Roll-Fo	8R-38	MFWD 190	28,300	160	10	0.095	1.46	2.21	0.67	0.61	4.97	1.66	3.64	10.28
Bed/Lister-Roll-Fo	12R-30	MFWD 225	37,800	160	10	0.080	1.23	2.21	0.76	0.62	4.83	1.87	3.69	10.41
Bed/Lister-Roll-Fo	12R-38	MFWD 225	38,400	160	10	0.063	0.97	1.74	0.61	0.49	3.82	1.50	2.91	8.25
Bed/Lister-Roll-Fo	16R-30	MFWD 225	48,700	160	10	0.060	0.92	1.65	0.73	0.47	3.79	1.81	2.77	8.37
Bed/Lister-Roll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.46	2.21	0.59	0.61	4.89	1.47	3.64	10.00
Blade-Box	6'-7'	MFWD 105	1,500	200	20	0.020	0.30	0.25	0.01	0.04	0.62	0.01	0.26	0.89
Blade-Box	8'-10'	MFWD 105	3,890	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	12'-16'	MFWD 105	6,190	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'-7'	MFWD 105	1,280	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	8'-10'	MFWD 105	4,010	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	12'-16'	MFWD 105	10,790	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-38(250)	MFWD 190	30,500	200	10	0.257	3.93	5.94	1.96	1.65	13.51	3.70	9.78	26.99
Boll Buggy	4R-38(350)	MFWD 190	30,500	200	10	0.257	3.93	5.94	1.96	1.65	13.51	3.70	9.78	26.99
Boll Buggy	4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.63	3.97	1.31	1.10	9.03	2.47	6.53	18.04
Boll Buggy	6R-30(355)	MFWD 190	30,500	200	10	0.218	3.33	5.03	1.66	1.40	11.43	3.13	8.28	22.85
Boll Buggy	6R-38(355)	MFWD 190	30,500	200	10	0.172	2.63	3.97	1.31	1.10	9.03	2.47	6.53	18.04
Chisel Plow-Folding	24'	MFWD 190	45,200	150	12	0.076	1.16	1.76	1.24	0.49	4.67	1.99	2.90	9.56
Chisel Plow-Folding	32'	MFWD 225	58,400	150	12	0.057	0.88	1.57	1.21	0.44	4.12	1.94	2.63	8.71
Chisel Plow-Folding	42'	MFWD 225	67,000	150	12	0.044	0.67	1.20	1.06	0.34	3.28	1.70	2.01	6.99
Chisel Plow-Folding	50'	MFWD 225	88,800	150	12	0.036	0.56	1.01	1.18	0.28	3.04	1.89	1.68	6.63
Chisel Plow-Folding	61'	MFWD 225	102,400	150	12	0.030	0.46	0.82	1.12	0.23	2.64	1.79	1.38	5.82
Chisel Plow-Rigid	10'	MFWD 170	7,930	150	12	0.184	2.82	3.81	0.52	0.94	8.11	0.84	5.58	14.54
Chisel Plow-Rigid	15'	2WD 130	13,800	150	12	0.123	1.88	1.94	0.61	0.45	4.89	0.98	2.53	8.41
Chisel Plow-Rigid	20'	MFWD 225	13,400	150	12	0.102	1.56	2.80	0.49	0.79	5.66	0.79	4.69	11.15
Cultivate	4R-30	2WD 105	15,800	150	10	0.206	3.14	2.63	0.86	0.48	7.13	2.13	2.69	11.96
Cultivate	4R-38	2WD 105	16,000	150	10	0.162	2.47	2.07	0.69	0.34	5.58	1.70	1.90	9.19
Cultivate	6R-30	MFWD 150	19,700	150	10	0.137	2.09	2.50	0.72	0.61	5.94	1.77	3.44	11.16
Cultivate	6R-38	MFWD 150	20,600	150	10	0.108	1.65	1.97	0.59	0.48	4.71	1.46	2.71	8.90
Cultivate	8R-30	MFWD 190	25,100	150	10	0.103	1.57	2.38	0.69	0.66	5.30	1.69	3.91	10.91
Cultivate	8R-38	MFWD 190	30,200	150	10	0.073	1.12	1.70	0.59	0.47	3.89	1.45	2.79	8.14
Cultivate	8R-38 2x1	MFWD 190	46,300	150	10	0.054	0.82	1.25	0.67	0.34	3.10	1.64	2.06	6.80
Cultivate	12R-30	MFWD 225	45,300	150	10	0.068	1.04	1.87	0.83	0.53	4.29	2.04	3.14	9.47
Cultivate	12R-38	MFWD 225	46,300	150	10	0.054	0.82	1.48	0.67	0.42	3.40	1.64	2.48	7.53
Cultivate	16R-30	MFWD 225	65,500	150	10	0.051	0.78	1.40	0.90	0.39	3.49	2.21	2.35	8.06
Cultivate & Post	4R-30	2WD 105	21,100	150	10	0.220	4.35	2.80	1.23	0.46	8.86	3.04	2.58	14.48
Cultivate & Post	4R-38	2WD 105	21,300	150	10	0.173	3.42	2.20	0.98	0.36	6.98	2.41	2.03	11.44

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022 (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	25,100	150	10	0.146	2.90	2.67	0.98	0.65	7.21	2.41	3.67	13.30
Cultivate & Post	6R-38	MFWD 150	25,900	150	10	0.115	2.29	2.10	0.79	0.51	5.71	1.96	2.90	10.58
Cultivate & Post	8R-30	MFWD 190	30,400	150	10	0.110	2.17	2.53	0.89	0.70	6.31	2.19	4.17	12.68
Cultivate & Post	8R-38	MFWD 190	35,500	150	10	0.086	1.72	2.00	0.82	0.55	5.11	2.02	3.30	10.43
Cultivate & Post	8R-38 2x1	MFWD 190	51,600	150	10	0.057	1.14	1.33	0.79	0.37	3.65	1.95	2.19	7.80
Cultivate & Post	12R-30	MFWD 225	50,600	150	10	0.073	1.45	2.00	0.98	0.56	5.01	2.43	3.35	10.79
Cultivate & Post	12R-38	MFWD 225	51,600	150	10	0.057	1.14	1.58	0.79	0.44	3.97	1.95	2.64	8.57
Cultivate & Post	16R-30	MFWD 225	70,800	150	10	0.055	1.08	1.50	1.03	0.42	4.05	2.55	2.51	9.12
Disk & Incorporate	14'	2WD 130	32,200	200	10	0.149	2.96	2.36	1.44	0.54	7.32	2.36	3.07	12.76
Disk & Incorporate	20'	MFWD 190	79,300	200	10	0.092	1.83	2.13	2.19	0.59	6.75	3.60	3.50	13.86
Disk & Incorporate	24'	MFWD 190	52,200	200	10	0.087	1.72	2.01	1.36	0.56	5.67	2.23	3.31	11.22
Disk & Incorporate	28'	MFWD 225	62,300	200	10	0.074	1.48	2.04	1.39	0.57	5.50	2.29	3.41	11.21
Disk & Incorporate	32'	MFWD 225	67,900	200	10	0.065	1.29	1.78	1.33	0.50	4.92	2.18	2.99	10.10
Disk Harrow	14'	2WD 130	26,900	180	10	0.140	2.14	2.21	1.04	0.51	5.92	2.06	2.88	10.86
Disk Harrow	20'	MFWD 190	47,100	180	10	0.098	1.49	2.26	1.28	0.63	5.68	2.52	3.72	11.93
Disk Harrow	24'	MFWD 190	46,900	180	10	0.081	1.24	1.88	1.06	0.52	4.73	2.09	3.10	9.93
Disk Harrow	28'	MFWD 225	56,900	180	10	0.070	1.07	1.91	1.10	0.54	4.64	2.17	3.20	10.02
Disk Harrow	32'	MFWD 225	62,600	180	10	0.061	0.93	1.67	1.06	0.47	4.15	2.09	2.80	9.06
Disk Harrow	42'	MFWD 225	110,100	180	10	0.046	0.71	1.27	1.43	0.36	3.78	2.81	2.13	8.73
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.14	1.27	0.65	0.18	4.26	1.27	1.05	6.59
Disk Heavy	14'	MFWD 150	26,900	180	10	0.145	2.22	2.65	1.09	0.65	6.63	2.14	3.65	12.43
Disk Heavy	20'	MFWD 190	73,900	180	10	0.097	1.48	2.24	1.99	0.62	6.35	3.92	3.69	13.97
Disk Heavy	28'	MFWD 225	56,900	180	10	0.075	1.15	2.06	1.19	0.58	5.00	2.35	3.45	10.81
Disk Ripper	15'	MFWD 225	50,800	180	10	0.136	2.08	3.72	1.92	1.05	8.78	3.77	6.22	18.78
Ditcher		2WD 130	6,480	200	10	0.020	0.30	0.31	0.05	0.07	0.74	0.06	0.41	1.22
Ditcher (1m/160a)		2WD 130	6,480	200	10	0.009	0.14	0.14	0.02	0.03	0.34	0.02	0.19	0.57
Fert Appl (Liquid)	4R-38	MFWD 150	19,000	150	8	0.154	3.06	2.81	1.95	0.69	8.53	2.05	3.87	14.46
Fert Appl (Liquid)	6R-30	MFWD 170	19,800	150	8	0.130	2.59	2.70	1.72	0.67	7.69	1.81	3.95	13.47
Fert Appl (Liquid)	6R-38	MFWD 170	19,800	150	8	0.103	2.04	2.13	1.36	0.52	6.07	1.43	3.12	10.63
Fert Appl (Liquid)	8R-30	MFWD 190	20,100	150	8	0.098	1.94	2.26	1.31	0.63	6.15	1.38	3.72	11.27
Fert Appl (Liquid)	8R-38	MFWD 190	22,600	150	8	0.077	1.53	1.79	1.16	0.49	4.99	1.22	2.94	9.17
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	25,200	150	8	0.051	1.02	1.19	0.86	0.33	3.41	0.91	1.96	6.29
Fert Appl (Liquid)	12R-30	MFWD 225	25,900	150	8	0.078	1.55	2.14	1.35	0.60	5.66	1.42	3.58	10.68
Fert Appl (Liquid)	12R-38	MFWD 225	23,700	150	8	0.051	1.02	1.41	0.81	0.40	3.65	0.85	2.36	6.87
Field Cult & Inc	42'	MFWD 225	70,900	100	10	0.037	0.74	1.03	0.66	0.29	2.74	2.63	1.72	7.10
Field Cult & Inc	50'	MFWD 225	76,700	100	10	0.031	0.62	0.86	0.60	0.24	2.34	2.39	1.44	6.19
Field Cult & Inc Fld	24'	MFWD 170	37,200	100	10	0.066	1.30	1.36	0.61	0.33	3.62	2.41	1.99	8.04
Field Cult & Inc Fld	32'	MFWD 190	49,800	100	10	0.049	0.98	1.14	0.61	0.31	3.06	2.42	1.88	7.37
Field Cult & Inc Rdg	12'	2WD 150	18,200	100	10	0.132	2.61	2.40	0.60	0.47	6.10	2.36	2.68	11.16
Field Cultivate Fld	24'	MFWD 170	31,800	100	10	0.062	0.95	1.28	0.49	0.31	3.04	1.94	1.87	6.87
Field Cultivate Fld	32'	MFWD 190	44,400	100	10	0.046	0.71	1.07	0.51	0.30	2.60	2.03	1.77	6.41
Field Cultivate Fld	42'	MFWD 225	60,600	100	10	0.035	0.54	0.97	0.53	0.27	2.32	2.11	1.62	6.07
Field Cultivate Fld	50'	MFWD 225	67,600	100	10	0.029	0.45	0.81	0.50	0.23	2.00	1.98	1.36	5.35
Field Cultivate Rdg	12'	2WD 150	12,900	100	10	0.124	1.90	2.26	0.40	0.45	5.02	1.57	2.53	9.12
Grain Cart Corn	500 bu	MFWD 190	29,100	200	12	0.025	0.38	0.58	0.19	0.16	1.33	0.31	0.96	2.61
Grain Cart Corn	700 bu	MFWD 190	44,900	200	12	0.025	0.38	0.58	0.30	0.16	1.44	0.49	0.96	2.89
Grain Cart Corn	1000 bu	MFWD 225	59,400	200	12	0.025	0.38	0.69	0.40	0.19	1.68	0.65	1.15	3.48
Grain Cart Rice	500 bu	MFWD 190	29,100	200	12	0.062	0.95	1.44	0.49	0.40	3.29	0.78	2.37	6.45
Grain Cart Rice	700 bu	MFWD 190	44,900	200	12	0.055	0.83	1.26	0.66	0.35	3.13	1.06	2.08	6.28
Grain Cart Rice	1000 bu	MFWD 190	59,400	200	12	0.045	0.69	1.05	0.73	0.29	2.79	1.17	1.73	5.70
Grain Cart Soybean	500 bu	MFWD 190	29,100	200	12	0.025	0.38	0.58	0.20	0.16	1.34	0.32	0.96	2.63
Grain Cart Soybean	700 bu	MFWD 190	44,900	200	12	0.021	0.32	0.49	0.25	0.13	1.21	0.41	0.80	2.42
Grain Cart Soybean	1000 bu	MFWD 190	59,400	200	12	0.021	0.32	0.49	0.34	0.13	1.29	0.54	0.80	2.64
Grain Cart Wht/Sor	500 bu	MFWD 190	29,100	200	12	0.025	0.38	0.58	0.20	0.16	1.34	0.32	0.96	2.63
Grain Cart Wht/Sor	700 bu	MFWD 190	44,900	200	12	0.021	0.32	0.49	0.25	0.13	1.21	0.41	0.80	2.42
Grain Cart Wht/Sor	1000 bu	MFWD 190	59,400	200	12	0.021	0.32	0.49	0.34	0.13	1.29	0.54	0.80	2.64
Grain Drill	10'	2WD 130	28,700	150	8	0.188	4.58	2.97	2.02	0.69	10.28	3.59	3.87	17.76
Grain Drill	12'	2WD 130	28,200	150	8	0.157	3.82	2.48	1.66	0.57	8.54	2.94	3.23	14.72
Grain Drill	15'	MFWD 150	34,400	150	8	0.125	3.05	2.29	1.62	0.56	7.53	2.87	3.14	13.55
Grain Drill	20'	MFWD 170	41,900	150	8	0.094	2.29	1.94	1.48	0.48	6.20	2.62	2.84	11.68
Grain Drill	24'	MFWD 190	67,300	150	8	0.078	1.91	1.81	1.98	0.50	6.21	3.51	2.98	12.70
Grain Drill	30'	MFWD 225	68,900	150	8	0.062	1.52	1.71	1.62	0.48	5.35	2.87	2.87	11.10
Grain Drill	35'	MFWD 225	93,600	150	8	0.053	1.31	1.47	1.89	0.41	5.09	3.35	2.46	10.90
Grain Drill & Pre	10'	2WD 130	34,000	150	8	0.203	4.94	3.20	2.58	0.74	11.48	4.58	4.17	20.24
Grain Drill & Pre	12'	2WD 130	33,500	150	8	0.169	4.11	2.67	2.12	0.62	9.53	3.76	3.48	16.78
Grain Drill & Pre	15'	MFWD 150	39,800	150	8	0.135	3.29	2.46	2.02	0.60	8.38	3.58	3.39	15.35
Grain Drill & Pre	20'	MFWD 170	47,200	150	8	0.101	2.47	2.09	1.79	0.52	6.88	3.18	3.06	13.13
Grain Drill & Pre	24'	MFWD 190	72,600	150	8	0.084	2.05	1.95	2.30	0.54	6.86	4.08	3.21	14.15
Grain Drill & Pre	30'	MFWD 225	74,200	150	8	0.067	1.64	1.85	1.88	0.52	5.90	3.33	3.09	12.33
Grain Drill & Pre	35'	MFWD 225	104,000	150	8	0.058	1.41	1.58	2.26	0.44	5.70	4.01	2.65	12.37
Grain Drill & Pre T	8R-38	MFWD 225	57,000	150	8	0.062	1.52	1.71	1.34	0.48	5.07	2.38	2.87	10.33
Harrow - Folding	24'	MFWD 190	13,800	200	10	0.064	0.98	1.49	0.31	0.41	3.21	0.43	2.45	6.10
Harrow - Folding	30'	MFWD 190	15,300	200	10	0.051	0.79	1.19	0.27	0.33	2.59	0.38	1.96	4.94
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.59	0.89	0.28	0.24	2.02	0.40	1.47	3.90
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.49	0.88	0.29	0.25	1.92	0.41	1.47	3.81
Header - Corn	6R-30	265 hp	54,200	300	8	0.170	2.60	5.48	2.30	6.93	17.32	3.23	25.73	46.29
Header - Corn	6R-38	265 hp	53,800	300	8	0.134	2.05	4.32	1.80	5.47	13.66	2.53	20.31	36.51
Header - Corn	8R-30	265 hp	71,200	300	8	0.127	1.95	4.11	2.27	5.20	13.53	3.18	19.30	36.02

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022 (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	72,200	300	8	0.100	1.54	3.98	1.82	4.35	11.70	2.55	16.14	30.40
Header - Corn	12R-20	325 hp	105,000	300	8	0.127	1.95	5.04	3.35	5.50	15.84	4.69	20.42	40.97
Header - Corn	12R-30	325 hp	118,000	300	8	0.085	1.30	3.36	2.51	3.66	10.84	3.52	13.61	27.97
Header - Draper (CL)	25' Rigid	265 hp	74,100	300	8	0.203	3.10	6.53	3.44	8.27	21.35	5.00	30.69	57.05
Header - Draper (CL)	30' Rigid	325 hp	78,600	300	8	0.169	2.58	6.68	3.04	7.29	19.60	4.42	27.06	51.09
Header - Draper (CL)	36' Rigid	355 hp	82,300	300	8	0.141	2.15	6.08	2.65	6.43	17.32	3.85	23.87	45.05
Header - Draper (CL)	40' Rigid	425 hp	86,900	300	8	0.126	1.93	6.55	2.52	6.27	17.29	3.66	23.29	44.25
Header - Draper (SL)	25' Rigid	325 hp	74,100	300	8	0.176	2.68	6.94	2.98	7.58	20.20	4.33	28.14	52.68
Header - Draper (SL)	30' Rigid	325 hp	78,600	300	8	0.146	2.23	5.79	2.64	6.32	16.99	3.83	23.45	44.27
Header - Draper (SL)	36' Rigid	355 hp	82,300	300	8	0.122	1.86	5.26	2.30	5.57	15.01	3.34	20.68	39.04
Header - Draper (SL)	40' Rigid	425 hp	86,900	300	8	0.110	1.67	5.67	2.19	5.44	14.98	3.17	20.18	38.35
Header -RiceStrp(CL)	20'	265 hp	50,600	300	8	0.253	3.87	8.17	3.21	10.33	25.59	4.50	38.36	68.46
Header -RiceStrp(CL)	24'	325 hp	54,000	300	8	0.211	3.23	8.35	2.85	9.11	23.55	4.00	33.82	61.38
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.42	6.26	2.41	6.83	17.93	3.37	25.37	46.68
Header -RiceStrp(SL)	20'	265 hp	50,600	300	8	0.220	3.35	7.08	2.78	8.96	22.18	3.90	33.25	59.33
Header -RiceStrp(SL)	24'	325 hp	54,000	300	8	0.183	2.79	7.23	2.47	7.90	20.41	3.46	29.31	53.20
Header -RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	2.09	5.42	2.09	5.92	15.54	2.92	21.98	40.46
Header -Soybean	22' Flex	265 hp	33,800	300	8	0.116	1.77	3.73	0.98	4.72	11.21	1.37	17.54	30.14
Header -Soybean	25' Flex	325 hp	37,000	300	8	0.102	1.56	4.03	0.94	4.40	10.94	1.32	16.33	28.60
Header -Soybean	30' Flex	325 hp	44,700	300	8	0.085	1.30	3.36	0.95	3.66	9.28	1.33	13.61	24.23
Header -Soybean	35' Flex	355 hp	52,200	300	8	0.072	1.11	3.14	0.95	3.32	8.54	1.33	12.35	22.23
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.77	3.73	0.57	4.72	10.81	0.80	17.54	29.16
Header Wheat/Sorghum	25' Rigid	325 hp	25,400	300	8	0.102	1.56	4.03	0.64	4.40	10.64	0.90	16.33	27.89
Header Wheat/Sorghum	30' Rigid	325 hp	29,100	300	8	0.085	1.30	3.36	0.61	3.66	8.95	0.86	13.61	23.43
Land Plane	50'x16'	MFWD 190	11,100	200	10	0.151	2.31	3.50	0.33	0.97	7.12	0.82	5.75	13.71
Levee Pull & Seed	8 Blade	MFWD 170	12,000	100	10	0.003	0.05	0.07	0.00	0.01	0.15	0.04	0.10	0.30
Levee Pull (1m/80a)	8 blade	MFWD 170	8,760	100	10	0.003	0.05	0.07	0.00	0.01	0.15	0.03	0.10	0.29
Levee Splitter (1/80	32"	MFWD 150	3,860	100	10	0.004	0.06	0.07	0.00	0.01	0.16	0.01	0.10	0.28
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	6.27	5.94	2.23	1.65	16.11	4.21	9.78	30.11
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	6.27	5.94	2.23	1.65	16.11	4.21	9.78	30.11
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	4.19	3.97	1.49	1.10	10.77	2.81	6.53	20.12
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	5.31	5.03	1.89	1.40	13.64	3.56	8.28	25.49
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	4.19	3.97	1.49	1.10	10.77	2.81	6.53	20.12
NT Grain Drill	10'	2WD 130	34,900	150	8	0.235	5.73	3.72	3.08	0.86	13.40	5.46	4.84	23.72
NT Grain Drill	12'	2WD 130	46,900	150	8	0.163	3.98	2.58	2.87	0.60	10.04	5.10	3.36	18.51
NT Grain Drill	15'	MFWD 150	56,900	150	8	0.130	3.18	2.38	2.79	0.58	8.95	4.95	3.28	17.18
NT Grain Drill	20'	MFWD 170	68,700	150	8	0.098	2.38	2.02	2.53	0.50	7.45	4.48	2.96	14.90
NT Grain Drill	24'	MFWD 190	98,000	150	8	0.081	1.99	1.88	3.00	0.52	7.41	5.33	3.10	15.85
NT Grain Drill	30'	MFWD 225	104,300	150	8	0.065	1.59	1.78	2.56	0.50	6.45	4.53	2.99	13.98
NT Grain Drill & Pre	10'	2WD 130	40,200	150	8	0.211	5.14	3.34	3.18	0.77	12.45	5.65	4.35	22.45
NT Grain Drill & Pre	12'	2WD 130	52,300	150	8	0.176	4.28	2.78	3.45	0.64	11.17	6.12	3.62	20.92
NT Grain Drill & Pre	15'	MFWD 150	62,200	150	8	0.141	3.43	2.56	3.28	0.63	9.92	5.82	3.53	19.28
NT Grain Drill & Pre	20'	MFWD 170	74,000	150	8	0.105	2.57	2.18	2.93	0.54	8.23	5.20	3.19	16.63
NT Grain Drill & Pre	24'	MFWD 190	103,000	150	8	0.088	2.14	2.03	3.40	0.56	8.15	6.03	3.34	17.52
NT Grain Drill & Pre	30'	MFWD 225	110,000	150	8	0.070	1.71	1.92	2.90	0.54	7.09	5.15	3.22	15.47
NT Plant&Pre-Folding	8R-38	MFWD 170	67,800	150	8	0.083	2.03	1.72	2.12	0.42	6.31	3.76	2.52	12.60
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	107,000	150	8	0.055	1.35	1.14	2.23	0.28	5.02	3.95	1.68	10.66
NT Plant&Pre-Folding	12R-20	MFWD 190	82,800	150	8	0.105	2.57	2.44	3.28	0.68	8.97	5.82	4.01	18.81
NT Plant&Pre-Folding	12R-30	MFWD 190	94,600	150	8	0.070	1.71	1.62	2.50	0.45	6.29	4.43	2.67	13.40
NT Plant&Pre-Folding	12R-38	MFWD 190	107,000	150	8	0.055	1.35	1.28	2.23	0.35	5.23	3.95	2.11	11.30
NT Plant&Pre-Folding	16R-30	MFWD 190	142,000	150	8	0.052	1.28	1.22	2.81	0.34	5.66	4.99	2.00	12.66
NT Plant&Pre-Folding	23R-15	MFWD 190	192,000	150	8	0.073	1.78	1.69	5.28	0.47	9.24	9.37	2.78	21.40
NT Plant&Pre-Folding	24R-20	MFWD 190	214,000	150	8	0.052	1.28	1.22	4.24	0.34	7.09	7.52	2.00	16.61
NT Plant&Pre-Folding	24R-30	MFWD 190	223,000	150	8	0.035	0.85	0.81	2.94	0.22	4.84	5.22	1.33	11.41
NT Plant&Pre-Folding	31R-15	MFWD 225	232,000	150	8	0.054	1.32	1.49	4.75	0.42	8.00	8.42	2.49	18.92
NT Plant&Pre-Folding	32R-15	MFWD 225	230,000	150	8	0.052	1.28	1.44	4.56	0.40	7.70	8.08	2.41	18.20
NT Plant&Pre-Rigid	4R-30	2WD 130	33,800	150	8	0.211	5.14	3.34	2.68	0.77	11.94	4.75	4.35	21.04
NT Plant&Pre-Rigid	4R-38	2WD 130	34,800	150	8	0.166	4.05	2.63	2.17	0.61	9.46	3.85	3.42	16.74
NT Plant&Pre-Rigid	6R-30	MFWD 150	43,600	150	8	0.141	3.43	2.56	2.30	0.63	8.93	4.08	3.53	16.55
NT Plant&Pre-Rigid	6R-38	MFWD 150	42,700	150	8	0.111	2.70	2.02	1.78	0.49	7.01	3.15	2.78	12.96
NT Plant&Pre-Rigid	8R-30	MFWD 170	54,200	150	8	0.105	2.57	2.18	2.14	0.54	7.44	3.80	3.19	14.45
NT Plant&Pre-Rigid	8R-38	MFWD 170	52,100	150	8	0.083	2.03	1.72	1.63	0.42	5.82	2.89	2.52	11.24
NT Plant&Pre-Rigid	11R-15	MFWD 170	65,100	150	8	0.143	3.50	2.97	3.51	0.73	10.72	6.22	4.34	21.29
NT Plant&Pre-Rigid	11R-20	MFWD 170	64,300	150	8	0.115	2.81	2.38	2.78	0.59	8.57	4.93	3.49	17.01
NT Plant&Pre-Rigid	12R-20	MFWD 190	66,600	150	8	0.105	2.57	2.44	2.64	0.68	8.33	4.68	4.01	17.03
NT Plant&Pre-Rigid	12R-30	MFWD 190	86,500	150	8	0.070	1.71	1.62	2.28	0.45	6.08	4.05	2.67	12.81
NT Plant&Pre-Rigid	15R-15	MFWD 190	87,300	150	8	0.113	2.75	2.61	3.70	0.72	9.79	6.56	4.29	20.65
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	173,000	150	8	0.055	1.35	1.52	3.61	0.43	6.91	6.40	2.54	15.86
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	134,900	150	8	0.083	2.03	2.28	4.22	0.64	9.19	7.49	3.82	20.51
NT Plant-Folding	8R-38	MFWD 170	62,500	150	8	0.077	1.88	1.60	1.81	0.39	5.70	3.22	2.34	11.28
NT Plant-Folding	8R-38 2x1	MFWD 170	96,300	150	8	0.051	1.25	1.06	1.86	0.26	4.45	3.30	1.56	9.32
NT Plant-Folding	12R-20	MFWD 190	77,500	150	8	0.098	2.38	2.26	2.85	0.63	8.14	5.05	3.72	16.92
NT Plant-Folding	12R-30	MFWD 190	84,300	150	8	0.065	1.59	1.51	2.06	0.42	5.59	3.66	2.48	11.74
NT Plant-Folding	12R-38	MFWD 190	96,300	150	8	0.051	1.25	1.19	1.86	0.33	4.65	3.30	1.96	9.92
NT Plant-Folding	16R-30	MFWD 190	132,000	150	8	0.049	1.19	1.13	2.43	0.31	5.07	4.30	1.86	11.24
NT Plant-Folding	23R-15	MFWD 190	182,000	150	8	0.068	1.65	1.57	4.65	0.43	8.32	8.24	2.58	19.16
NT Plant-Folding	24R-20	MFWD 190	204,000	150	8	0.049	1.19	1.13	3.75	0.31	6.40	6.65	1.86	14.92
NT Plant-Folding	24R-30	MFWD 190	208,000	150	8	0.032	0.79	0.75	2.55	0.21	4.31	4.52	1.24	10.08
NT Plant-Folding	31R-15	MFWD 225	222,000	150	8	0.050	1.23	1.38	4.22	0.39	7.24	7.48	2.31	17.05

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022 (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	219,000	150	8	0.049	1.19	1.34	4.03	0.38	6.95	7.14	2.24	16.34
NT Plant-Rigid	4R-30	2WD 130	28,400	150	8	0.196	4.77	3.10	2.09	0.72	10.69	3.70	4.04	18.44
NT Plant-Rigid	4R-38	2WD 130	29,500	150	8	0.154	3.76	2.44	1.71	0.56	8.48	3.03	3.18	14.69
NT Plant-Rigid	6R-30	MFWD 150	38,300	150	8	0.130	3.18	2.38	1.88	0.58	8.03	3.33	3.28	14.65
NT Plant-Rigid	6R-38	MFWD 150	37,300	150	8	0.103	2.51	1.88	1.44	0.46	6.30	2.56	2.58	11.45
NT Plant-Rigid	8R-30	MFWD 170	48,900	150	8	0.098	2.38	2.02	1.80	0.50	6.72	3.19	2.96	12.88
NT Plant-Rigid	8R-38	MFWD 170	46,800	150	8	0.077	1.88	1.60	1.36	0.39	5.25	2.41	2.34	10.01
NT Plant-Rigid	11R-15	MFWD 170	59,700	150	8	0.133	3.25	2.75	2.99	0.68	9.68	5.30	4.03	19.02
NT Plant-Rigid	11R-20	MFWD 170	59,000	150	8	0.107	2.61	2.21	2.37	0.55	7.75	4.20	3.24	15.20
NT Plant-Rigid	12R-20	MFWD 190	61,200	150	8	0.098	2.38	2.26	2.25	0.63	7.54	3.99	3.72	15.26
NT Plant-Rigid	12R-30	MFWD 190	76,200	150	8	0.065	1.59	1.51	1.87	0.42	5.39	3.31	2.48	11.19
NT Plant-Rigid	15R-15	MFWD 190	77,000	150	8	0.105	2.55	2.42	3.03	0.67	8.68	5.37	3.98	18.05
NT Plant-TwinRow	12R-30/40	MFWD 225	163,000	150	8	0.051	1.25	1.41	3.15	0.40	6.23	5.59	2.36	14.19
NT Plant-TwinRow	8R-30/40	MFWD 225	130,000	150	8	0.077	1.88	2.12	3.78	0.60	8.39	6.70	3.54	18.65
Peanut Cond.& Lifter	6-Row	MFWD 190	15,200	300	20	0.100	1.52	2.30	0.25	0.64	4.73	0.33	3.79	8.86
Peanut Conditioner	6-Row	MFWD 190	18,500	300	20	0.100	1.52	2.30	0.37	0.64	4.84	0.35	3.79	8.99
Peanut Dig/Invertor	4R-30	MFWD 190	38,600	300	15	0.235	3.60	5.44	2.26	1.51	12.82	2.50	8.95	24.28
Peanut Dig/Invertor	4R-38	MFWD 190	38,600	300	15	0.186	2.84	4.29	1.78	1.19	10.12	1.97	7.06	19.17
Peanut Dig/Invertor	6R-38	MFWD 190	54,700	300	15	0.124	1.89	2.86	1.19	0.79	6.74	1.86	4.70	13.32
Peanut Dump Cart	6-Row	MFWD 190	57,400	300	20	0.310	4.73	7.15	1.03	1.99	14.92	3.76	11.76	30.45
Peanut Harvester	4R-30	MFWD 225	160,000	300	20	0.849	12.97	23.23	7.70	6.58	50.50	25.74	38.83	115.08
Peanut Harvester	4R-38	MFWD 225	160,000	300	20	0.934	14.27	25.54	8.47	7.24	55.53	29.98	42.70	128.21
Peanut Harvester	6R-38	MFWD 225	175,000	300	20	0.625	9.54	17.08	5.28	4.84	36.75	21.92	28.55	87.24
Peanut Lifter	6-Row	MFWD 225	7,440	300	20	0.100	1.52	2.73	0.15	0.77	5.18	0.14	4.56	9.89
Peanut Plt&Pre Fold.	12R-38	MFWD 190	94,300	150	8	0.080	1.95	1.85	2.84	0.51	7.17	5.03	3.05	15.26
Peanut Plt&Pre Rigid	8R-30	MFWD 190	46,000	150	8	0.152	3.71	3.52	2.63	0.98	10.86	4.67	5.79	21.33
Peanut Plt&Pre Rigid	8R-38	MFWD 190	43,900	150	8	0.120	2.93	2.78	1.98	0.77	8.49	3.52	4.58	16.59
Peanut Ptlt&PreTwin	8R-30/40	MFWD 190	127,000	150	8	0.120	2.93	2.78	5.75	0.77	12.25	10.19	4.58	27.03
Pipe Spool 160ac	1/4m roll	2WD 130	6,500	15	12	0.003	0.10	0.04	0.01	0.01	0.17	0.11	0.06	0.35
Pipe Trailer 1m/160a	30'	2WD 130	1,980	100	15	0.003	0.19	0.05	0.00	0.01	0.26	0.00	0.07	0.35
Plant & Pre-Folding	8R-38	MFWD 170	59,600	150	8	0.080	1.95	1.65	1.79	0.41	5.81	3.17	2.42	11.42
Plant & Pre-Folding	8R-38 2x1	MFWD 170	94,300	150	8	0.053	1.30	1.10	1.88	0.27	4.56	3.34	1.61	9.53
Plant & Pre-Folding	12R-20	MFWD 190	70,600	150	8	0.101	2.47	2.34	2.68	0.65	8.15	4.76	3.85	16.77
Plant & Pre-Folding	12R-30	MFWD 190	82,400	150	8	0.067	1.64	1.56	2.09	0.43	5.73	3.70	2.56	12.01
Plant & Pre-Folding	12R-38	MFWD 190	94,300	150	8	0.053	1.30	1.23	1.88	0.34	4.76	3.34	2.02	10.14
Plant & Pre-Folding	16R-30	MFWD 190	126,000	150	8	0.050	1.23	1.17	2.39	0.32	5.13	4.25	1.92	11.31
Plant & Pre-Folding	23R-15	MFWD 190	169,000	150	8	0.070	1.71	1.62	4.46	0.45	8.26	7.91	2.67	18.86
Plant & Pre-Folding	24R-20	MFWD 190	190,000	150	8	0.050	1.23	1.17	3.61	0.32	6.35	6.41	1.92	14.68
Plant & Pre-Folding	24R-30	MFWD 190	198,000	150	8	0.033	0.82	0.78	2.51	0.21	4.33	4.45	1.28	10.07
Plant & Pre-Folding	31R-15	MFWD 225	200,000	150	8	0.052	1.27	1.43	3.93	0.40	7.05	6.97	2.39	16.42
Plant & Pre-Folding	32R-15	MFWD 225	197,000	150	8	0.050	1.23	1.38	3.75	0.39	6.76	6.64	2.31	15.73
Plant & Pre-Rigid	4R-30	2WD 130	29,700	150	8	0.203	4.94	3.20	2.26	0.74	11.15	4.00	4.17	19.34
Plant & Pre-Rigid	4R-38	2WD 130	30,800	150	8	0.159	3.89	2.52	1.84	0.58	8.84	3.27	3.28	15.41
Plant & Pre-Rigid	6R-30	MFWD 150	37,500	150	8	0.135	3.29	2.46	1.90	0.60	8.26	3.37	3.39	15.03
Plant & Pre-Rigid	6R-38	MFWD 150	36,600	150	8	0.106	2.60	1.94	1.46	0.47	6.49	2.59	2.67	11.76
Plant & Pre-Rigid	8R-30	MFWD 170	46,000	150	8	0.101	2.47	2.09	1.75	0.52	6.83	3.10	3.06	13.01
Plant & Pre-Rigid	8R-38	MFWD 170	43,900	150	8	0.080	1.95	1.65	1.32	0.41	5.34	2.34	2.42	10.11
Plant & Pre-Rigid	11R-15	MFWD 170	53,900	150	8	0.148	3.60	3.06	2.99	0.75	10.42	5.30	4.47	20.21
Plant & Pre-Rigid	11R-20	MFWD 170	53,100	150	8	0.110	2.69	2.29	2.20	0.56	7.76	3.91	3.35	15.03
Plant & Pre-Rigid	12R-20	MFWD 190	54,300	150	8	0.101	2.47	2.34	2.06	0.65	7.53	3.66	3.85	15.05
Plant & Pre-Rigid	12R-30	MFWD 190	74,200	150	8	0.067	1.64	1.56	1.88	0.43	5.52	3.33	2.56	11.43
Plant & Pre-Rigid	15R-15	MFWD 190	72,000	150	8	0.108	2.64	2.50	2.93	0.69	8.78	5.19	4.12	18.09
Plant & Pre-TwinRow	12R-30/40	MFWD 225	160,700	150	8	0.053	1.30	1.46	3.22	0.41	6.39	5.70	2.44	14.54
Plant & Pre-TwinRow	8R-30/40	MFWD 225	127,000	150	8	0.080	1.95	2.19	3.82	0.62	8.59	6.77	3.66	19.03
Plant - Folding	8R-38	MFWD 170	54,300	150	8	0.074	1.81	1.53	1.51	0.38	5.25	2.68	2.25	10.19
Plant - Folding	8R-38 2x1	MFWD 170	84,000	150	8	0.049	1.20	1.02	1.56	0.25	4.04	2.77	1.49	8.31
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.29	2.17	2.30	0.60	7.38	4.08	3.57	15.04
Plant - Folding	12R-30	MFWD 190	72,100	150	8	0.062	1.52	1.45	1.69	0.40	5.08	3.01	2.38	10.48
Plant - Folding	12R-38	MFWD 190	84,000	150	8	0.049	1.20	1.14	1.56	0.31	4.23	2.77	1.88	8.88
Plant - Folding	16R-30	MFWD 190	115,000	150	8	0.047	1.14	1.08	2.03	0.30	4.57	3.60	1.78	9.96
Plant - Folding	23R-15	MFWD 190	158,000	150	8	0.065	1.59	1.51	3.87	0.42	7.40	6.87	2.48	16.76
Plant - Folding	24R-20	MFWD 190	179,000	150	8	0.047	1.14	1.08	3.16	0.30	5.70	5.60	1.78	13.09
Plant - Folding	24R-30	MFWD 190	184,000	150	8	0.031	0.76	0.72	2.16	0.20	3.86	3.84	1.19	8.89
Plant - Folding	31R-15	MFWD 225	190,000	150	8	0.048	1.18	1.33	3.47	0.37	6.36	6.15	2.22	14.74
Plant - Folding	32R-15	MFWD 225	187,000	150	8	0.047	1.14	1.28	3.30	0.36	6.10	5.85	2.15	14.11
Plant - Rigid	4R-30	2WD 130	24,400	150	8	0.188	4.58	2.97	1.72	0.69	9.98	3.05	3.87	16.91
Plant - Rigid	4R-38	2WD 130	25,400	150	8	0.148	3.61	2.34	1.41	0.54	7.91	2.50	3.05	13.47
Plant - Rigid	6R-30	MFWD 150	32,200	150	8	0.125	3.05	2.29	1.51	0.56	7.42	2.69	3.14	13.26
Plant - Rigid	6R-38	MFWD 150	31,200	150	8	0.099	2.41	1.80	1.16	0.44	5.82	2.05	2.48	10.37
Plant - Rigid	8R-30	MFWD 170	40,700	150	8	0.094	2.29	1.94	1.43	0.48	6.16	2.55	2.84	11.56
Plant - Rigid	8R-38	MFWD 170	38,600	150	8	0.074	1.81	1.53	1.07	0.38	4.81	1.91	2.25	8.97
Plant - Rigid	11R-15	MFWD 170	48,500	150	8	0.137	3.34	2.84	2.50	0.70	9.39	4.43	4.15	17.99
Plant - Rigid	11R-20	MFWD 170	47,800	150	8	0.103	2.50	2.12	1.84	0.52	7.00	3.27	3.11	13.39
Plant - Rigid	12R-20	MFWD 190	49,000	150	8	0.094	2.29	2.17	1.73	0.60	6.80	3.07	3.57	13.45
Plant - Rigid	12R-30	MFWD 190	64,000	150	8	0.062	1.52	1.45	1.50	0.40	4.89	2.67	2.38	9.95
Plant - Rigid	15R-15	2WD 150	61,700	150	8	0.094	2.29	1.71	2.18	0.34	6.53	3.86	1.91	12.32
Plant - TwinRow	12R-30/40	MFWD 225	150,000	150	8	0.049	1.20	1.35	2.79	0.38	5.73	4.94	2.26	12.95
Plant - TwinRow	8R-30/40	MFWD 225	121,000	150	8	0.074	1.81	2.03	3.38	0.57	7.80	5.99	3.40	17.20
Roller/Cultipacker	12'	2WD 130	7,470	300	12	0.124	1.90	1.96	0.21	0.45	4.54	0.27	2.55	7.37

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022 (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	20'	MFWD 150	12,500	300	12	0.074	1.14	1.36	0.22	0.33	3.05	0.27	1.87	5.20
Roller/Cultipacker	30'	MFWD 170	16,900	300	12	0.049	0.75	1.02	0.19	0.25	2.24	0.25	1.50	3.99
Roller/Cultipacker	38'	MFWD 225	24,200	300	12	0.039	0.60	1.07	0.22	0.30	2.20	0.28	1.79	4.28
Roller/Stubble	20'	2WD 50	14,600	300	12	0.074	1.14	0.45	0.25	0.05	1.90	0.32	0.30	2.53
Roller/Stubble	32'	MFWD 225	24,500	300	12	0.046	0.71	1.27	0.26	0.36	2.61	0.34	2.13	5.09
Rotary Cutter	7'	MFWD 130	0	185	10	0.168	2.57	2.65	0.00	0.68	5.91	0.00	3.86	9.78
Rotary Cutter	12'	2WD 150	14,100	185	10	0.098	1.49	1.78	1.12	0.35	4.76	0.73	1.99	7.50
Rotary Cutter-Flex	15'	MFWD 150	21,800	185	10	0.078	1.19	1.43	1.38	0.35	4.37	0.91	1.96	7.24
Rotary Cutter-Flex	20'	MFWD 150	30,100	185	10	0.058	0.89	1.07	1.43	0.26	3.67	0.94	1.47	6.09
Row Cond & Inc-Fold.	26'	MFWD 190	29,200	100	10	0.063	1.25	1.46	0.46	0.40	3.59	1.82	2.40	7.82
Row Cond & Inc-Fold.	38'	MFWD 225	41,800	100	10	0.043	0.85	1.18	0.45	0.33	2.83	1.78	1.98	6.60
Row Cond & Inc-Rigid	13'	2WD 130	13,400	100	10	0.126	2.51	2.00	0.42	0.46	5.40	1.67	2.61	9.69
Row Cond & Inc-Rigid	21'	2WD 170	19,500	100	10	0.078	1.55	1.62	0.38	0.29	3.85	1.50	1.72	7.08
Row Cond & Inc-Rigid	26'	MFWD 190	23,900	100	10	0.026	0.52	0.61	0.15	0.17	1.47	0.62	1.00	3.10
Row Cond Folding	26'	MFWD 225	23,900	100	10	0.059	0.91	1.63	0.35	0.46	3.36	1.40	2.72	7.49
Row Cond Folding	38'	MFWD 225	31,500	100	10	0.040	0.62	1.11	0.32	0.31	2.37	1.26	1.86	5.51
Row Cond Rigid	13'	2WD 130	8,670	100	10	0.119	1.82	1.88	0.25	0.43	4.40	1.01	2.45	7.88
Row Cond Rigid	21'	2WD 170	14,200	100	10	0.073	1.12	1.52	0.26	0.27	3.19	1.03	1.62	5.84
Row Cond Rigid	26'	MFWD 190	18,600	100	10	0.059	0.91	1.37	0.27	0.38	2.95	1.09	2.26	6.31
Row Cond./Roll-Fol	30'	MFWD 190	46,200	160	10	0.062	0.95	1.44	0.72	0.40	3.52	1.77	2.37	7.66
Row Cond./Roll-Fold.	26'	MFWD 190	26,500	160	10	0.072	1.10	1.66	0.47	0.46	3.70	1.17	2.73	7.61
Row Cond./Roll-Fold.	40'	MFWD 225	34,000	160	10	0.046	0.71	1.28	0.39	0.36	2.75	0.97	2.14	5.88
Row Cond./Roll-Rig	21'	MFWD 190	25,800	160	10	0.089	1.36	2.06	0.57	0.57	4.57	1.41	3.38	9.37
Row Cond./Roll-Rig	26'	MFWD 190	28,400	160	10	0.072	1.10	1.66	0.51	0.46	3.74	1.25	2.73	7.73
Spin Spreader	5 ton	MFWD 190	14,500	100	8	0.042	1.02	0.97	0.34	0.27	2.60	0.64	1.59	4.84
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.15	0.51	0.08	0.49	6.25	0.09	1.84	8.19
Spray (ATV)	20'	800 CC	1,690	200	8	0.084	1.67	0.16	0.06	0.16	2.07	0.07	0.59	2.74
Spray (Band)	27' Fold	MFWD 170	5,300	200	8	0.062	1.24	1.29	0.15	0.32	3.01	0.17	1.89	5.08
Spray (Band)	40' Fold	MFWD 170	10,200	200	8	0.042	0.83	0.87	0.20	0.21	2.13	0.22	1.27	3.63
Spray (Band)	50' Fold	MFWD 170	9,160	200	8	0.033	0.67	0.69	0.14	0.17	1.68	0.16	1.02	2.87
Spray (Band)	60' Fold	MFWD 170	14,700	200	8	0.028	0.55	0.58	0.19	0.14	1.48	0.21	0.85	2.55
Spray (Bcast/HB)	13' Rigid	MFWD 150	8,500	200	8	0.130	2.57	2.37	0.51	0.58	6.05	0.58	3.26	9.89
Spray (Bcast/HB)	20' Rigid	MFWD 150	9,960	200	8	0.084	1.67	1.54	0.39	0.37	3.99	0.44	2.11	6.55
Spray (Bcast/HB)	27' Fold	MFWD 170	16,100	200	8	0.062	1.24	1.29	0.47	0.32	3.32	0.53	1.89	5.75
Spray (Bcast/HB)	27' Rigid	MFWD 170	11,700	200	8	0.062	1.24	1.29	0.34	0.32	3.20	0.38	1.89	5.47
Spray (Bcast/HB)	30' Fold	MFWD 170	17,100	200	8	0.056	1.11	1.16	0.45	0.28	3.02	0.50	1.70	5.23
Spray (Bcast/HB)	40' Fold	MFWD 170	19,900	200	8	0.042	0.83	0.87	0.39	0.21	2.32	0.44	1.27	4.04
Spray (Broadcast)	27'	MFWD 170	5,300	200	8	0.062	1.24	1.29	0.15	0.32	3.01	0.17	1.89	5.08
Spray (Broadcast)	40'	MFWD 170	10,200	200	8	0.042	0.83	0.87	0.20	0.21	2.13	0.22	1.27	3.63
Spray (Broadcast)	50'	MFWD 170	9,200	200	8	0.033	0.67	0.69	0.14	0.17	1.68	0.16	1.02	2.87
Spray (Broadcast)	60'	MFWD 170	14,700	200	8	0.028	0.55	0.58	0.19	0.14	1.48	0.21	0.85	2.55
Spray (Direct/Hood)	8R-30	MFWD 170	17,800	200	8	0.084	1.67	1.74	0.70	0.43	4.56	0.79	2.55	7.91
Spray (Direct/Hood)	8R-38	MFWD 170	18,700	200	8	0.066	1.32	1.38	0.58	0.34	3.63	0.65	2.02	6.31
Spray (Direct/Hood)	12R-30	MFWD 170	24,900	200	8	0.056	1.11	1.16	0.65	0.28	3.22	0.73	1.70	5.67
Spray (Direct/Hood)	12R-38	MFWD 170	26,100	200	8	0.044	0.88	0.91	0.54	0.22	2.57	0.61	1.34	4.53
Spray (Direct/Layby)	8R-30	MFWD 170	15,500	200	8	0.084	1.67	1.74	0.61	0.43	4.47	0.68	2.55	7.71
Spray (Direct/Layby)	8R-38	MFWD 170	15,500	200	8	0.066	1.32	1.38	0.48	0.34	3.53	0.54	2.02	6.10
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	22,900	200	8	0.044	0.88	0.91	0.47	0.22	2.50	0.53	1.34	4.38
Spray (Direct/Layby)	12R-30	MFWD 170	22,900	200	8	0.056	1.11	1.16	0.60	0.28	3.17	0.67	1.70	5.55
Spray (Direct/Layby)	12R-38	MFWD 170	22,900	200	8	0.044	0.88	0.91	0.47	0.22	2.50	0.53	1.34	4.38
Spray (Direct/Layby)	16R-20/30	MFWD 225	26,700	200	8	0.062	1.24	1.71	0.78	0.48	4.22	0.87	2.86	7.96
Spray (Levee Leaper)	50'	MFWD 225	13,400	200	8	0.033	0.67	0.92	0.21	0.26	2.07	0.23	1.54	3.85
Spray (Pull Type)	60'	MFWD 225	49,600	200	8	0.028	0.55	0.77	0.65	0.21	2.20	0.73	1.28	4.22
Spray (Pull Type)	80'	MFWD 225	53,300	200	8	0.021	0.41	0.57	0.52	0.16	1.68	0.59	0.96	3.24
Spray (Pull Type)	90'	MFWD 225	54,200	200	8	0.018	0.37	0.51	0.47	0.14	1.50	0.53	0.85	2.90
Spray (Pull Type)	120'	MFWD 225	84,300	200	8	0.014	0.27	0.38	0.55	0.10	1.33	0.62	0.64	2.59
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.67	1.95	0.16	0.54	4.33	0.18	3.21	7.72
Spray (Spot)	27'	MFWD 170	5,300	200	8	0.062	1.24	1.29	0.15	0.32	3.01	0.17	1.89	5.08
Spray (Spot)	40'	MFWD 170	10,200	200	8	0.042	0.83	0.87	0.20	0.21	2.13	0.22	1.27	3.63
Spray (Spot)	50'	MFWD 170	9,200	200	8	0.033	0.67	0.69	0.14	0.17	1.68	0.16	1.02	2.87
Spray (Spot)	60'	MFWD 225	14,700	200	8	0.028	0.55	0.77	0.19	0.21	1.74	0.21	1.28	3.24
Stalk Shredder	14'	MFWD 150	18,400	200	10	0.117	1.79	2.14	1.89	0.52	6.37	1.06	2.95	10.39
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.25	1.50	2.38	0.36	5.52	1.34	2.06	8.93
Stalk Shredder-Flail	12'	MFWD 150	25,900	200	10	0.137	2.09	2.50	3.11	0.61	8.33	1.75	3.44	13.53
Stalk Shredder-Flail	15'	MFWD 150	26,000	200	10	0.110	1.67	2.00	2.50	0.49	6.67	1.40	2.75	10.83
Stalk Shredder-Flail	18'	MFWD 150	29,600	200	10	0.091	1.39	1.67	2.37	0.40	5.85	1.33	2.29	9.48
Stalk Shredder-Flail	20'	MFWD 150	31,700	200	10	0.082	1.25	1.50	2.28	0.36	5.42	1.28	2.06	8.77
Stalk Shredder-Flail	25'	MFWD 150	46,900	200	10	0.066	1.00	1.20	2.70	0.29	5.21	1.52	1.65	8.38
Strip Till	8R-38	MFWD 225	43,000	150	10	0.061	0.94	1.68	1.14	0.47	4.25	1.73	2.81	8.80
Strip Till	12R-30	MFWD 225	69,600	150	10	0.061	0.94	1.68	1.85	0.47	4.96	2.81	2.81	10.58
Strip Till	12R-40	MFWD 225	75,400	150	10	0.046	0.70	1.26	1.51	0.35	3.83	2.28	2.11	8.23
Subsoiler	3 shank	MFWD 190	6,500	100	15	0.204	3.12	4.71	0.44	1.31	9.59	0.99	7.75	18.34
Subsoiler	4 shank	MFWD 225	11,430	100	15	0.153	2.34	4.19	0.58	1.19	8.32	1.31	7.01	16.65
Subsoiler	5 shank	MFWD 225	14,630	100	15	0.122	1.86	3.34	0.59	0.94	6.75	1.34	5.59	13.69
Subsoiler low-till	6 shank	MFWD 225	20,000	100	15	0.102	1.56	2.79	0.68	0.79	5.82	1.53	4.66	12.02
Subsoiler low-till	8 shank	MFWD 225	21,400	100	15	0.076	1.16	2.09	0.54	0.59	4.39	1.22	3.49	9.12

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
		dollars
ADJUVANTS		
Agri-Dex	pt	1.75
AMS SuperMax	pt	3.81
Class Act NG	pt	4.75
Crop Oil Conc.(Pet.)	pt	2.86
Crop Oil Conc.(Veg.)	pt	2.90
Dyne-A-Pak	pt	4.13
Fire-Zone	pt	2.87
Herbimax	pt	4.00
Induce	pt	3.00
MSO	pt	4.38
Penetrator Plus	pt	2.58
Surfactant	pt	3.30
CLEANING		
Cleaning Peanuts	ton	18.00
CROP CONSULTANT		
Corn Consultant	acre	6.00
Cotton Consultant	acre	8.00
Peanut Consultant	acre	9.25
Rice Consultant	acre	8.00
Sorghum Consultant	acre	6.00
Soybeans Consultant	acre	6.50
Wheat Consultant	acre	5.50
CUSTOM FERTILIZE		
App Fert by Air	cwt	7.50
App Fert by Air(Mi	appl	7.50
Custom Apply Fert	acre	7.50
CUSTOM LIME		
Lime (Spread)	ton	59.00
CUSTOM PLANT		
Custom Plant	acre	7.50
Custom Plant Air	cwt	7.50
CUSTOM SPRAY		
App by Air (3 gal)	appl	5.60
App by Air (5 gal)	appl	7.00
App by Air (10 gal)	appl	9.30
Custom Spray Ground	acre	7.00
DRYING		
Dry Corn	bu	0.19
Dry Grain Sorghum	cwt	0.25
Dry Peanuts	ton	24.00
Dry Rice	bu	0.40
ERADICATION FEE		
Eradication	acre	1.00
FERTILIZERS		
Agrotain Ultra	pt	11.30
Amm Sulfate (21% N)	cwt	19.88
Boron Plus	pt	4.64
DAP	cwt	35.88
Fert 10-34-0	cwt	31.55
Fert 10-34-0	gal	3.68
Fert 11-37-0	cwt	26.26
Fert 41-0-0-4	cwt	18.22
Lime	ton	49.00
NBPT	pt	12.93
Phosphorus(46% P2O5)	cwt	27.75
Potash (60% K2O)	cwt	26.30
Sulfur Plus	pt	2.62
UAN (32% N)	cwt	19.00
UAN (32%)	gal	2.10
UAN + Sulfur (28%)	cwt	18.45
UAN + Sulfur (28%)	gal	2.05
Urea, Solid (46% N)	cwt	28.63
Zinc Plus	pt	3.40
FUNGICIDES		
Abound	oz	1.96
Alfa Guard	lb	1.26
Allegiance Flowabl	oz	3.35
Ameristar Top	oz	2.51
Approach Prima	pt	28.00
Apron Maxx RTA	oz	0.84
Artisan	oz	0.23
Avaris	oz	1.68
Avicta Complete Bean	oz	0.26
Bravo Weather Stick	pt	4.12
Captan 50 WP	lb	6.59
Convoy	oz	1.17
Cotton Seed Trt.	acre	20.00
CruiserMaxx Vibrance	oz	4.60
Elatus	oz	3.31
Flint Extra	oz	8.75
Headline EC	oz	4.44
Miravis Top	oz	1.34
Prior Xemium	oz	3.91
Propimax EC	pt	12.50
Prosaro	oz	2.36
Provost Optimum	oz	219.44
Quadris	oz	1.56
Quadris Top	oz	2.59
Quadris Top SBX	oz	2.77
Quilt	pt	20.23
Quilt XCEL	pt	24.10
Stratego	pt	23.93
Stratego YLD	oz	3.46
Tilt 3.6 EC	oz	0.90
Tilt/ Bravo SE	oz	0.72
Trivapro	oz	1.50
GINNING		
Gin & Haul	lb	0.11
GROWTH REGULATORS		
Mepex	oz	0.09
Mepichlor 4.2%	oz	0.09
Mepiquat	oz	0.21
Mepstar 6	oz	0.08
Palisade	oz	1.20
Pentia	oz	0.41
Pix WSB	oz	1.32
Stance	oz	1.27
Veto	oz	0.06
HARVEST AIDS		
Adios	oz	1.00
Boll Buster	oz	0.34
Def/Folex	pt	11.73
Defol 5	gal	8.54
Display	oz	10.23
Ethephon 6E	pt	3.89
Finish 6	pt	11.74
Folex 6EC	pt	11.74
Freefall SC	oz	1.63
Ginstar EC	pt	27.59
Gramoxone SL	oz	0.19
Sharpen	oz	5.99
Sodium Chlorate 5L	gal	8.54
SuperBoll	oz	0.24
Thidiazuron 4lb	oz	2.07
Tribufos 6lb	pt	11.74
Vacate	oz	1.39
HAULING		
Haul Corn	bu	0.23
Haul Peanuts	ton	14.50
Haul Rice	bu	0.35
Haul Sorghum	bu	0.25
Haul Soybeans	bu	0.27
Haul Wheat	bu	0.26
HERBICIDES		
2,4-D Amine 4	pt	2.64
2,4-D Ester	pt	2.41
AAtrex 4L	pt	1.90
Accent Q	oz	18.15
Acuron	oz	0.51

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Aim	oz	5.79	Harmony Extra SG	oz	10.86
Anthem Flex	oz	3.57	Helmet	oz	0.41
Anthem Maxx	oz	5.38	Huskie	oz	0.82
Armezon Pro	oz	0.92	Impact	oz	15.32
Atrazine 4L	pt	1.67	Intimidator	oz	0.64
Atrazine 90DF	lb	3.36	Leadoff	oz	6.00
Authority First	lb	68.23	League	oz	4.39
Authority Elite	pt	13.75	Lexar	pt	6.79
Authority Maxx	lb	68.82	Liberty 280	oz	0.59
Authority MTZ	lb	20.63	Loyant	oz	2.29
Avatar	pt	9.62	Makaze	oz	0.21
Avenger	pt	11.75	Metolachlor	pt	5.02
Axial XL	oz	1.10	Metribuzin 4L	pt	8.25
Axiom	oz	2.06	Metribuzin 75	lb	14.73
Banvel	pt	4.81	MSMA	pt	3.42
Barrage	pt	5.36	Newpath	oz	3.84
Basagran	pt	5.43	Obey	oz	1.01
Boundary	pt	10.45	Osprey	oz	4.00
Brake	oz	1.48	Outlook	pt	13.88
Broadaxe	pt	13.95	Panther Pro	oz	6.61
Broadhead	lb	58.21	Parallel	pt	4.01
Buccaneer Plus	pt	2.97	Paraquat	oz	0.16
Buctril	pt	4.28	Parazone 3SL	oz	0.18
Butyrac 200 (2,4-DB)	pt	2.90	Permit	oz	21.96
Cadre	oz	3.33	Permit Plus	oz	21.96
Canopy	oz	2.91	PowerFlex	oz	7.00
Caparol	pt	4.87	Preface	oz	4.99
Capreno	oz	3.96	Prefix	pt	6.17
Cinch	pt	14.18	Provisia	oz	0.76
Cinch ATZ	pt	5.96	Prowl 3.3 EC	pt	5.69
Clarity	pt	11.00	Quelex	oz	7.42
Classic	oz	12.00	RealmQ	oz	5.34
Clearpath	oz	4.06	RebelEx	oz	2.00
Clethodim 2E	oz	0.50	Reflex	pt	6.71
Clincher SF	oz	2.56	Regiment	oz	45.50
Cobra	oz	1.23	Resicore	oz	0.60
Command 3ME	pt	18.00	Resource	oz	2.11
Corvus	oz	4.69	RiceBeaux	pt	5.38
Cotoran	pt	5.79	Riceshot	pt	4.92
Cotton Pro	pt	3.45	Ricestar HT	pt	26.88
Dicamba	pt	6.35	Ringside	pt	5.63
Direx	pt	2.44	Roundup Power Max	oz	0.20
Diuron	pt	3.50	Roundup PowerMax	pt	3.24
Dual II Magnum	pt	11.15	Roundup PowerMax ii	oz	0.19
Dual Magnum	pt	10.02	Roundup Pro	pt	0.20
Duet	pt	6.22	Scepter 70 DG	oz	4.64
Engenia	oz	0.83	Select Max	pt	12.73
Envive	oz	4.06	Sencor/Tricor.Metrib	lb	23.95
Envoke	oz	0.80	Sequence	pt	5.72
Facet L	pt	14.83	Sharpen	oz	5.99
Fierce	oz	6.50	Sinister	pt	13.77
Fierce XLT	oz	3.91	Sonic	oz	4.04
Finesse	oz	12.45	Stalwart	pt	3.82
Firestorm	pt	3.44	Stam 80 EDF	lb	9.45
First Rate	oz	37.79	Stam M4	qt	10.83
Flexstar	pt	7.34	Staple LX	oz	7.89
Flexstar GT	pt	4.73	Storm	pt	11.16
Fusilade DX	oz	0.88	Strada	oz	5.88
Gambit	oz	16.50	Strada Pro	oz	6.56
Glyphosate 3lbs a.e	pt	1.81	Strada XT2	pt	3.26
Glyphosate 3lbs a.e	oz	0.11	Superwham	qt	10.07
Goal 2XL	pt	8.69	Suprend	lb	13.52
Gramoxone SL 2.0	oz	0.19	SureStart II	oz	0.39
Grandstand R	pt	17.79	Surveil	oz	6.70
Grasp	oz	12.07	Synchrony XP	oz	11.26
Grasp Xtra	oz	1.61	Tempest	pt	19.50
Halex GT	pt	5.82	Touchdown Total	qt	10.21
Halomax	oz	21.11	Treflan	pt	2.50

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Trifluralin	pt	3.73	Mustang Max	oz	0.97
Triflurex	pt	3.47	Nuprid 4F	oz	0.94
Ultra Blazer	pt	5.25	Oberon	oz	2.78
Valor EZ	oz	4.71	Orthene 90	lb	11.15
Valor SX	oz	3.60	Permethrin	oz	0.40
Valor XLT	oz	3.45	Portal XLO	oz	0.74
Vamos	pt	6.49	Pounce 25WP	lb	19.52
Verdict	oz	1.54	Prevathon	oz	1.05
Veritas	pt	7.49	Python WDG	oz	19.80
Villain	pt	5.24	Radiant	oz	8.28
Volunteer	pt	10.63	Sevin 4F	pt	56.11
Warrant	pt	3.97	Sevin XLR Plus	qt	16.01
XtendiMax	oz	0.42	Sivanto Prime	oz	3.24
Zidua DF	oz	8.76	Tempest	oz	1.70
Zidua SC	oz	4.93	Transform WG	oz	7.63
INOCULANT			Up-Cyde	oz	0.36
Inoculant-Soybean	acre	1.55	Warrior ZT	oz	2.74
Optimize LIFT	oz	0.50	Zeal	oz	8.42
INSECTICIDES			IRRIGATION SUPPLIES		
Abamectin .15EC	oz	1.75	Roll-Out Pipe	ft	0.24
Acephate 90%	lb	9.87	SEED/PLANTS		
Acephate 90SP	lb	8.58	Corn Seed BtRR	thous	3.75
Admire Pro	oz	1.57	Corn Seed Conv.	thous	1.93
Agri-Mek	oz	2.66	Corn Seed Op Leptra	thous	3.66
Asana .66 XL	oz	0.63	Corn Seed RR2	thous	3.25
Avenger	oz	0.28	Corn Seed VT2P	thous	3.63
Baythroid XL	oz	1.04	Cot. Seed B3XF/W3FE	thous	2.59
Belt	oz	6.80	Cotton Seed B3XF	thous	2.59
Besiege	oz	2.38	Cotton Seed GLB2	thous	2.05
Bidrin 8EC	oz	1.34	Cotton Seed W3FE	thous	2.59
Bifenthrin	oz	0.86	Cotton Seed W3RF	thous	1.98
Bifenture 2EC	oz	0.51	Peanut Seed	lb	0.84
Brigade EC	pt	18.77	Rice Conv Hyb Trt	lb	6.60
Capture LFR	oz	1.37	Rice Fullpage Hyb Tr	lb	7.37
Centric 40WG	oz	4.97	Rice Seed CF(Levees)	lb	1.03
Cypermethrin	oz	1.31	Rice Seed Clearfield	lb	1.03
Declare	oz	1.95	Rice Seed Conv.	lb	0.32
Diamond .83EC	oz	1.28	Rice Seed Cv(Levees)	lb	0.32
Dimethoate 4E	pt	5.65	Rice Seed CvH(Levee)	lb	1.93
Dimilin 2L	oz	1.70	Rice Seed FPH(Levee)	lb	2.67
Endigo	oz	1.53	Rice Seed Provisia	lb	1.25
Force 3G	lb	7.28	Rice Seed Trt/Insect	lbseed	0.29
Hero	oz	1.09	Sorghum Concept	lb	3.10
Imidacloprid 4F	oz	0.78	Sorghum Concept+ Po	lb	3.72
Imidan 70 WSB	oz	0.79	Soybean Enlist E3	lb	1.20
IncidentalPestTrt $8	acre	8.00	Soybean Seed LL	lb	1.16
IncidentalPestTrt$15	acre	15.00	Soybean Seed RR2	lb	1.16
IncidentalPestTrt$22	acre	22.00	Soybean Seed RR2X	lb	1.34
IncidentalPestTrt$30	acre	30.00	Wheat Seed Private	lb	0.28
Intrepid 2F	oz	1.91	SOIL TEST		
Intruder 70WSP	oz	1.13	Soil Test	acre	10.00
Lambda	oz	1.88	SURVEY & MARK LEVEES		
Lannate LV	pt	9.30	Survey & Mark Levees	acre	4.50
Macho	oz	0.47	Survey & Mark Levees	acre	4.50
Malathion 8E	pt	9.84			

Appendix Table 5. Estimated fuel prices and interest rates, Mississippi, 2022

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	2.36
Gasoline	gal	2.81
INTEREST RATES		
Short-term	%	3.50
Intermediate-term	%	4.00

Appendix Table 6. Labor types, wage rates and unallocated labor Multipliers for crop enterprises, Mississippi, 2022

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	15.27
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, 2022

Crop	unit	Futures Contract Month	Futures Contract Price[a]	Basis[b]	Forward Contract Price[c]	Loan Rate[d]	Budget Price[e]
Corn	bu	Dec '22	5.31	-0.14	5.17	2.35	5.17
Cotton Lint	lb	Dec '22	0.87	-0.016	0.8544	0.52	0.8544
Cottonseed	lb						0.11[f]
Grain Sorghum	bu				4.91	4.09	4.91
Peanuts	ton				430.00	354.89	430.00
Soybeans	bu	Nov '22	12.45	0.01	12.46	6.41	12.46
Rice	bu	Nov '22	6.16	-0.36	5.80	3.21	5.80
Wheat	bu	Jul '22	7.44	0.16	7.28	3.60	7.28

[a] Average of the daily closing futures contract prices during the first 5 trading days in October 2021 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 2020 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 2021 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2021 Farm-stored Loan Rate for long grain rough rice. National 2021 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 2008-2021.

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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Land Plane	50'x16'		0.88	0.32	0.58		0.01	1.79	1.65	3.44
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.31	0.72
Roll-Out Pipe	ft	7.92					0.12	8.04		8.04
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.26	0.11	0.42		0.01	0.80	0.85	1.65
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		0.39	0.17	0.63		0.01	1.20	1.27	2.47
Land Forming ($450)	each								28.81	28.81
Well & Pump, Furrow	each			2.96			0.04	3.00	7.88	10.88
Main Line Pipe	each								4.36	4.36
Engine, RPF, 75	each								8.23	8.23
June Irrigation	ac-in		6.73	1.40			0.12	8.25		8.25
July Irrigation	ac-in		6.73	1.40			0.09	8.22		8.22
August Irrigation	ac-in		6.73	1.40			0.07	8.20		8.20
TOTALS		7.92	21.91	7.83	4.50	0.00	0.51	42.67	53.36	96.03

Note: Cost of production estimates are based on 2021 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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.27			0.27		0.27
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			0.20	13.68	49.60	63.28
Well & Pump, 1/4 CP	each			3.50			0.05	3.55	9.34	12.89
Engine, 1/4 CP, 65	each								9.76	9.76
June Irr. 3app@.75"	ac-in		7.93	1.49			0.14	9.56		9.56
July Irr. 4app@.75"	ac-in		10.57	1.99			0.15	12.71		12.71
Aug Irr. 3app@.75"	ac-in		7.93	1.49			0.08	9.50		9.50
TOTALS		0.00	26.43	21.95	1.84	0.00	0.64	50.86	68.70	119.56

Note: Cost of production estimates are based on 2021 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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Land Plane	50'x16'		0.88	0.32	0.58		0.06	1.84	1.65	3.49
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.19	0.07	0.14			0.40	0.31	0.71
Roll-Out Pipe	ft	7.92					0.09	8.01		8.01
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.26	0.11	0.42		0.01	0.80	0.85	1.65
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		0.39	0.17	0.63			1.19	1.27	2.46
Land Forming ($450)	each								28.81	28.81
Well & Pump, Furrow	each			2.96			0.03	2.99	7.88	10.87
Main Line Pipe	each								4.36	4.36
Engine, RPF, ESB	each								8.23	8.23
1st June Irrigation	ac-in		5.77	1.40			0.08	7.25		7.25
2nd June Irrigation	ac-in		5.77	1.40			0.08	7.25		7.25
July Irrigation	ac-in		5.77	1.40			0.06	7.23		7.23
TOTALS		7.92	19.03	7.83	4.50	0.00	0.43	39.71	53.36	93.07

Note: Cost of production estimates are based on 2021 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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.33	0.11	0.25		0.01	0.70	0.63	1.33
Survey & Mark Levees	acre	2.25					0.03	2.28		2.28
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.44	0.15	0.33		0.01	0.93	0.83	1.76
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31		0.01	0.84	0.61	1.45
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"		0.34	0.10	0.25		0.01	0.70	0.56	1.26
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.44	0.15	0.33		0.01	0.93	0.83	1.76
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31		0.01	0.84	0.61	1.45
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"		0.34	0.10	0.25		0.01	0.70	0.56	1.26
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.44	0.15	0.33		0.01	0.93	0.83	1.76
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31		0.01	0.84	0.61	1.45
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"		0.34	0.10	0.25		0.01	0.70	0.56	1.26
Tear Down Levees										
Levee Splitter (1/80	32"		0.26	0.07	0.19			0.52	0.43	0.95
Land Forming ($113)	each								7.23	7.23
Well & Pump, Flood	each			5.91			0.09	6.00	15.76	21.76
Engine, CF, 75	each								16.46	16.46
June Irrigation	ac-in		8.65	2.80			0.17	11.62		11.62
July Irrigation	ac-in		8.65	2.80			0.13	11.58		11.58
August Irrigation	ac-in		8.65	2.80			0.10	11.55		11.55
TOTALS		2.25	30.11	15.57	5.93	0.00	0.66	54.52	46.51	101.03

Note: Cost of production estimates are based on 2021 input prices.
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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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.07			0.07		0.07
Maintenance										
IRRIGATE LABOR	hour				0.27			0.27		0.27
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			0.13	8.73	31.65	40.38
Well & Pump, 1/2 CP	each			1.13			0.02	1.15	3.02	4.17
Engine, 1/2 CP, 174	each								4.44	4.44
June Irr. 3app@.75"	ac-in		11.62	0.68			0.18	12.48		12.48
July Irr. 4app@.75"	ac-in		15.49	0.91			0.19	16.59		16.59
Aug Irr. 3app@.75"	ac-in		11.62	0.68			0.11	12.41		12.41
TOTALS		0.00	38.73	12.00	0.47	0.00	0.63	51.83	39.11	90.94

Note: Cost of production estimates are based on 2021 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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Land Plane	50'x16'		0.88	0.32	0.58		0.06	1.84	1.65	3.49
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.19	0.07	0.14			0.40	0.31	0.71
Roll-Out Pipe	ft	7.92					0.09	8.01		8.01
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.26	0.11	0.42		0.01	0.80	0.85	1.65
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		0.39	0.17	0.63		0.01	1.20	1.27	2.47
Land Forming ($450)	each								28.81	28.81
Well & Pump, Furrow	each			2.96			0.03	2.99	7.88	10.87
Main Line Pipe	each								4.36	4.36
Engine, RPF, Corn	each								8.23	8.23
1st June Irrigation	ac-in		6.25	1.05			0.09	7.39		7.39
2nd June Irrigation	ac-in		6.25	1.05			0.09	7.39		7.39
3rd June Irrigation	ac-in		6.25	1.05			0.09	7.39		7.39
July Irrigation	ac-in		6.25	1.05			0.06	7.36		7.36
TOTALS		7.92	26.72	7.83	4.73	0.00	0.55	47.75	53.36	101.11

Note: Cost of production estimates are based on 2021 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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.33	0.11	0.25		0.01	0.70	0.63	1.33
Survey & Mark Levees	acre	4.50					0.08	4.58		4.58
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.88	0.30	0.65		0.03	1.86	1.66	3.52
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31		0.01	0.84	0.61	1.45
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		0.12	6.92		6.92
Apply Water										
IRRIGATE LABOR	hour				6.80		0.10	6.90		6.90
Apply Water										
IRRIGATE LABOR	hour				6.80		0.08	6.88		6.88
Apply Water										
IRRIGATE LABOR	hour				6.80		0.06	6.86		6.86
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.69	0.20	0.51		0.01	1.41	1.14	2.55
Tear Down Levees										
Levee Splitter (1/80	32"		0.26	0.07	0.19			0.52	0.43	0.95
Land Forming ($113)	each								7.23	7.23
Levee Gates	each								0.64	0.64
Well & Pump, Flood	each			5.91			0.09	6.00	15.76	21.76
Engine, Rice CL, 75	each								16.46	16.46
May Irrigation	ac-in		11.54	1.53			0.23	13.30		13.30
June Irrigation	ac-in		17.30	2.29			0.29	19.88		19.88
July Irrigation	ac-in		17.30	2.29			0.23	19.82		19.82
August Irrigation	ac-in		17.30	2.29			0.17	19.76		19.76
TOTALS		4.50	66.01	15.10	33.87	0.00	1.59	121.07	44.56	165.63

Note: Cost of production estimates are based on 2021 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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Survey & Mark Levees	acre	2.25					0.04	2.29		2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.22	0.49		0.02	1.39	1.25	2.64
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31		0.01	0.84	0.61	1.45
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Install Gates										
IRRIGATE LABOR	hour				1.36		0.02	1.38		1.38
Apply Water										
IRRIGATE LABOR	hour				4.53		0.08	4.61		4.61
Apply Water										
IRRIGATE LABOR	hour				4.53		0.07	4.60		4.60
Apply Water										
IRRIGATE LABOR	hour				4.53		0.05	4.58		4.58
Apply Water										
IRRIGATE LABOR	hour				4.53		0.04	4.57		4.57
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.52	0.15	0.38		0.01	1.06	0.85	1.91
Land Forming ($450)	each								28.81	28.81
Levee Gates	each								0.64	0.64
Well & Pump, Flood	each			5.91			0.09	6.00	15.76	21.76
Engine, Rice SL, 75	each								16.46	16.46
May Irrigation	ac-in		11.54	1.86			0.23	13.63		13.63
June Irrigation	ac-in		13.46	2.18			0.23	15.87		15.87
July Irrigation	ac-in		13.46	2.18			0.18	15.82		15.82
August Irrigation	ac-in		13.46	2.18			0.14	15.78		15.78
TOTALS		2.25	53.51	14.79	22.70	0.00	1.24	94.49	64.38	158.87

Note: Cost of production estimates are based on 2021 input prices.
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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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Survey & Mark Levees	acre	2.25					0.04	2.29		2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.22	0.49		0.02	1.39	1.25	2.64
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31		0.01	0.84	0.61	1.45
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.31	0.72
Roll-Out Pipe	ft	7.92					0.14	8.06		8.06
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.26	0.11	0.42		0.01	0.80	0.85	1.65
Install Gates										
IRRIGATE LABOR	hour				1.36		0.02	1.38		1.38
Apply Water										
IRRIGATE LABOR	hour				1.81		0.03	1.84		1.84
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"		0.52	0.15	0.38		0.01	1.06	0.85	1.91
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.13	0.05	0.21			0.39	0.42	0.81
Land Forming ($450)	each								28.81	28.81
Levee Gates	each								0.32	0.32
Well & Pump, Flood	each			5.91			0.09	6.00	15.76	21.76
Engine, Mult In Rice	each								16.46	16.46
May Irrigation	ac-in		9.61	1.75			0.20	11.56		11.56
June Irrigation	ac-in		11.54	2.10			0.20	13.84		13.84
July Irrigation	ac-in		11.54	2.10			0.16	13.80		13.80
August Irrigation	ac-in		11.54	2.10			0.12	13.76		13.76
TOTALS		10.17	46.40	14.67	12.13	0.00	1.15	84.52	65.64	150.16

Note: Cost of production estimates are based on 2021 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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
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		0.03	2.30		2.30
Apply Water										
IRRIGATE LABOR	hour				2.27		0.02	2.29		2.29
Land Forming ($450)	each								28.81	28.81
Well & Pump, Flood	each			5.91			0.09	6.00	15.76	21.76
Engine, Rice SL, 75	each								16.46	16.46
May Irrigation	ac-in		7.69	1.24			0.16	9.09		9.09
June Irrigation	ac-in		9.61	1.55			0.16	11.32		11.32
July Irrigation	ac-in		9.61	1.55			0.13	11.29		11.29
August Irrigation	ac-in		9.61	1.55			0.10	11.26		11.26
TOTALS		0.00	36.52	11.80	9.53	0.00	0.77	58.62	61.03	119.65

Note: Cost of production estimates are based on 2021 input prices.
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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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Land Plane	50'x16'		0.88	0.32	0.58		0.06	1.84	1.65	3.49
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.31	0.72
Roll-Out Pipe	ft	7.92					0.12	8.04		8.04
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.26	0.11	0.42		0.01	0.80	0.85	1.65
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		0.39	0.17	0.63		0.01	1.20	1.27	2.47
Land Forming ($450)	each								28.81	28.81
Well & Pump, Furrow	each			2.96			0.04	3.00	7.88	10.88
Main Line Pipe	each								4.36	4.36
Engine, RPF, PNUT	each								8.23	8.23
1st July Irrigation	ac-in		5.77	1.05			0.08	6.90		6.90
1st Aug Irrigation	ac-in		5.77	1.05			0.06	6.88		6.88
2nd Aug Irrigation	ac-in		5.77	1.05			0.06	6.88		6.88
1st Sep Irrigation	ac-in		5.77	1.05			0.04	6.86		6.86
TOTALS		7.92	24.80	7.83	4.73	0.00	0.52	45.80	53.36	99.16

Note: Cost of production estimates are based on 2021 input prices.

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