DELTA
2020
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2019-05

October 2019

Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses**." Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2020 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses**."

Acknowledgments

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

Special appreciation is expressed to producers who provided information on crop practices used. Appreciation also is expressed to farm supply dealers, equipment dealers, custom operators, and chemical companies who provided prices for crop production inputs. The Mississippi Agricultural Statistics Service is commended for its excellence in collecting price and production practice data.

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2020 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 2019. (Appendix Tables 1, 2, and 3).

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

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

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

Estimates of Direct Costs

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

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

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

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 2019 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 through 18. A dryland crop budget may be converted to an irrigated crop budget by adding the appropriate direct and fixed costs to the costs of the dryland crop. Also, adjustments in crop yields and other costs may be required with the addition of supplemental irrigation.

Net Returns

Net returns are generally considered to be the amount left after subtracting all costs from all incomes for a particular enterprise. In these budgets, "RETURNS ABOVE DIRECT EXPENSES" and "RETURNS ABOVE TOTAL SPECIFIED EXPENSES" are used as a proxy for the economic concepts of net returns above variable costs and net returns above variable plus fixed costs, respectively. Some items are intentionally left out of these calculations, i.e., costs for land or land rent, taxes, insurance premiums, general farm overhead, and expected incomes from government payments or insurance payments. These costs and incomes vary widely among farms and farm situations so as to make routine calculation for representative situations impractical. These items should, however, be considered by each producer and factored into the final budget each producer develops for his own situation.

Enterprise Budgets

Table 1.A Estimated costs per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	_____
App by Air (3 gal)	appl	5.50	5.2500	28.88	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_____
Ethephon 6E	pt	2.90	2.3125	6.71	_____
Tribufos 6lb	pt	8.61	0.5000	4.31	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_____
UAN (32%)	gal	1.51	34.3582	51.88	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	10.87	1.0000	10.87	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Cotoran	pt	5.85	2.0000	11.70	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Liberty 280	oz	0.49	58.0000	28.42	_____
Warrant	pt	4.02	3.0000	12.06	_____
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_____
Bidrin 8EC	oz	1.28	5.2000	6.66	_____
Centric 40WG	oz	4.89	2.0000	9.78	_____
Diamond .83EC	oz	1.31	6.0000	7.86	_____
Imidacloprid 4F	oz	0.81	2.0000	1.62	_____
Bifenthrin	oz	0.82	12.8000	10.50	_____
Lambda	oz	1.71	1.0000	1.71	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.38	1.5000	11.07	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	48.0000	4.80	_____
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.3993	6.10	_____
Self-Propelled	hour	15.22	0.2075	3.16	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
UNALLOCATED LABOR	hour	15.17	0.4855	7.37	_____
DIESEL FUEL					
Tractors	gal	2.30	4.6248	10.65	_____
Self-Propelled	gal	2.30	4.8836	11.22	_____
REPAIR & MAINTENANCE					
Implements	acre	7.30	1.0000	7.30	_____
Tractors	acre	2.85	1.0000	2.85	_____
Self-Propelled	acre	22.35	1.0000	22.35	_____
INTEREST ON OP. CAP.	acre	15.66	1.0000	15.66	_____

TOTAL DIRECT EXPENSES				723.91	_____
FIXED EXPENSES					
Implements	acre	11.35	1.0000	11.35	_____
Tractors	acre	19.29	1.0000	19.29	_____
Self-Propelled	acre	96.53	1.0000	96.53	_____

TOTAL FIXED EXPENSES				127.17	_____

TOTAL SPECIFIED EXPENSES				851.08	_____

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

Table 1.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

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

TOTAL INCOME				916.68	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	93.13	1.0000	93.13	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	91.75	1.0000	91.75	_____
INSECTICIDES	acre	76.75	1.0000	76.75	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	4.80	1.0000	4.80	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
OPERATOR LABOR	hour	15.22	0.6069	9.26	_____
UNALLOCATED LABOR	hour	15.17	0.4855	7.37	_____
DIESEL FUEL	gal	2.30	9.5084	21.87	_____
REPAIR & MAINTENANCE	acre	32.50	1.0000	32.50	_____
INTEREST ON OP. CAP.	acre	15.66	1.0000	15.66	_____

TOTAL DIRECT EXPENSES				723.91	_____
RETURNS ABOVE DIRECT EXPENSES				192.77	_____
TOTAL FIXED EXPENSES				127.17	_____

TOTAL SPECIFIED EXPENSES				851.08	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				65.60	_____

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

Table 1.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt$15	acre					1.0000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.60	0.39	0.92	0.48

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

Table 1.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		0.66	0.41	0.68		0.09	1.84	1.85	3.69
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	25.94					0.79	26.73		26.73
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	25.94					0.57	26.51		26.51
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Warrant	pt	12.06					0.26	12.32		12.32
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
IncidentalPestTrt$15	acre	15.00					0.26	15.26		15.26
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	132.00					0.58	132.58		132.58
Stalk Shredder-Flail	20'		2.20	2.76	2.26		0.03	7.25	5.41	12.66
TOTALS		634.43	21.87	32.50	19.45	0.00	15.66	723.91	127.17	851.08

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

Table 1.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	916.68
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	41.25	0.00	0.00	0.00	0.00	25.94	0.00	25.94	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	21.15	0.00	44.33	26.27	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	39.38	21.70	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	3.20	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.15	0.00	0.00	0.00	0.00	1.65	3.67	3.44	0.00	0.00	0.00	8.54
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.09	0.00	0.00	0.00	0.00	1.38	3.09	2.91	0.00	0.00	0.00	12.40
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.00	1.11	2.83	1.94	0.00	0.00	0.00	24.51
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	1.03	0.92	5.01	1.66	1.06	0.43	0.21	0.78
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	30.24	31.00	196.08	77.64	61.52	33.13	24.44	178.23
NET INCOME	-91.63	0.00	0.00	0.00	-30.24	-31.00	-196.08	-77.64	-61.52	-33.13	-24.44	738.45
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-121.87	-152.87	-348.95	-426.59	-488.11	-521.24	-545.68	192.77

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

Table 1.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-212	-193	-174	-156	-137	-118	-99	-80	-61	-42	-23
			-339	-320	-302	-283	-264	-245	-226	-207	-188	-169	-151
60	720.00	lb	-169	-146	-123	-101	-78	-56	-33	-10	11	34	57
			-296	-273	-251	-228	-205	-183	-160	-137	-115	-92	-70
70	840.00	lb	-125	-99	-73	-46	-20	6	32	58	85	111	138
			-253	-226	-200	-173	-147	-121	-94	-68	-41	-15	11
80	960.00	lb	-82	-52	-22	7	38	68	98	128	158	189	219
			-209	-179	-149	-119	-89	-58	-28	1	31	61	92
90	1080.00	lb	-39	-5	28	62	96	130	164	198	232	266	300
			-166	-132	-98	-64	-30	3	37	71	105	139	173
100	1200.00	lb	4	41	79	117	155	192	230	268	305	343	381
			-123	-85	-47	-9	27	65	103	141	178	216	254
110	1320.00	lb	47	88	130	171	213	254	296	337	379	421	462
			-79	-38	3	44	86	127	169	210	252	293	335
120	1440.00	lb	90	136	181	226	271	317	362	407	453	498	543
			-36	8	54	99	144	190	235	280	325	371	416
130	1560.00	lb	134	183	232	281	330	379	428	477	526	575	624
			6	56	105	154	203	252	301	350	399	448	497
140	1680.00	lb	177	230	283	335	388	441	494	547	600	652	705
			50	103	155	208	261	314	367	420	472	525	578
150	1800.00	lb	220	277	334	390	447	503	560	617	673	730	786
			93	150	206	263	320	376	433	489	546	603	659

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

Table 2.A Estimated costs per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	_____
App by Air (3 gal)	appl	5.50	5.7500	31.63	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_____
Ethephon 6E	pt	2.90	2.3125	6.71	_____
Tribufos 6lb	pt	8.61	0.5000	4.31	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_____
UAN (32%)	gal	1.51	34.3582	51.88	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	10.87	1.0000	10.87	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Cotoran	pt	5.85	2.0000	11.70	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Liberty 280	oz	0.49	58.0000	28.42	_____
Warrant	pt	4.02	3.0000	12.06	_____
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_____
Bidrin 8EC	oz	1.28	5.2000	6.66	_____
Diamond .83EC	oz	1.31	6.0000	7.86	_____
Imidacloprid 4F	oz	0.81	2.0000	1.62	_____
Centric 40WG	oz	4.89	2.0000	9.78	_____
Bifenthrin	oz	0.82	12.8000	10.50	_____
Lambda	oz	1.71	1.0000	1.71	_____
IncidentalPestTrt$15	acre	15.00	1.5000	22.50	_____
Transform WG	oz	7.38	1.5000	11.07	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	51.0000	5.10	_____
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5025	7.67	_____
Self-Propelled	hour	15.22	0.2075	3.16	_____
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	15.18	0.5052	7.67	_____
DIESEL FUEL					
Tractors	gal	2.30	5.6368	12.97	_____
Self-Propelled	gal	2.30	4.8836	11.22	_____
Roll-Out Pipe Irr.	gal	2.30	8.5535	19.68	_____
REPAIR & MAINTENANCE					
Implements	acre	7.73	1.0000	7.73	_____
Tractors	acre	3.44	1.0000	3.44	_____
Self-Propelled	acre	22.35	1.0000	22.35	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	16.64	1.0000	16.64	_____

TOTAL DIRECT EXPENSES				811.44	_____
FIXED EXPENSES					
Implements	acre	13.46	1.0000	13.46	_____
Tractors	acre	23.34	1.0000	23.34	_____
Self-Propelled	acre	96.53	1.0000	96.53	_____
Roll-Out Pipe Irr.	acre	60.69	1.0000	60.69	_____

TOTAL FIXED EXPENSES				194.02	_____

TOTAL SPECIFIED EXPENSES				1005.46	_____

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

Table 2.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1500.0000	943.35	_____
Cotton Seed	lb	0.10	2025.0000	202.50	_____

TOTAL INCOME				1145.85	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.13	1.0000	49.13	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	93.13	1.0000	93.13	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	91.75	1.0000	91.75	_____
INSECTICIDES	acre	84.25	1.0000	84.25	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	5.10	1.0000	5.10	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	15.22	0.7101	10.83	_____
UNALLOCATED LABOR	hour	15.18	0.5052	7.67	_____
DIESEL FUEL	gal	2.30	19.0740	43.87	_____
REPAIR & MAINTENANCE	acre	40.41	1.0000	40.41	_____
INTEREST ON OP. CAP.	acre	16.64	1.0000	16.64	_____

TOTAL DIRECT EXPENSES				811.44	_____
RETURNS ABOVE DIRECT EXPENSES				334.41	_____
TOTAL FIXED EXPENSES				194.02	_____

TOTAL SPECIFIED EXPENSES				1005.46	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				140.39	_____

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

Table 2.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	1.00	Nov		0.04	0.04	0.04	0.03
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					19.0000				
Centric 40WG	oz					2.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air (3 gal)	appl					1.5000				
IncidentalPestTrt$15	acre					1.5000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1500.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
Roll-Out Pipe Irr.	acre				Jan	1.0000	0.07	0.07	0.44	
TOTALS							0.71	0.50	1.38	0.50

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

Table 2.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		1.31	0.81	1.35		0.18	3.65	3.71	7.36
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	25.94					0.79	26.73		26.73
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	25.94					0.57	26.51		26.51
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.06	3.30	2.56	5.86
Warrant	pt	12.06					0.21	12.27		12.27
Liberty 280	oz	14.21					0.25	14.46		14.46
Mepiquat Chloride	oz	1.90					0.03	1.93		1.93
Centric 40WG	oz	9.78					0.17	9.95		9.95
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	8.25					0.14	8.39		8.39
IncidentalPestTrt$15	acre	22.50					0.39	22.89		22.89
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	165.00					0.72	165.72		165.72
Stalk Shredder-Flail	20'		2.20	2.76	2.26		0.03	7.25	5.41	12.66
Roll-Out Pipe Irr.	acre	7.92	21.35	7.51	4.50		0.75	42.03	64.99	107.02
TOTALS		685.90	43.87	40.41	24.62	0.00	16.64	811.44	194.02	1005.46

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

Table 2.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1145.85
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	20.63	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	41.25	0.00	0.00	0.00	0.00	25.94	0.00	25.94	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	21.15	0.00	44.33	0.00	26.27	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	4.10	56.66	21.70	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	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.82	0.00	0.00	0.00	0.00	1.65	3.90	4.62	1.65	0.23	0.63	9.12
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	2.74	0.00	0.00	0.00	0.00	1.38	3.09	8.72	7.75	6.56	0.38	13.25
REPAIR & MAINTENANCE	2.51	0.00	0.00	0.00	0.00	1.11	2.83	5.75	1.94	1.31	0.15	24.81
INTEREST ON OP. CAP.	4.65	0.00	0.00	0.00	1.03	0.92	5.02	1.25	2.09	0.53	0.22	0.93
TOTAL DIRECT EXPENSES	93.44	0.00	0.00	0.00	30.24	31.00	196.32	58.30	122.09	41.33	25.61	213.11
NET INCOME	-93.44	0.00	0.00	0.00	-30.24	-31.00	-196.32	-58.30	-122.09	-41.33	-25.61	932.74
NET INCOME TO DATE	-93.44	-93.44	-93.44	-93.44	-123.68	-154.68	-351.00	-409.30	-531.39	-572.72	-598.33	334.41

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

Table 2.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-172	-148	-125	-101	-77	-54	-30	-7	16	39	63
			-366	-342	-319	-295	-272	-248	-224	-201	-177	-154	-130
60	900.00	lb	-118	-89	-61	-33	-4	23	51	79	108	136	164
			-312	-283	-255	-227	-198	-170	-142	-114	-85	-57	-29
70	1050.00	lb	-63	-30	2	35	68	101	134	167	200	233	266
			-257	-224	-191	-158	-125	-92	-59	-26	6	39	72
80	1200.00	lb	-9	27	65	103	141	178	216	254	292	329	367
			-203	-166	-128	-90	-52	-15	22	60	98	135	173
90	1350.00	lb	44	86	129	171	214	256	299	341	383	426	468
			-149	-107	-64	-22	20	62	105	147	189	232	274
100	1500.00	lb	98	145	192	240	287	334	381	428	475	523	570
			-95	-48	-1	46	93	140	187	234	281	329	376
110	1650.00	lb	152	204	256	308	360	412	464	515	567	619	671
			-41	10	62	114	166	218	270	321	373	425	477
120	1800.00	lb	206	263	320	376	433	489	546	603	659	716	772
			12	69	126	182	239	295	352	409	465	522	578
130	1950.00	lb	261	322	383	445	506	567	629	690	751	812	874
			67	128	189	251	312	373	434	496	557	618	680
140	2100.00	lb	315	381	447	513	579	645	711	777	843	909	975
			121	187	253	319	385	451	517	583	649	715	781
150	2250.00	lb	369	440	510	581	652	723	793	864	935	1006	1076
			175	246	316	387	458	529	599	670	741	812	882

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

Table 3.A Estimated costs per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	_____
App by Air (3 gal)	appl	5.50	5.7500	31.63	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_____
Ethephon 6E	pt	2.90	2.3125	6.71	_____
Tribufos 6lb	pt	8.61	0.5000	4.31	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_____
UAN (32%)	gal	1.51	34.3582	51.88	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	10.87	1.0000	10.87	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Cotoran	pt	5.85	2.0000	11.70	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Liberty 280	oz	0.49	58.0000	28.42	_____
Warrant	pt	4.02	3.0000	12.06	_____
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_____
Bidrin 8EC	oz	1.28	5.2000	6.66	_____
Centric 40WG	oz	4.89	2.0000	9.78	_____
Diamond .83EC	oz	1.31	6.0000	7.86	_____
Imidacloprid 4F	oz	0.81	2.0000	1.62	_____
Bifenthrin	oz	0.82	12.8000	10.50	_____
Lambda	oz	1.71	1.0000	1.71	_____
IncidentalPestTrt$15	acre	15.00	1.5000	22.50	_____
Transform WG	oz	7.38	1.5000	11.07	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	48.0000	4.80	_____
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.3993	6.10	_____
Self-Propelled	hour	15.22	0.2075	3.16	_____
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	15.17	0.4855	7.37	_____
DIESEL FUEL					
Tractors	gal	2.30	4.6248	10.65	_____
Self-Propelled	gal	2.30	4.8836	11.22	_____
1/4-mi. Pivot Irr.	gal	2.30	11.2011	25.77	_____
REPAIR & MAINTENANCE					
Implements	acre	7.30	1.0000	7.30	_____
Tractors	acre	2.85	1.0000	2.85	_____
Self-Propelled	acre	22.35	1.0000	22.35	_____
1/4-mi. Pivot Irr.	acre	21.65	1.0000	21.65	_____
INTEREST ON OP. CAP.	acre	16.91	1.0000	16.91	_____

TOTAL DIRECT EXPENSES				817.67	_____
FIXED EXPENSES					
Implements	acre	11.35	1.0000	11.35	_____
Tractors	acre	19.29	1.0000	19.29	_____
Self-Propelled	acre	96.53	1.0000	96.53	_____
1/4-mi. Pivot Irr.	acre	82.73	1.0000	82.73	_____

TOTAL FIXED EXPENSES				209.90	_____

TOTAL SPECIFIED EXPENSES				1027.57	_____

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

Table 3.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1500.0000	943.35	_____
Cotton Seed	lb	0.10	2025.0000	202.50	_____

TOTAL INCOME				1145.85	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.13	1.0000	49.13	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	93.13	1.0000	93.13	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	91.75	1.0000	91.75	_____
INSECTICIDES	acre	84.25	1.0000	84.25	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	4.80	1.0000	4.80	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	15.22	0.6069	9.26	_____
UNALLOCATED LABOR	hour	15.17	0.4855	7.37	_____
DIESEL FUEL	gal	2.30	20.7096	47.64	_____
REPAIR & MAINTENANCE	acre	54.15	1.0000	54.15	_____
INTEREST ON OP. CAP.	acre	16.91	1.0000	16.91	_____

TOTAL DIRECT EXPENSES				817.67	_____
RETURNS ABOVE DIRECT EXPENSES				328.18	_____
TOTAL FIXED EXPENSES				209.90	_____

TOTAL SPECIFIED EXPENSES				1027.57	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				118.28	_____

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

Table 3.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air (3 gal)	appl					1.5000				
IncidentalPestTrt$15	acre					1.5000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1500.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
1/4-mi. Pivot Irr.	acre				Jan	1.0000			0.20	
TOTALS							0.60	0.39	1.12	0.48

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

Table 3.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		0.66	0.41	0.68		0.09	1.84	1.85	3.69
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	25.94					0.79	26.73		26.73
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	25.94					0.57	26.51		26.51
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Warrant	pt	12.06					0.26	12.32		12.32
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	8.25					0.14	8.39		8.39
IncidentalPestTrt$15	acre	22.50					0.39	22.89		22.89
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	165.00					0.72	165.72		165.72
Stalk Shredder-Flail	20'		2.20	2.76	2.26		0.03	7.25	5.41	12.66
1/4-mi. Pivot Irr.	acre		25.77	21.65	1.84		0.94	50.20	82.73	132.93
TOTALS		677.68	47.64	54.15	21.29	0.00	16.91	817.67	209.90	1027.57

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

Table 3.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1145.85
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	20.63	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	41.25	0.00	0.00	0.00	0.00	25.94	0.00	25.94	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	21.15	0.00	44.33	26.27	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	46.88	21.70	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	3.20	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.15	0.00	0.00	0.00	0.00	1.65	5.01	3.59	0.20	0.15	0.00	8.54
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.09	0.00	0.00	0.00	0.00	1.38	3.09	10.64	10.31	7.73	0.00	12.40
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.00	1.11	2.83	20.32	1.87	1.40	0.00	24.51
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	1.03	0.92	5.05	2.23	1.44	0.55	0.21	0.92
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	30.24	31.00	197.46	104.47	84.53	42.53	24.44	211.37
NET INCOME	-91.63	0.00	0.00	0.00	-30.24	-31.00	-197.46	-104.47	-84.53	-42.53	-24.44	934.48
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-121.87	-152.87	-350.33	-454.80	-539.33	-581.86	-606.30	328.18

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

Table 3.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-178	-154	-131	-107	-84	-60	-37	-13	10	33	57
			-388	-364	-341	-317	-294	-270	-246	-223	-199	-176	-152
60	900.00	lb	-124	-96	-67	-39	-11	17	45	73	102	130	158
			-334	-305	-277	-249	-221	-192	-164	-136	-107	-79	-51
70	1050.00	lb	-70	-37	-4	28	61	94	127	160	193	226	259
			-280	-247	-214	-181	-148	-115	-81	-48	-15	17	50
80	1200.00	lb	-16	21	59	97	134	172	210	248	285	323	361
			-225	-188	-150	-112	-74	-37	0	38	75	113	151
90	1350.00	lb	38	80	123	165	207	250	292	335	377	420	462
			-171	-129	-86	-44	-1	40	82	125	167	210	252
100	1500.00	lb	92	139	186	233	281	328	375	422	469	516	564
			-117	-70	-23	23	71	118	165	212	259	306	354
110	1650.00	lb	146	198	250	302	354	405	457	509	561	613	665
			-63	-11	40	92	144	196	247	299	351	403	455
120	1800.00	lb	200	257	313	370	427	483	540	596	653	710	766
			-9	47	104	160	217	273	330	387	443	500	556
130	1950.00	lb	254	316	377	438	500	561	622	684	745	806	868
			44	106	167	228	290	351	412	474	535	596	658
140	2100.00	lb	309	375	441	507	573	639	705	771	837	903	969
			99	165	231	297	363	429	495	561	627	693	759
150	2250.00	lb	363	433	504	575	646	716	787	858	929	1000	1070
			153	224	294	365	436	507	577	648	719	790	860

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	_____
App by Air (3 gal)	appl	5.50	5.2500	28.88	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_____
Ethephon 6E	pt	2.90	2.3125	6.71	_____
Tribufos 6lb	pt	8.61	0.5000	4.31	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_____
UAN (32%)	gal	1.51	25.4000	38.35	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	10.87	1.0000	10.87	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Cotoran	pt	5.85	2.0000	11.70	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Liberty 280	oz	0.49	58.0000	28.42	_____
Warrant	pt	4.02	3.0000	12.06	_____
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_____
Bidrin 8EC	oz	1.28	5.2000	6.66	_____
Centric 40WG	oz	4.89	2.0000	9.78	_____
Diamond .83EC	oz	1.31	6.0000	7.86	_____
Imidacloprid 4F	oz	0.81	2.0000	1.62	_____
Bifenthrin	oz	0.82	12.8000	10.50	_____
Lambda	oz	1.71	1.0000	1.71	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.38	1.5000	11.07	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	48.0000	4.80	_____
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.2712	4.14	_____
Self-Propelled	hour	15.22	0.2075	3.16	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
UNALLOCATED LABOR	hour	15.19	0.3830	5.82	_____
DIESEL FUEL					
Tractors	gal	2.30	3.1417	7.24	_____
Self-Propelled	gal	2.30	4.8836	11.22	_____
REPAIR & MAINTENANCE					
Implements	acre	5.28	1.0000	5.28	_____
Tractors	acre	1.94	1.0000	1.94	_____
Self-Propelled	acre	22.35	1.0000	22.35	_____
INTEREST ON OP. CAP.	acre	14.69	1.0000	14.69	_____

TOTAL DIRECT EXPENSES				699.35	_____
FIXED EXPENSES					
Implements	acre	7.83	1.0000	7.83	_____
Tractors	acre	13.10	1.0000	13.10	_____
Self-Propelled	acre	96.53	1.0000	96.53	_____

TOTAL FIXED EXPENSES				117.46	_____

TOTAL SPECIFIED EXPENSES				816.81	_____

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

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

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

TOTAL INCOME				916.68	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	79.60	1.0000	79.60	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	91.75	1.0000	91.75	_____
INSECTICIDES	acre	76.75	1.0000	76.75	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	4.80	1.0000	4.80	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2897	2.61	_____
OPERATOR LABOR	hour	15.22	0.4788	7.30	_____
UNALLOCATED LABOR	hour	15.19	0.3830	5.82	_____
DIESEL FUEL	gal	2.30	8.0253	18.46	_____
REPAIR & MAINTENANCE	acre	29.57	1.0000	29.57	_____
INTEREST ON OP. CAP.	acre	14.69	1.0000	14.69	_____

TOTAL DIRECT EXPENSES				699.35	_____
RETURNS ABOVE DIRECT EXPENSES				217.33	_____
TOTAL FIXED EXPENSES				117.46	_____

TOTAL SPECIFIED EXPENSES				816.81	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				99.87	_____

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

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.10	0.04
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					25.4000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt$15	acre					1.0000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.47	0.27	0.76	0.38

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

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
NT Plant-Folding	12R-38		1.38	2.13	1.89		0.14	5.54	6.19	11.73
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	38.35					0.84	39.19		39.19
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Warrant	pt	12.06					0.26	12.32		12.32
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
IncidentalPestTrt$15	acre	15.00					0.26	15.26		15.26
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	132.00					0.58	132.58		132.58
Stalk Shredder-Flail	20'		2.20	2.76	2.26		0.03	7.25	5.41	12.66
TOTALS		620.90	18.46	29.57	15.73	0.00	14.69	699.35	117.46	816.81

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

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

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	916.68
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	41.25	0.00	0.00	0.00	0.00	0.00	0.00	38.35	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	21.15	0.00	44.33	26.27	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	39.38	21.70	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	3.20	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	3.75	3.44	0.00	0.00	0.00	8.54
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	3.15	2.91	0.00	0.00	0.00	12.40
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.12	1.94	0.00	0.00	0.00	24.51
INTEREST ON OP. CAP.	4.23	0.00	0.00	0.00	1.03	0.00	5.02	1.93	1.06	0.43	0.21	0.78
TOTAL DIRECT EXPENSES	84.95	0.00	0.00	0.00	30.24	0.00	196.52	90.32	61.52	33.13	24.44	178.23
NET INCOME	-84.95	0.00	0.00	0.00	-30.24	0.00	-196.52	-90.32	-61.52	-33.13	-24.44	738.45
NET INCOME TO DATE	-84.95	-84.95	-84.95	-84.95	-115.19	-115.19	-311.71	-402.03	-463.55	-496.68	-521.12	217.33

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

Table 4.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-188	-169	-150	-131	-112	-93	-74	-55	-37	-18	0
			-305	-286	-267	-248	-230	-211	-192	-173	-154	-135	-116
60	720.00	lb	-144	-122	-99	-76	-54	-31	-8	13	36	59	81
			-262	-239	-216	-194	-171	-148	-126	-103	-81	-58	-35
70	840.00	lb	-101	-74	-48	-22	4	30	57	83	109	136	162
			-218	-192	-166	-139	-113	-86	-60	-33	-7	18	45
80	960.00	lb	-58	-27	2	32	62	92	123	153	183	213	243
			-175	-145	-115	-84	-54	-24	5	35	66	96	126
90	1080.00	lb	-14	19	53	87	121	155	189	223	257	290	324
			-132	-98	-64	-30	3	37	71	105	139	173	207
100	1200.00	lb	28	66	104	141	179	217	255	292	330	368	406
			-88	-51	-13	24	62	99	137	175	213	250	288
110	1320.00	lb	72	113	155	196	238	279	321	362	404	445	487
			-45	-3	37	79	120	162	203	245	286	328	369
120	1440.00	lb	115	160	205	251	296	341	387	432	477	522	568
			-2	43	88	133	179	224	269	314	360	405	450
130	1560.00	lb	158	207	256	305	354	403	453	502	551	600	649
			41	90	139	188	237	286	335	384	433	482	531
140	1680.00	lb	202	254	307	360	413	466	518	571	624	677	730
			84	137	190	243	295	348	401	454	507	560	612
150	1800.00	lb	245	301	358	415	471	528	584	641	698	754	811
			127	184	241	297	354	410	467	524	580	637	693

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

Table 5.A Estimated costs per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.5000	17.50	_____
App by Air (3 gal)	appl	5.50	5.2500	28.88	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	_____
Ethephon 6E	pt	2.90	2.3125	6.71	_____
Tribufos 6lb	pt	8.61	0.5000	4.31	_____
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	_____
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_____
UAN (32%)	gal	1.51	32.5498	49.15	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	10.87	1.0000	10.87	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Cotoran	pt	5.85	2.0000	11.70	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Liberty 280	oz	0.49	58.0000	28.42	_____
Warrant	pt	4.02	2.0000	8.04	_____
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	_____
Bidrin 8EC	oz	1.28	5.2000	6.66	_____
Centric 40WG	oz	4.89	1.3400	6.55	_____
Diamond .83EC	oz	1.31	6.0000	7.86	_____
Imidacloprid 4F	oz	0.81	2.0000	1.62	_____
Bifenthrin	oz	0.82	12.8000	10.50	_____
Lambda	oz	1.71	1.0000	1.71	_____
IncidentalPestTrt$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.38	1.5000	11.07	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	30.0000	70.20	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	42.7200	4.27	_____
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.8159	12.43	_____
Self-Propelled	hour	15.22	0.1958	2.98	_____
HAND LABOR					
Implements	hour	9.06	0.3181	2.87	_____
Self-Propelled	hour	9.06	0.1840	1.66	_____
UNALLOCATED LABOR	hour	15.20	0.8094	12.31	_____
DIESEL FUEL					
Tractors	gal	2.30	9.4502	21.75	_____
Self-Propelled	gal	2.30	3.4035	7.82	_____
REPAIR & MAINTENANCE					
Implements	acre	10.53	1.0000	10.53	_____
Tractors	acre	5.80	1.0000	5.80	_____
Self-Propelled	acre	10.01	1.0000	10.01	_____
INTEREST ON OP. CAP.	acre	14.23	1.0000	14.23	_____

TOTAL DIRECT EXPENSES				641.83	_____
FIXED EXPENSES					
Implements	acre	18.09	1.0000	18.09	_____
Tractors	acre	39.41	1.0000	39.41	_____
Self-Propelled	acre	43.60	1.0000	43.60	_____

TOTAL FIXED EXPENSES				101.10	_____

TOTAL SPECIFIED EXPENSES				742.93	_____

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

Table 5.B Summary of estimated costs and returns per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	811.0000	510.04	_____
Cotton Seed	lb	0.10	1095.0000	109.50	_____

TOTAL INCOME				619.54	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	90.41	1.0000	90.41	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	87.73	1.0000	87.73	_____
INSECTICIDES	acre	73.52	1.0000	73.52	_____
SEED/PLANTS	acre	70.20	1.0000	70.20	_____
GROWTH REGULATORS	acre	4.27	1.0000	4.27	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5022	4.53	_____
OPERATOR LABOR	hour	15.22	1.0118	15.41	_____
UNALLOCATED LABOR	hour	15.20	0.8094	12.31	_____
DIESEL FUEL	gal	2.30	12.8538	29.57	_____
REPAIR & MAINTENANCE	acre	26.34	1.0000	26.34	_____
INTEREST ON OP. CAP.	acre	14.23	1.0000	14.23	_____

TOTAL DIRECT EXPENSES				641.83	_____
RETURNS ABOVE DIRECT EXPENSES				-22.29	_____
TOTAL FIXED EXPENSES				101.10	_____

TOTAL SPECIFIED EXPENSES				742.93	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-123.39	_____

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

Table 5.C Estimated resource use for field operations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	8R-38 2x1	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	8R-38 2x1	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cot. Seed B3XF/W3FE	thous					30.0000				
Cotton Seed Trt.	acre					0.6700				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					2.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					10.7200				
Centric 40WG	oz					1.3400				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt$15	acre					1.0000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R2x1(350)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	4R2x1(350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1(350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	811.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.01	0.81	1.51	0.80

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

Table 5.D Estimated costs for field operations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	8R-38 2x1		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	8R-38 2x1		0.66	0.41	0.68		0.09	1.84	1.85	3.69
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	8R-38 2x1		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	24.58					0.75	25.33		25.33
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	8R-38 2x1		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	70.20					1.84	72.04		72.04
Cotton Seed Trt.	acre	13.40					0.35	13.75		13.75
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Spray (Direct/Layby)	8R-38 2x1		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	8R-38 2x1		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	24.58					0.54	25.12		25.12
Spray (Direct/Layby)	8R-38 2x1		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Warrant	pt	8.04					0.18	8.22		8.22
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.07					0.02	1.09		1.09
Centric 40WG	oz	6.55					0.14	6.69		6.69
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
IncidentalPestTrt$15	acre	15.00					0.26	15.26		15.26
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Cotton Picker	4R2x1(350)		7.14	9.61	6.28		0.10	23.13	40.78	63.91
Boll Buggy	4R2x1(350)		4.59	2.53	4.72		0.05	11.89	11.24	23.13
Module Builder	4R2x1(350)		4.59	2.71	6.28		0.06	13.64	11.65	25.29
Gin & Haul	lb	89.21					0.39	89.60		89.60
Stalk Shredder-Flail	15'		2.93	3.07	3.01		0.04	9.05	6.82	15.87
TOTALS		539.44	29.57	26.34	32.25	0.00	14.23	641.83	101.10	742.93

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

Table 5.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	619.54
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.21
FERTILIZERS	41.25	0.00	0.00	0.00	0.00	24.58	0.00	24.58	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	21.15	0.00	44.33	22.25	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	10.65	39.38	21.70	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	70.20	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	3.20	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.15	0.00	0.00	0.00	0.00	1.65	3.67	4.49	0.00	0.00	0.00	20.29
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.09	0.00	0.00	0.00	0.00	1.38	3.09	3.76	0.00	0.00	0.00	19.25
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.00	1.11	2.83	2.37	0.00	0.00	0.00	17.92
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	1.03	0.88	3.91	1.51	1.06	0.43	0.21	0.64
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	30.24	29.60	153.28	70.68	61.52	33.13	24.44	147.31
NET INCOME	-91.63	0.00	0.00	0.00	-30.24	-29.60	-153.28	-70.68	-61.52	-33.13	-24.44	472.23
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-121.87	-151.47	-304.75	-375.43	-436.95	-470.08	-494.52	-22.29

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

Table 5.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-296	-283	-270	-258	-245	-232	-219	-207	-194	-181	-168
			-397	-384	-371	-359	-346	-333	-320	-308	-295	-282	-269
60	486.60	lb	-266	-251	-236	-221	-205	-190	-175	-159	-144	-129	-113
			-368	-352	-337	-322	-306	-291	-276	-260	-245	-230	-215
70	567.70	lb	-237	-219	-201	-184	-166	-148	-130	-112	-94	-77	-59
			-338	-320	-303	-285	-267	-249	-231	-213	-195	-178	-160
80	648.80	lb	-208	-187	-167	-147	-126	-106	-85	-65	-45	-24	-4
			-309	-289	-268	-248	-227	-207	-187	-166	-146	-125	-105
90	729.90	lb	-179	-156	-133	-110	-87	-64	-41	-18	4	27	50
			-280	-257	-234	-211	-188	-165	-142	-119	-96	-73	-50
100	811.00	lb	-149	-124	-98	-73	-47	-22	3	28	54	79	105
			-250	-225	-199	-174	-148	-123	-97	-72	-46	-21	4
110	892.10	lb	-120	-92	-64	-36	-8	19	47	75	103	131	160
			-221	-193	-165	-137	-109	-81	-53	-25	2	30	58
120	973.20	lb	-91	-60	-30	0	31	61	92	123	153	184	214
			-192	-161	-131	-100	-69	-39	-8	21	52	83	113
130	1054.30	lb	-61	-28	4	37	70	103	136	170	203	236	269
			-163	-129	-96	-63	-30	2	35	69	102	135	168
140	1135.40	lb	-32	3	38	74	110	145	181	217	252	288	324
			-133	-98	-62	-26	9	44	80	116	151	187	223
150	1216.50	lb	-3	34	73	111	149	187	226	264	302	340	379
			-104	-66	-27	10	48	86	125	163	201	239	278

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

Table 6.A Estimated costs per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Prefix	pt	5.69	2.0000	11.38	_____
Zidua DF	oz	8.23	1.5000	12.35	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.39	50.0000	69.50	_____
ADJUVANTS					
Surfactant	pt	5.31	1.0000	5.31	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.3302	5.03	_____
Harvesters	hour	15.22	0.0851	1.30	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	15.24	0.3738	5.70	_____
DIESEL FUEL					
Tractors	gal	2.30	3.8252	8.80	_____
Harvesters	gal	2.30	1.4243	3.28	_____
REPAIR & MAINTENANCE					
Implements	acre	5.10	1.0000	5.10	_____
Tractors	acre	2.34	1.0000	2.34	_____
Harvesters	acre	3.40	1.0000	3.40	_____
INTEREST ON OP. CAP.	acre	10.47	1.0000	10.47	_____

TOTAL DIRECT EXPENSES				360.89	_____
FIXED EXPENSES					
Implements	acre	11.35	1.0000	11.35	_____
Tractors	acre	15.94	1.0000	15.94	_____
Harvesters	acre	14.41	1.0000	14.41	_____

TOTAL FIXED EXPENSES				41.70	_____

TOTAL SPECIFIED EXPENSES				402.59	_____

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

Table 6.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	42.0000	403.20	_____
TOTAL INCOME				403.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	6.69	1.0000	6.69	_____
HERBICIDES	acre	87.90	1.0000	87.90	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
SEED/PLANTS	acre	69.50	1.0000	69.50	_____
ADJUVANTS	acre	5.30	1.0000	5.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	15.22	0.4154	6.33	_____
UNALLOCATED LABOR	hour	15.24	0.3738	5.70	_____
DIESEL FUEL	gal	2.30	5.2496	12.08	_____
REPAIR & MAINTENANCE	acre	10.84	1.0000	10.84	_____
INTEREST ON OP. CAP.	acre	10.47	1.0000	10.47	_____
TOTAL DIRECT EXPENSES				360.89	_____
RETURNS ABOVE DIRECT EXPENSES				42.31	_____
TOTAL FIXED EXPENSES				41.70	_____
TOTAL SPECIFIED EXPENSES				402.59	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				0.61	_____

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

Table 6.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2020

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

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

Table 6.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Subsoiler	3 shank		1.09	0.37	1.18		0.14	2.78	2.19	4.97
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Disk Harrow	24'		2.18	1.59	2.37		0.32	6.46	6.27	12.73
Field Cultivate Fld	24'		1.66	0.92	1.80		0.23	4.61	5.19	9.80
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Select Max	pt	10.87					0.38	11.25		11.25
Valor SX	oz	8.56					0.30	8.86		8.86
Surfactant	pt	2.12					0.07	2.19		2.19
Plant & Pre-Folding	12R-30		1.80	2.48	2.57		0.18	7.03	7.46	14.49
Soybean Seed RR2	lb	69.50					1.82	71.32		71.32
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Prefix	pt	11.38					0.25	11.63		11.63
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Zidua DF	oz	12.35					0.27	12.62		12.62
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	5.69					0.05	5.74		5.74
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	11.34					0.05	11.39		11.39
Grain Cart Soybean	700 bu		0.57	0.36	0.61		0.01	1.55	1.44	2.99
TOTALS		314.60	12.08	10.84	12.90	0.00	10.47	360.89	41.70	402.59

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

Table 6.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	403.20
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	29.37	0.00	25.84	32.69	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.69	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	69.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	2.12	0.00	2.12	0.00	0.00	0.00	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.35	0.00	0.00	0.00	0.00	0.00	2.57	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	4.93	0.00	0.00	0.00	0.00	0.00	1.80	1.50	0.00	0.00	0.00	3.85
REPAIR & MAINTENANCE	2.88	0.00	0.00	0.00	0.00	0.00	2.48	0.82	0.00	0.00	0.00	4.66
INTEREST ON OP. CAP.	4.75	0.00	0.00	0.00	1.35	0.00	2.95	0.96	0.00	0.00	0.36	0.10
TOTAL DIRECT EXPENSES	95.40	0.00	0.00	0.00	39.84	0.00	115.50	44.37	0.00	0.00	42.75	23.03
NET INCOME	-95.40	0.00	0.00	0.00	-39.84	0.00	-115.50	-44.37	0.00	0.00	-42.75	380.17
NET INCOME TO DATE	-95.40	-95.40	-95.40	-95.40	-135.24	-135.24	-250.74	-295.11	-295.11	-295.11	-337.86	42.31

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

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Non-irrigated, Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-203	-193	-183	-173	-163	-153	-143	-133	-123	-113	-103
			-245	-235	-225	-215	-205	-195	-185	-175	-165	-154	-144
60	25.20	bu	-174	-162	-150	-138	-126	-114	-102	-90	-78	-66	-53
			-216	-204	-192	-180	-168	-156	-144	-131	-119	-107	-95
70	29.40	bu	-145	-131	-117	-103	-89	-75	-61	-47	-32	-18	-4
			-187	-173	-159	-145	-131	-116	-102	-88	-74	-60	-46
80	33.60	bu	-116	-100	-84	-68	-52	-36	-19	-3	12	28	44
			-158	-142	-126	-110	-93	-77	-61	-45	-29	-13	2
90	37.80	bu	-87	-69	-51	-33	-15	3	21	39	57	75	93
			-129	-111	-93	-74	-56	-38	-20	-2	15	34	52
100	42.00	bu	-58	-38	-18	1	22	42	62	82	102	122	143
			-100	-80	-59	-39	-19	0	20	40	61	81	101
110	46.20	bu	-29	-7	14	37	59	81	103	125	148	170	192
			-71	-48	-26	-4	17	39	61	84	106	128	150
120	50.40	bu	-0	23	48	72	96	120	144	169	193	217	241
			-41	-17	6	30	54	78	103	127	151	175	199
130	54.60	bu	28	55	81	107	133	159	186	212	238	264	290
			-12	13	39	65	91	118	144	170	196	222	249
140	58.80	bu	57	86	114	142	170	199	227	255	283	311	340
			16	44	72	100	129	157	185	213	242	270	298
150	63.00	bu	87	117	147	177	207	238	268	298	328	359	389
			45	75	105	136	166	196	226	256	287	317	347

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

Table 7.A Estimated costs per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.0000	35.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Prefix	pt	5.69	2.0000	11.38	_____
Zidua DF	oz	8.23	1.5000	12.35	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
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 RR2	lb	1.39	50.0000	69.50	_____
ADJUVANTS					
Surfactant	pt	5.31	1.1000	5.84	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4897	7.46	_____
Harvesters	hour	15.22	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	0.0959	0.87	_____
UNALLOCATED LABOR	hour	15.24	0.4466	6.81	_____
DIESEL FUEL					
Tractors	gal	2.30	5.4882	12.62	_____
Harvesters	gal	2.30	1.4243	3.28	_____
Roll-Out Pipe Irr.	gal	2.30	7.3316	16.86	_____
REPAIR & MAINTENANCE					
Implements	acre	6.03	1.0000	6.03	_____
Tractors	acre	3.33	1.0000	3.33	_____
Harvesters	acre	3.40	1.0000	3.40	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	11.79	1.0000	11.79	_____

TOTAL DIRECT EXPENSES				435.37	_____
FIXED EXPENSES					
Implements	acre	14.89	1.0000	14.89	_____
Tractors	acre	22.70	1.0000	22.70	_____
Harvesters	acre	14.41	1.0000	14.41	_____
Roll-Out Pipe Irr.	acre	60.69	1.0000	60.69	_____

TOTAL FIXED EXPENSES				112.69	_____

TOTAL SPECIFIED EXPENSES				548.06	_____

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

Table 7.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	60.0000	576.00	_____
TOTAL INCOME				576.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	87.90	1.0000	87.90	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	69.50	1.0000	69.50	_____
ADJUVANTS	acre	5.83	1.0000	5.83	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	15.22	0.5748	8.76	_____
UNALLOCATED LABOR	hour	15.24	0.4466	6.81	_____
DIESEL FUEL	gal	2.30	14.2442	32.76	_____
REPAIR & MAINTENANCE	acre	19.65	1.0000	19.65	_____
INTEREST ON OP. CAP.	acre	11.79	1.0000	11.79	_____
TOTAL DIRECT EXPENSES				435.37	_____
RETURNS ABOVE DIRECT EXPENSES				140.63	_____
TOTAL FIXED EXPENSES				112.69	_____
TOTAL SPECIFIED EXPENSES				548.06	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				27.94	_____

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

Table 7.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt $8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.57	0.57	1.03	0.44

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

Table 7.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Subsoiler	3 shank		1.09	0.37	1.18		0.14	2.78	2.19	4.97
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Disk Harrow	24'		2.18	1.59	2.37		0.32	6.46	6.27	12.73
Field Cultivate Fld	24'		1.66	0.92	1.80		0.23	4.61	5.19	9.80
Bed/Lister-Roll-Fo	12R-30		2.15	1.30	2.34		0.30	6.09	6.00	12.09
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Select Max	pt	10.87					0.38	11.25		11.25
Valor SX	oz	8.56					0.30	8.86		8.86
Surfactant	pt	2.12					0.07	2.19		2.19
Plant & Pre-Folding	12R-30		1.80	2.48	2.57		0.18	7.03	7.46	14.49
Soybean Seed RR2	lb	69.50					1.82	71.32		71.32
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Prefix	pt	11.38					0.25	11.63		11.63
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Zidua DF	oz	12.35					0.27	12.62		12.62
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Quadris Top SBX	oz	16.52					0.22	16.74		16.74
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	5.69					0.05	5.74		5.74
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	16.20					0.07	16.27		16.27
Grain Cart Soybean	700 bu		0.57	0.36	0.61		0.01	1.55	1.44	2.99
Roll-Out Pipe Irr.	acre	7.92	18.53	7.51	4.50		0.68	39.14	64.99	104.13
TOTALS		351.43	32.76	19.65	19.74	0.00	11.79	435.37	112.69	548.06

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

Table 7.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	576.00
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	29.37	0.00	25.84	32.69	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.69	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	69.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	2.12	0.00	2.12	0.00	0.00	0.53	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
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	8.27	0.00	0.00	0.00	0.00	0.00	2.57	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	7.93	0.00	0.00	0.00	0.00	0.00	1.80	1.50	11.68	5.62	0.00	4.23
REPAIR & MAINTENANCE	4.48	0.00	0.00	0.00	0.00	0.00	2.48	0.82	5.75	1.31	0.00	4.81
INTEREST ON OP. CAP.	5.14	0.00	0.00	0.00	1.35	0.00	2.95	0.97	0.48	0.41	0.36	0.13
TOTAL DIRECT EXPENSES	103.31	0.00	0.00	0.00	39.84	0.00	115.50	44.61	28.66	31.62	42.75	29.08
NET INCOME	-103.31	0.00	0.00	0.00	-39.84	0.00	-115.50	-44.61	-28.66	-31.62	-42.75	546.92
NET INCOME TO DATE	-103.31	-103.31	-103.31	-103.31	-143.15	-143.15	-258.65	-303.26	-331.92	-363.54	-406.29	140.63

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

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-211	-196	-182	-168	-153	-139	-124	-110	-96	-81	-67
			-323	-309	-295	-280	-266	-251	-237	-223	-208	-194	-179
60	36.00	bu	-169	-152	-135	-117	-100	-83	-65	-48	-31	-14	3
			-282	-265	-247	-230	-213	-195	-178	-161	-144	-126	-109
70	42.00	bu	-128	-107	-87	-67	-47	-27	-7	13	33	53	73
			-240	-220	-200	-180	-160	-139	-119	-99	-79	-59	-39
80	48.00	bu	-86	-63	-40	-17	5	28	51	74	97	120	143
			-199	-176	-153	-130	-107	-84	-60	-37	-14	8	31
90	54.00	bu	-44	-19	6	32	58	84	110	136	162	188	214
			-157	-131	-105	-79	-53	-28	-2	23	49	75	101
100	60.00	bu	-3	25	54	83	111	140	169	198	227	255	284
			-116	-87	-58	-29	-0	27	56	85	114	143	171
110	66.00	bu	38	69	101	133	164	196	228	259	291	323	355
			-74	-42	-11	20	52	83	115	147	178	210	242
120	72.00	bu	79	114	148	183	218	252	287	321	356	390	425
			-32	1	36	70	105	139	174	209	243	278	312
130	78.00	bu	121	158	196	233	271	308	345	383	420	458	495
			8	46	83	120	158	195	233	270	308	345	383
140	84.00	bu	162	203	243	283	324	364	404	445	485	525	566
			50	90	130	171	211	251	292	332	372	413	453
150	90.00	bu	204	247	290	334	377	420	463	506	550	593	636
			91	135	178	221	264	307	351	394	437	480	523

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

Table 8.A Estimated costs per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Prefix	pt	5.69	2.0000	11.38	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.39	50.0000	69.50	_____
ADJUVANTS					
Surfactant	pt	5.31	1.1000	5.84	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4582	6.96	_____
Harvesters	hour	15.22	0.0851	1.30	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR	hour	15.26	0.3065	4.68	_____
DIESEL FUEL					
Tractors	gal	2.30	4.3236	9.93	_____
Harvesters	gal	2.30	1.4243	3.28	_____
Contour Flood Irr.	gal	2.30	10.9974	25.29	_____
REPAIR & MAINTENANCE					
Implements	acre	5.04	1.0000	5.04	_____
Tractors	acre	2.53	1.0000	2.53	_____
Harvesters	acre	3.40	1.0000	3.40	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	11.07	1.0000	11.07	_____

TOTAL DIRECT EXPENSES				410.16	_____
FIXED EXPENSES					
Implements	acre	10.59	1.0000	10.59	_____
Tractors	acre	17.18	1.0000	17.18	_____
Harvesters	acre	14.41	1.0000	14.41	_____
Contour Flood Irr.	acre	47.45	1.0000	47.45	_____

TOTAL FIXED EXPENSES				89.63	_____

TOTAL SPECIFIED EXPENSES				499.79	_____

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

Table 8.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	53.0000	508.80	_____
TOTAL INCOME				508.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	70.09	1.0000	70.09	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
SEED/PLANTS	acre	69.50	1.0000	69.50	_____
ADJUVANTS	acre	5.83	1.0000	5.83	_____
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	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1100	1.00	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	15.22	0.5433	8.26	_____
UNALLOCATED LABOR	hour	15.26	0.3065	4.68	_____
DIESEL FUEL	gal	2.30	16.7455	38.50	_____
REPAIR & MAINTENANCE	acre	24.77	1.0000	24.77	_____
INTEREST ON OP. CAP.	acre	11.07	1.0000	11.07	_____
TOTAL DIRECT EXPENSES				410.16	_____
RETURNS ABOVE DIRECT EXPENSES				98.64	_____
TOTAL FIXED EXPENSES				89.63	_____
TOTAL SPECIFIED EXPENSES				499.79	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				9.01	_____

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

Table 8.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

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

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

Table 8.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Disk Harrow	24'		1.84	1.49	2.37		0.30	6.00	5.61	11.61
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Spray (Broadcast)	60'		0.75	0.41	0.95		0.08	2.19	1.63	3.82
Glyphosate 3lbs a.e	oz	4.48					0.18	4.66		4.66
Select Max	pt	10.87					0.43	11.30		11.30
Surfactant	pt	2.12					0.08	2.20		2.20
Valor SX	oz	8.56					0.34	8.90		8.90
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.52	2.40	2.57		0.17	6.66	6.91	13.57
Soybean Seed RR2	lb	69.50					1.82	71.32		71.32
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.05	2.01	1.40	3.41
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Prefix	pt	11.38					0.30	11.68		11.68
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Quadris Top SBX	oz	16.52					0.29	16.81		16.81
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	14.31					0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
Contour Flood Irr.	acre	2.25	29.37	15.07	5.89		0.94	53.52	55.53	109.05
TOTALS		319.06	38.50	24.77	16.76	0.00	11.07	410.16	89.63	499.79

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

Table 8.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	508.80
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	23.91	0.00	0.00	41.70	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	69.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	2.12	0.00	0.00	2.12	0.00	0.53	0.00	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.37	0.00	0.00	0.95	0.00	0.00	3.97	2.86	1.67	1.67	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	1.84	0.00	0.00	0.75	0.00	0.00	2.15	10.55	9.60	9.60	0.25	3.76
REPAIR & MAINTENANCE	1.49	0.00	0.00	0.41	0.00	0.00	2.78	9.39	2.99	2.99	0.08	4.64
INTEREST ON OP. CAP.	4.36	0.00	0.00	1.11	0.00	0.00	3.59	0.64	0.66	0.35	0.25	0.11
TOTAL DIRECT EXPENSES	87.55	0.00	0.00	29.25	0.00	0.00	140.55	30.17	38.97	27.30	30.47	25.90
NET INCOME	-87.55	0.00	0.00	-29.25	0.00	0.00	-140.55	-30.17	-38.97	-27.30	-30.47	482.90
NET INCOME TO DATE	-87.55	-87.55	-87.55	-116.80	-116.80	-116.80	-257.35	-287.52	-326.49	-353.79	-384.26	98.64

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

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-212	-199	-186	-174	-161	-148	-135	-123	-110	-97	-84
			-301	-289	-276	-263	-250	-238	-225	-212	-200	-187	-174
60	31.80	bu	-175	-160	-144	-129	-114	-99	-83	-68	-53	-38	-22
			-265	-249	-234	-219	-204	-188	-173	-158	-142	-127	-112
70	37.10	bu	-138	-120	-103	-85	-67	-49	-31	-14	3	21	39
			-228	-210	-192	-174	-157	-139	-121	-103	-85	-68	-50
80	42.40	bu	-102	-81	-61	-40	-20	-0	20	40	60	81	101
			-191	-171	-150	-130	-110	-89	-69	-49	-28	-8	11
90	47.70	bu	-65	-42	-19	3	26	49	72	94	117	140	163
			-154	-132	-109	-86	-63	-40	-17	5	28	51	74
100	53.00	bu	-28	-3	22	47	73	98	124	149	174	200	225
			-118	-92	-67	-41	-16	9	34	59	85	110	136
110	58.30	bu	8	36	64	92	120	148	176	204	232	260	288
			-81	-53	-25	2	30	58	86	114	142	170	198
120	63.60	bu	44	75	105	136	166	197	228	258	289	319	350
			-44	-14	16	46	77	107	138	168	199	230	260
130	68.90	bu	81	114	147	180	213	246	280	313	346	379	412
			-8	25	58	91	124	157	190	223	256	289	322
140	74.20	bu	118	153	189	225	260	296	332	367	403	438	474
			28	64	99	135	171	206	242	278	313	349	384
150	79.50	bu	155	193	231	269	307	345	384	422	460	498	536
			65	103	141	179	218	256	294	332	370	408	447

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

Table 9.A Estimated costs per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	5.69	2.0000	11.38	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.82	6.4000	5.25	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.39	50.0000	69.50	_____
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.1171	1.78	_____
Harvesters	hour	15.22	0.1021	1.56	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_____
Harvesters	gal	2.30	1.3935	3.21	_____
1/2-mi Pivot Irr.	gal	2.30	16.4057	37.73	_____
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_____
Tractors	acre	0.83	1.0000	0.83	_____
Harvesters	acre	3.75	1.0000	3.75	_____
1/2-mi Pivot Irr.	acre	11.79	1.0000	11.79	_____
INTEREST ON OP. CAP.	acre	9.05	1.0000	9.05	_____

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

TOTAL FIXED EXPENSES				74.85	_____

TOTAL SPECIFIED EXPENSES				454.35	_____

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

Table 9.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	50.0000	480.00	_____
TOTAL INCOME				480.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	41.70	1.0000	41.70	_____
INSECTICIDES	acre	34.62	1.0000	34.62	_____
SEED/PLANTS	acre	69.50	1.0000	69.50	_____
ADJUVANTS	acre	3.18	1.0000	3.18	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	15.22	0.2193	3.34	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL	gal	2.30	19.1560	44.06	_____
REPAIR & MAINTENANCE	acre	19.71	1.0000	19.71	_____
INTEREST ON OP. CAP.	acre	9.05	1.0000	9.05	_____
TOTAL DIRECT EXPENSES				379.50	_____
RETURNS ABOVE DIRECT EXPENSES				100.50	_____
TOTAL FIXED EXPENSES				74.85	_____
TOTAL SPECIFIED EXPENSES				454.35	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				25.65	_____

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

Table 9.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 9.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 9.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	480.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	15.86	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	1.06	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.57	0.98	0.04	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.12	15.84	11.32	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83	1.23	0.62	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.18	2.94	0.60	1.02	0.13	0.12
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	7.02	137.16	34.51	78.20	15.13	25.93
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-7.02	-137.16	-34.51	-78.20	-15.13	454.07
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.57	-225.73	-260.24	-338.44	-353.57	100.50

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

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 10.A Estimated costs per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.0000	21.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	5.69	2.0000	11.38	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.82	6.4000	5.25	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.39	50.0000	69.50	_____
ADJUVANTS					
Surfactant	pt	5.31	0.5000	2.66	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.1171	1.78	_____
Harvesters	hour	15.22	0.1021	1.56	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_____
Harvesters	gal	2.30	1.3935	3.21	_____
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_____
Tractors	acre	0.83	1.0000	0.83	_____
Harvesters	acre	3.75	1.0000	3.75	_____
INTEREST ON OP. CAP.	acre	7.78	1.0000	7.78	_____

TOTAL DIRECT EXPENSES				297.44	_____
FIXED EXPENSES					
Implements	acre	6.37	1.0000	6.37	_____
Tractors	acre	5.66	1.0000	5.66	_____
Harvesters	acre	15.90	1.0000	15.90	_____

TOTAL FIXED EXPENSES				27.93	_____

TOTAL SPECIFIED EXPENSES				325.37	_____

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

Table 10.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	25.0000	240.00	_____
TOTAL INCOME				240.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	6.69	1.0000	6.69	_____
HERBICIDES	acre	41.70	1.0000	41.70	_____
INSECTICIDES	acre	34.62	1.0000	34.62	_____
SEED/PLANTS	acre	69.50	1.0000	69.50	_____
ADJUVANTS	acre	2.65	1.0000	2.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	15.22	0.2193	3.34	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL	gal	2.30	2.7503	6.33	_____
REPAIR & MAINTENANCE	acre	7.92	1.0000	7.92	_____
INTEREST ON OP. CAP.	acre	7.78	1.0000	7.78	_____
TOTAL DIRECT EXPENSES				297.44	_____
RETURNS ABOVE DIRECT EXPENSES				-57.44	_____
TOTAL FIXED EXPENSES				27.93	_____
TOTAL SPECIFIED EXPENSES				325.37	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-85.37	_____

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

Table 10.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

Table 10.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

Table 10.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	240.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	7.00	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	15.86	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.53	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.53	0.93	0.00	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.75	0.00	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48	0.41	0.00	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.17	2.47	0.32	0.54	0.13	0.09
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	6.67	114.98	18.27	41.69	15.13	19.15
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-6.67	-114.98	-18.27	-41.69	-15.13	220.85
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.22	-203.20	-221.47	-263.16	-278.29	-57.44

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

Table 10.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Prefix	pt	5.69	2.0000	11.38	_____
Zidua DF	oz	8.23	1.5000	12.35	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.32	50.0000	66.00	_____
ADJUVANTS					
Surfactant	pt	5.31	1.0000	5.31	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.3302	5.03	_____
Harvesters	hour	15.22	0.0851	1.30	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	15.24	0.3738	5.70	_____
DIESEL FUEL					
Tractors	gal	2.30	3.8252	8.80	_____
Harvesters	gal	2.30	1.4243	3.28	_____
REPAIR & MAINTENANCE					
Implements	acre	5.10	1.0000	5.10	_____
Tractors	acre	2.34	1.0000	2.34	_____
Harvesters	acre	3.40	1.0000	3.40	_____
INTEREST ON OP. CAP.	acre	10.38	1.0000	10.38	_____

TOTAL DIRECT EXPENSES				357.30	_____
FIXED EXPENSES					
Implements	acre	11.35	1.0000	11.35	_____
Tractors	acre	15.94	1.0000	15.94	_____
Harvesters	acre	14.41	1.0000	14.41	_____

TOTAL FIXED EXPENSES				41.70	_____

TOTAL SPECIFIED EXPENSES				399.00	_____

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	42.0000	403.20	_____
TOTAL INCOME				403.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	6.69	1.0000	6.69	_____
HERBICIDES	acre	87.90	1.0000	87.90	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
SEED/PLANTS	acre	66.00	1.0000	66.00	_____
ADJUVANTS	acre	5.30	1.0000	5.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	15.22	0.4154	6.33	_____
UNALLOCATED LABOR	hour	15.24	0.3738	5.70	_____
DIESEL FUEL	gal	2.30	5.2496	12.08	_____
REPAIR & MAINTENANCE	acre	10.84	1.0000	10.84	_____
INTEREST ON OP. CAP.	acre	10.38	1.0000	10.38	_____
TOTAL DIRECT EXPENSES				357.30	_____
RETURNS ABOVE DIRECT EXPENSES				45.90	_____
TOTAL FIXED EXPENSES				41.70	_____
TOTAL SPECIFIED EXPENSES				399.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				4.20	_____

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

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

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

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

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Subsoiler	3 shank		1.09	0.37	1.18		0.14	2.78	2.19	4.97
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Disk Harrow	24'		2.18	1.59	2.37		0.32	6.46	6.27	12.73
Field Cultivate Fld	24'		1.66	0.92	1.80		0.23	4.61	5.19	9.80
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Select Max	pt	10.87					0.38	11.25		11.25
Valor SX	oz	8.56					0.30	8.86		8.86
Surfactant	pt	2.12					0.07	2.19		2.19
Plant & Pre-Folding	12R-30		1.80	2.48	2.57		0.18	7.03	7.46	14.49
Soybean Seed RR2X	lb	66.00					1.73	67.73		67.73
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Prefix	pt	11.38					0.25	11.63		11.63
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Zidua DF	oz	12.35					0.27	12.62		12.62
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	5.69					0.05	5.74		5.74
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	11.34					0.05	11.39		11.39
Grain Cart Soybean	700 bu		0.57	0.36	0.61		0.01	1.55	1.44	2.99
TOTALS		311.10	12.08	10.84	12.90	0.00	10.38	357.30	41.70	399.00

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

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

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	403.20
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	29.37	0.00	25.84	32.69	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.69	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	2.12	0.00	2.12	0.00	0.00	0.00	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.35	0.00	0.00	0.00	0.00	0.00	2.57	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	4.93	0.00	0.00	0.00	0.00	0.00	1.80	1.50	0.00	0.00	0.00	3.85
REPAIR & MAINTENANCE	2.88	0.00	0.00	0.00	0.00	0.00	2.48	0.82	0.00	0.00	0.00	4.66
INTEREST ON OP. CAP.	4.75	0.00	0.00	0.00	1.35	0.00	2.86	0.96	0.00	0.00	0.36	0.10
TOTAL DIRECT EXPENSES	95.40	0.00	0.00	0.00	39.84	0.00	111.91	44.37	0.00	0.00	42.75	23.03
NET INCOME	-95.40	0.00	0.00	0.00	-39.84	0.00	-111.91	-44.37	0.00	0.00	-42.75	380.17
NET INCOME TO DATE	-95.40	-95.40	-95.40	-95.40	-135.24	-135.24	-247.15	-291.52	-291.52	-291.52	-334.27	45.90

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

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

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-200	-190	-180	-170	-160	-150	-139	-129	-119	-109	-99
			-242	-232	-221	-211	-201	-191	-181	-171	-161	-151	-141
60	25.20	bu	-171	-159	-147	-135	-122	-110	-98	-86	-74	-62	-50
			-213	-200	-188	-176	-164	-152	-140	-128	-116	-104	-92
70	29.40	bu	-142	-128	-113	-99	-85	-71	-57	-43	-29	-15	-1
			-183	-169	-155	-141	-127	-113	-99	-85	-71	-56	-42
80	33.60	bu	-113	-96	-80	-64	-48	-32	-16	-0	15	32	48
			-154	-138	-122	-106	-90	-74	-58	-41	-25	-9	6
90	37.80	bu	-84	-65	-47	-29	-11	6	24	43	61	79	97
			-125	-107	-89	-71	-53	-34	-16	1	19	37	55
100	42.00	bu	-54	-34	-14	5	25	45	66	86	106	126	146
			-96	-76	-56	-36	-15	4	24	44	64	84	105
110	46.20	bu	-25	-3	18	40	62	85	107	129	151	173	195
			-67	-45	-23	-0	21	43	65	87	109	132	154
120	50.40	bu	3	27	51	75	100	124	148	172	196	221	245
			-38	-14	9	34	58	82	106	130	155	179	203
130	54.60	bu	32	58	84	111	137	163	189	215	242	268	294
			-9	16	43	69	95	121	147	174	200	226	252
140	58.80	bu	61	89	117	146	174	202	230	259	287	315	343
			19	48	76	104	132	160	189	217	245	273	302
150	63.00	bu	90	120	151	181	211	241	272	302	332	362	393
			48	79	109	139	169	200	230	260	290	321	351

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

Table 12.A Estimated costs per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.0000	35.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Prefix	pt	5.69	2.0000	11.38	_____
Zidua DF	oz	8.23	1.5000	12.35	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
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	1.32	50.0000	66.00	_____
ADJUVANTS					
Surfactant	pt	5.31	1.1000	5.84	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4897	7.46	_____
Harvesters	hour	15.22	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	0.0959	0.87	_____
UNALLOCATED LABOR	hour	15.24	0.4466	6.81	_____
DIESEL FUEL					
Tractors	gal	2.30	5.4882	12.62	_____
Harvesters	gal	2.30	1.4243	3.28	_____
Roll-Out Pipe Irr.	gal	2.30	7.3316	16.86	_____
REPAIR & MAINTENANCE					
Implements	acre	6.03	1.0000	6.03	_____
Tractors	acre	3.33	1.0000	3.33	_____
Harvesters	acre	3.40	1.0000	3.40	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	11.70	1.0000	11.70	_____

TOTAL DIRECT EXPENSES				431.78	_____
FIXED EXPENSES					
Implements	acre	14.89	1.0000	14.89	_____
Tractors	acre	22.70	1.0000	22.70	_____
Harvesters	acre	14.41	1.0000	14.41	_____
Roll-Out Pipe Irr.	acre	60.69	1.0000	60.69	_____

TOTAL FIXED EXPENSES				112.69	_____

TOTAL SPECIFIED EXPENSES				544.47	_____

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

Table 12.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	60.0000	576.00	_____
TOTAL INCOME				576.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	87.90	1.0000	87.90	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	66.00	1.0000	66.00	_____
ADJUVANTS	acre	5.83	1.0000	5.83	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	15.22	0.5748	8.76	_____
UNALLOCATED LABOR	hour	15.24	0.4466	6.81	_____
DIESEL FUEL	gal	2.30	14.2442	32.76	_____
REPAIR & MAINTENANCE	acre	19.65	1.0000	19.65	_____
INTEREST ON OP. CAP.	acre	11.70	1.0000	11.70	_____
TOTAL DIRECT EXPENSES				431.78	_____
RETURNS ABOVE DIRECT EXPENSES				144.22	_____
TOTAL FIXED EXPENSES				112.69	_____
TOTAL SPECIFIED EXPENSES				544.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				31.53	_____

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

Table 12.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Zidua DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt $8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.57	0.57	1.03	0.44

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

Table 12.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Subsoiler	3 shank		1.09	0.37	1.18		0.14	2.78	2.19	4.97
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Disk Harrow	24'		2.18	1.59	2.37		0.32	6.46	6.27	12.73
Field Cultivate Fld	24'		1.66	0.92	1.80		0.23	4.61	5.19	9.80
Bed/Lister-Roll-Fo	12R-30		2.15	1.30	2.34		0.30	6.09	6.00	12.09
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Select Max	pt	10.87					0.38	11.25		11.25
Valor SX	oz	8.56					0.30	8.86		8.86
Surfactant	pt	2.12					0.07	2.19		2.19
Plant & Pre-Folding	12R-30		1.80	2.48	2.57		0.18	7.03	7.46	14.49
Soybean Seed RR2X	lb	66.00					1.73	67.73		67.73
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Prefix	pt	11.38					0.25	11.63		11.63
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
Zidua DF	oz	12.35					0.27	12.62		12.62
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Quadris Top SBX	oz	16.52					0.22	16.74		16.74
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	5.69					0.05	5.74		5.74
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	16.20					0.07	16.27		16.27
Grain Cart Soybean	700 bu		0.57	0.36	0.61		0.01	1.55	1.44	2.99
Roll-Out Pipe Irr.	acre	7.92	18.53	7.51	4.50		0.68	39.14	64.99	104.13
TOTALS		347.93	32.76	19.65	19.74	0.00	11.70	431.78	112.69	544.47

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

Table 12.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	576.00
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	29.37	0.00	25.84	32.69	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.69	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	66.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	2.12	0.00	2.12	0.00	0.00	0.53	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
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	8.27	0.00	0.00	0.00	0.00	0.00	2.57	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	7.93	0.00	0.00	0.00	0.00	0.00	1.80	1.50	11.68	5.62	0.00	4.23
REPAIR & MAINTENANCE	4.48	0.00	0.00	0.00	0.00	0.00	2.48	0.82	5.75	1.31	0.00	4.81
INTEREST ON OP. CAP.	5.14	0.00	0.00	0.00	1.35	0.00	2.86	0.97	0.48	0.41	0.36	0.13
TOTAL DIRECT EXPENSES	103.31	0.00	0.00	0.00	39.84	0.00	111.91	44.61	28.66	31.62	42.75	29.08
NET INCOME	-103.31	0.00	0.00	0.00	-39.84	0.00	-111.91	-44.61	-28.66	-31.62	-42.75	546.92
NET INCOME TO DATE	-103.31	-103.31	-103.31	-103.31	-143.15	-143.15	-255.06	-299.67	-328.33	-359.95	-402.70	144.22

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

Table 12.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-207	-193	-178	-164	-150	-135	-121	-106	-92	-78	-63
			-320	-305	-291	-277	-262	-248	-233	-219	-205	-190	-176
60	36.00	bu	-166	-148	-131	-114	-96	-79	-62	-45	-27	-10	6
			-278	-261	-244	-226	-209	-192	-175	-157	-140	-123	-105
70	42.00	bu	-124	-104	-84	-64	-43	-23	-3	16	36	56	77
			-237	-217	-196	-176	-156	-136	-116	-96	-75	-55	-35
80	48.00	bu	-82	-59	-36	-13	9	32	55	78	101	124	147
			-195	-172	-149	-126	-103	-80	-57	-34	-11	11	34
90	54.00	bu	-41	-15	10	36	62	88	114	140	166	191	217
			-154	-128	-102	-76	-50	-24	1	27	53	79	105
100	60.00	bu	0	29	57	86	115	144	173	201	230	259	288
			-112	-83	-54	-26	2	31	60	89	117	146	175
110	66.00	bu	41	73	105	136	168	200	231	263	295	326	358
			-70	-39	-7	24	55	87	119	150	182	214	245
120	72.00	bu	83	117	152	187	221	256	290	325	359	394	428
			-29	5	39	74	108	143	178	212	247	281	316
130	78.00	bu	124	162	199	237	274	312	349	387	424	461	499
			12	49	87	124	162	199	236	274	311	349	386
140	84.00	bu	166	206	247	287	327	368	408	448	489	529	569
			53	94	134	174	215	255	295	336	376	416	457
150	90.00	bu	208	251	294	337	380	424	467	510	553	596	640
			95	138	181	224	268	311	354	397	440	484	527

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

Table 13.A Estimated costs per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Prefix	pt	5.69	2.0000	11.38	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.32	50.0000	66.00	_____
ADJUVANTS					
Surfactant	pt	5.31	1.1000	5.84	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4582	6.96	_____
Harvesters	hour	15.22	0.0851	1.30	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR	hour	15.26	0.3065	4.68	_____
DIESEL FUEL					
Tractors	gal	2.30	4.3236	9.93	_____
Harvesters	gal	2.30	1.4243	3.28	_____
Contour Flood Irr.	gal	2.30	10.9974	25.29	_____
REPAIR & MAINTENANCE					
Implements	acre	5.04	1.0000	5.04	_____
Tractors	acre	2.53	1.0000	2.53	_____
Harvesters	acre	3.40	1.0000	3.40	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	10.98	1.0000	10.98	_____

TOTAL DIRECT EXPENSES				406.57	_____
FIXED EXPENSES					
Implements	acre	10.59	1.0000	10.59	_____
Tractors	acre	17.18	1.0000	17.18	_____
Harvesters	acre	14.41	1.0000	14.41	_____
Contour Flood Irr.	acre	47.45	1.0000	47.45	_____

TOTAL FIXED EXPENSES				89.63	_____

TOTAL SPECIFIED EXPENSES				496.20	_____

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

Table 13.B Summary of estimated costs and returns per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	53.0000	508.80	_____
TOTAL INCOME				508.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	70.09	1.0000	70.09	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
SEED/PLANTS	acre	66.00	1.0000	66.00	_____
ADJUVANTS	acre	5.83	1.0000	5.83	_____
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	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1100	1.00	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	15.22	0.5433	8.26	_____
UNALLOCATED LABOR	hour	15.26	0.3065	4.68	_____
DIESEL FUEL	gal	2.30	16.7455	38.50	_____
REPAIR & MAINTENANCE	acre	24.77	1.0000	24.77	_____
INTEREST ON OP. CAP.	acre	10.98	1.0000	10.98	_____
TOTAL DIRECT EXPENSES				406.57	_____
RETURNS ABOVE DIRECT EXPENSES				102.23	_____
TOTAL FIXED EXPENSES				89.63	_____
TOTAL SPECIFIED EXPENSES				496.20	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				12.60	_____

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

Table 13.C Estimated resource use for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

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

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

Table 13.D Estimated costs for field operations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Disk Harrow	24'		1.84	1.49	2.37		0.30	6.00	5.61	11.61
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Spray (Broadcast)	60'		0.75	0.41	0.95		0.08	2.19	1.63	3.82
Glyphosate 3lbs a.e	oz	4.48					0.18	4.66		4.66
Select Max	pt	10.87					0.43	11.30		11.30
Surfactant	pt	2.12					0.08	2.20		2.20
Valor SX	oz	8.56					0.34	8.90		8.90
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.52	2.40	2.57		0.17	6.66	6.91	13.57
Soybean Seed RR2X	lb	66.00					1.73	67.73		67.73
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.05	2.01	1.40	3.41
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Prefix	pt	11.38					0.30	11.68		11.68
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Glyphosate 3lbs a.e	oz	4.48					0.10	4.58		4.58
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Quadris Top SBX	oz	16.52					0.29	16.81		16.81
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	14.31					0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
Contour Flood Irr.	acre	2.25	29.37	15.07	5.89		0.94	53.52	55.53	109.05
TOTALS		315.56	38.50	24.77	16.76	0.00	10.98	406.57	89.63	496.20

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

Table 13.E Estimated monthly income and expense flows per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	508.80
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	23.91	0.00	0.00	41.70	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	2.12	0.00	0.00	2.12	0.00	0.53	0.00	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.37	0.00	0.00	0.95	0.00	0.00	3.97	2.86	1.67	1.67	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	1.84	0.00	0.00	0.75	0.00	0.00	2.15	10.55	9.60	9.60	0.25	3.76
REPAIR & MAINTENANCE	1.49	0.00	0.00	0.41	0.00	0.00	2.78	9.39	2.99	2.99	0.08	4.64
INTEREST ON OP. CAP.	4.36	0.00	0.00	1.11	0.00	0.00	3.50	0.64	0.66	0.35	0.25	0.11
TOTAL DIRECT EXPENSES	87.55	0.00	0.00	29.25	0.00	0.00	136.96	30.17	38.97	27.30	30.47	25.90
NET INCOME	-87.55	0.00	0.00	-29.25	0.00	0.00	-136.96	-30.17	-38.97	-27.30	-30.47	482.90
NET INCOME TO DATE	-87.55	-87.55	-87.55	-116.80	-116.80	-116.80	-253.76	-283.93	-322.90	-350.20	-380.67	102.23

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

* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, RR2X, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-208	-195	-183	-170	-157	-144	-132	-119	-106	-94	-81
			-298	-285	-272	-260	-247	-234	-221	-209	-196	-183	-171
60	31.80	bu	-171	-156	-141	-126	-110	-95	-80	-65	-49	-34	-19
			-261	-246	-230	-215	-200	-185	-169	-154	-139	-124	-108
70	37.10	bu	-135	-117	-99	-81	-63	-46	-28	-10	7	25	42
			-224	-206	-189	-171	-153	-135	-117	-100	-82	-64	-46
80	42.40	bu	-98	-78	-57	-37	-17	3	23	44	64	84	105
			-188	-167	-147	-126	-106	-86	-65	-45	-25	-4	15
90	47.70	bu	-61	-38	-15	6	29	52	75	98	121	144	167
			-151	-128	-105	-82	-59	-36	-13	8	31	54	77
100	53.00	bu	-24	0	25	51	76	102	127	153	178	203	229
			-114	-89	-63	-38	-12	12	38	63	88	114	139
110	58.30	bu	11	39	67	95	123	151	179	207	235	263	291
			-77	-49	-21	6	34	62	90	118	145	173	201
120	63.60	bu	48	79	109	140	170	201	231	262	292	323	353
			-41	-10	19	50	80	111	142	172	203	233	264
130	68.90	bu	85	118	151	184	217	250	283	316	349	382	415
			-4	28	61	94	127	160	194	227	260	293	326
140	74.20	bu	121	157	193	228	264	300	335	371	406	442	478
			32	67	103	139	174	210	245	281	317	352	388
150	79.50	bu	158	196	234	273	311	349	387	425	463	502	540
			69	107	145	183	221	259	297	336	374	412	450

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

Table 14.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	5.69	2.0000	11.38	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.82	6.4000	5.25	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.32	50.0000	66.00	_____
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.1171	1.78	_____
Harvesters	hour	15.22	0.1021	1.56	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_____
Harvesters	gal	2.30	1.3935	3.21	_____
1/2-mi Pivot Irr.	gal	2.30	16.4057	37.73	_____
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_____
Tractors	acre	0.83	1.0000	0.83	_____
Harvesters	acre	3.75	1.0000	3.75	_____
1/2-mi Pivot Irr.	acre	11.79	1.0000	11.79	_____
INTEREST ON OP. CAP.	acre	8.97	1.0000	8.97	_____

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

TOTAL FIXED EXPENSES				74.85	_____

TOTAL SPECIFIED EXPENSES				450.77	_____

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

Table 14.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

TOTAL INCOME				480.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	41.70	1.0000	41.70	_____
INSECTICIDES	acre	34.62	1.0000	34.62	_____
SEED/PLANTS	acre	66.00	1.0000	66.00	_____
ADJUVANTS	acre	3.18	1.0000	3.18	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	15.22	0.2193	3.34	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL	gal	2.30	19.1560	44.06	_____
REPAIR & MAINTENANCE	acre	19.71	1.0000	19.71	_____
INTEREST ON OP. CAP.	acre	8.97	1.0000	8.97	_____

TOTAL DIRECT EXPENSES				375.92	_____
RETURNS ABOVE DIRECT EXPENSES				104.08	_____
TOTAL FIXED EXPENSES				74.85	_____

TOTAL SPECIFIED EXPENSES				450.77	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				29.23	_____

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

Table 14.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 14.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 14.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	480.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	15.86	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	1.06	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.57	0.98	0.04	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.12	15.84	11.32	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83	1.23	0.62	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.18	2.86	0.60	1.02	0.13	0.12
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	7.02	133.58	34.51	78.20	15.13	25.93
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-7.02	-133.58	-34.51	-78.20	-15.13	454.07
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.57	-222.15	-256.66	-334.86	-349.99	104.08

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

Table 14.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 15.A Estimated costs per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.0000	21.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Prefix	pt	5.69	2.0000	11.38	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.82	6.4000	5.25	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.32	50.0000	66.00	_____
ADJUVANTS					
Surfactant	pt	5.31	0.5000	2.66	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.1171	1.78	_____
Harvesters	hour	15.22	0.1021	1.56	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_____
Harvesters	gal	2.30	1.3935	3.21	_____
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_____
Tractors	acre	0.83	1.0000	0.83	_____
Harvesters	acre	3.75	1.0000	3.75	_____
INTEREST ON OP. CAP.	acre	7.70	1.0000	7.70	_____

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

TOTAL FIXED EXPENSES				27.93	_____

TOTAL SPECIFIED EXPENSES				321.79	_____

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

Table 15.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	25.0000	240.00	_____
TOTAL INCOME				240.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	6.69	1.0000	6.69	_____
HERBICIDES	acre	41.70	1.0000	41.70	_____
INSECTICIDES	acre	34.62	1.0000	34.62	_____
SEED/PLANTS	acre	66.00	1.0000	66.00	_____
ADJUVANTS	acre	2.65	1.0000	2.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	15.22	0.2193	3.34	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL	gal	2.30	2.7503	6.33	_____
REPAIR & MAINTENANCE	acre	7.92	1.0000	7.92	_____
INTEREST ON OP. CAP.	acre	7.70	1.0000	7.70	_____
TOTAL DIRECT EXPENSES				293.86	_____
RETURNS ABOVE DIRECT EXPENSES				-53.86	_____
TOTAL FIXED EXPENSES				27.93	_____
TOTAL SPECIFIED EXPENSES				321.79	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-81.79	_____

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

Table 15.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

Table 15.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

Table 15.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	240.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	7.00	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	15.86	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.53	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.53	0.93	0.00	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.75	0.00	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48	0.41	0.00	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.17	2.39	0.32	0.54	0.13	0.09
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	6.67	111.40	18.27	41.69	15.13	19.15
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-6.67	-111.40	-18.27	-41.69	-15.13	220.85
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.22	-199.62	-217.89	-259.58	-274.71	-53.86

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

* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, RR2X, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Liberty 280	oz	0.49	58.0000	28.42	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Zidua DF	oz	8.23	1.5000	12.35	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.27	50.0000	63.50	_____
ADJUVANTS					
Surfactant	pt	5.31	1.0000	5.31	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.3302	5.03	_____
Harvesters	hour	15.22	0.0851	1.30	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	15.24	0.3738	5.70	_____
DIESEL FUEL					
Tractors	gal	2.30	3.8252	8.80	_____
Harvesters	gal	2.30	1.4243	3.28	_____
REPAIR & MAINTENANCE					
Implements	acre	5.10	1.0000	5.10	_____
Tractors	acre	2.34	1.0000	2.34	_____
Harvesters	acre	3.40	1.0000	3.40	_____
INTEREST ON OP. CAP.	acre	10.71	1.0000	10.71	_____

TOTAL DIRECT EXPENSES				373.47	_____
FIXED EXPENSES					
Implements	acre	11.35	1.0000	11.35	_____
Tractors	acre	15.94	1.0000	15.94	_____
Harvesters	acre	14.41	1.0000	14.41	_____

TOTAL FIXED EXPENSES				41.70	_____

TOTAL SPECIFIED EXPENSES				415.17	_____

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

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	42.0000	403.20	_____
TOTAL INCOME				403.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	6.69	1.0000	6.69	_____
HERBICIDES	acre	106.24	1.0000	106.24	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
SEED/PLANTS	acre	63.50	1.0000	63.50	_____
ADJUVANTS	acre	5.30	1.0000	5.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	15.22	0.4154	6.33	_____
UNALLOCATED LABOR	hour	15.24	0.3738	5.70	_____
DIESEL FUEL	gal	2.30	5.2496	12.08	_____
REPAIR & MAINTENANCE	acre	10.84	1.0000	10.84	_____
INTEREST ON OP. CAP.	acre	10.71	1.0000	10.71	_____
TOTAL DIRECT EXPENSES				373.47	_____
RETURNS ABOVE DIRECT EXPENSES				29.73	_____
TOTAL FIXED EXPENSES				41.70	_____
TOTAL SPECIFIED EXPENSES				415.17	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-11.97	_____

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

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

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

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

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Subsoiler	3 shank		1.09	0.37	1.18		0.14	2.78	2.19	4.97
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Disk Harrow	24'		2.18	1.59	2.37		0.32	6.46	6.27	12.73
Field Cultivate Fld	24'		1.66	0.92	1.80		0.23	4.61	5.19	9.80
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Select Max	pt	10.87					0.38	11.25		11.25
Valor SX	oz	8.56					0.30	8.86		8.86
Surfactant	pt	2.12					0.07	2.19		2.19
Plant & Pre-Folding	12R-30		1.80	2.48	2.57		0.18	7.03	7.46	14.49
Soybean Seed LL	lb	63.50					1.67	65.17		65.17
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Liberty 280	oz	14.21					0.31	14.52		14.52
Dual Magnum	pt	10.26					0.22	10.48		10.48
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Liberty 280	oz	14.21					0.31	14.52		14.52
Zidua DF	oz	12.35					0.27	12.62		12.62
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	5.69					0.05	5.74		5.74
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	11.34					0.05	11.39		11.39
Grain Cart Soybean	700 bu		0.57	0.36	0.61		0.01	1.55	1.44	2.99
TOTALS		326.94	12.08	10.84	12.90	0.00	10.71	373.47	41.70	415.17

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

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

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	403.20
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	29.37	0.00	25.84	51.03	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.69	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	2.12	0.00	2.12	0.00	0.00	0.00	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.35	0.00	0.00	0.00	0.00	0.00	2.57	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	4.93	0.00	0.00	0.00	0.00	0.00	1.80	1.50	0.00	0.00	0.00	3.85
REPAIR & MAINTENANCE	2.88	0.00	0.00	0.00	0.00	0.00	2.48	0.82	0.00	0.00	0.00	4.66
INTEREST ON OP. CAP.	4.75	0.00	0.00	0.00	1.35	0.00	2.80	1.35	0.00	0.00	0.36	0.10
TOTAL DIRECT EXPENSES	95.40	0.00	0.00	0.00	39.84	0.00	109.35	63.10	0.00	0.00	42.75	23.03
NET INCOME	-95.40	0.00	0.00	0.00	-39.84	0.00	-109.35	-63.10	0.00	0.00	-42.75	380.17
NET INCOME TO DATE	-95.40	-95.40	-95.40	-95.40	-135.24	-135.24	-244.59	-307.69	-307.69	-307.69	-350.44	29.73

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

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

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-216	-206	-196	-186	-176	-166	-156	-146	-135	-125	-115
			-258	-248	-238	-228	-217	-207	-197	-187	-177	-167	-157
60	25.20	bu	-187	-175	-163	-151	-139	-126	-114	-102	-90	-78	-66
			-229	-217	-204	-192	-180	-168	-156	-144	-132	-120	-108
70	29.40	bu	-158	-144	-130	-116	-101	-87	-73	-59	-45	-31	-17
			-200	-185	-171	-157	-143	-129	-115	-101	-87	-73	-58
80	33.60	bu	-129	-113	-97	-80	-64	-48	-32	-16	-0	15	32
			-170	-154	-138	-122	-106	-90	-74	-58	-41	-25	-9
90	37.80	bu	-100	-82	-63	-45	-27	-9	8	26	44	63	81
			-141	-123	-105	-87	-69	-51	-33	-14	3	21	39
100	42.00	bu	-71	-50	-30	-10	9	29	49	70	90	110	130
			-112	-92	-72	-52	-32	-11	8	28	48	68	88
110	46.20	bu	-41	-19	2	24	46	68	91	113	135	157	179
			-83	-61	-39	-17	5	27	49	71	93	115	138
120	50.40	bu	-12	11	35	59	83	108	132	156	180	204	229
			-54	-30	-6	18	42	66	90	114	138	163	187
130	54.60	bu	16	42	68	94	121	147	173	199	225	252	278
			-25	0	26	53	79	105	131	157	184	210	236
140	58.80	bu	45	73	101	130	158	186	214	242	271	299	327
			3	31	60	88	116	144	172	201	229	257	285
150	63.00	bu	74	104	134	165	195	225	255	286	316	346	376
			32	62	93	123	153	183	214	244	274	304	335

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

Table 17.A Estimated costs per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.0000	35.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Liberty 280	oz	0.49	58.0000	28.42	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Zidua DF	oz	8.23	1.5000	12.35	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
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 LL	lb	1.27	50.0000	63.50	_____
ADJUVANTS					
Surfactant	pt	5.31	1.1000	5.84	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4897	7.46	_____
Harvesters	hour	15.22	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	0.0959	0.87	_____
UNALLOCATED LABOR	hour	15.24	0.4466	6.81	_____
DIESEL FUEL					
Tractors	gal	2.30	5.4882	12.62	_____
Harvesters	gal	2.30	1.4243	3.28	_____
Roll-Out Pipe Irr.	gal	2.30	7.3316	16.86	_____
REPAIR & MAINTENANCE					
Implements	acre	6.03	1.0000	6.03	_____
Tractors	acre	3.33	1.0000	3.33	_____
Harvesters	acre	3.40	1.0000	3.40	_____
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	_____
INTEREST ON OP. CAP.	acre	12.03	1.0000	12.03	_____

TOTAL DIRECT EXPENSES				447.95	_____
FIXED EXPENSES					
Implements	acre	14.89	1.0000	14.89	_____
Tractors	acre	22.70	1.0000	22.70	_____
Harvesters	acre	14.41	1.0000	14.41	_____
Roll-Out Pipe Irr.	acre	60.69	1.0000	60.69	_____

TOTAL FIXED EXPENSES				112.69	_____

TOTAL SPECIFIED EXPENSES				560.64	_____

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

Table 17.B Summary of estimated costs and returns per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	60.0000	576.00	_____

TOTAL INCOME				576.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	35.00	1.0000	35.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	106.24	1.0000	106.24	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	63.50	1.0000	63.50	_____
ADJUVANTS	acre	5.83	1.0000	5.83	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	15.22	0.5748	8.76	_____
UNALLOCATED LABOR	hour	15.24	0.4466	6.81	_____
DIESEL FUEL	gal	2.30	14.2442	32.76	_____
REPAIR & MAINTENANCE	acre	19.65	1.0000	19.65	_____
INTEREST ON OP. CAP.	acre	12.03	1.0000	12.03	_____

TOTAL DIRECT EXPENSES				447.95	_____
RETURNS ABOVE DIRECT EXPENSES				128.05	_____
TOTAL FIXED EXPENSES				112.69	_____

TOTAL SPECIFIED EXPENSES				560.64	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				15.36	_____

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

Table 17.C Estimated resource use for field operations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fo	12R-30	MFWD 225	0.080	1.00	Oct		0.08	0.08	0.08	0.07
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Zidua DF	oz					1.5000				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Quadris Top SBX	oz					7.0000				
Surfactant	pt					0.1000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air (5 gal)	appl					1.0000				
IncidentalPestTrt $8	acre					1.0000				
App by Air (5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.57	0.57	1.03	0.44

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

Table 17.D Estimated costs for field operations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Subsoiler	3 shank		1.09	0.37	1.18		0.14	2.78	2.19	4.97
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Disk Harrow	24'		2.18	1.59	2.37		0.32	6.46	6.27	12.73
Field Cultivate Fld	24'		1.66	0.92	1.80		0.23	4.61	5.19	9.80
Bed/Lister-Roll-Fo	12R-30		2.15	1.30	2.34		0.30	6.09	6.00	12.09
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Select Max	pt	10.87					0.38	11.25		11.25
Valor SX	oz	8.56					0.30	8.86		8.86
Surfactant	pt	2.12					0.07	2.19		2.19
Plant & Pre-Folding	12R-30		1.80	2.48	2.57		0.18	7.03	7.46	14.49
Soybean Seed LL	lb	63.50					1.67	65.17		65.17
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Soybeans Consultant	acre	6.50					0.14	6.64		6.64
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Liberty 280	oz	14.21					0.31	14.52		14.52
Dual Magnum	pt	10.26					0.22	10.48		10.48
Spray (Broadcast)	60'		0.75	0.41	0.95		0.05	2.16	1.63	3.79
Liberty 280	oz	14.21					0.31	14.52		14.52
Zidua DF	oz	12.35					0.27	12.62		12.62
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Quadris Top SBX	oz	16.52					0.22	16.74		16.74
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Acephate 90SP	lb	5.69					0.05	5.74		5.74
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	16.20					0.07	16.27		16.27
Grain Cart Soybean	700 bu		0.57	0.36	0.61		0.01	1.55	1.44	2.99
Roll-Out Pipe Irr.	acre	7.92	18.53	7.51	4.50		0.68	39.14	64.99	104.13
TOTALS		363.77	32.76	19.65	19.74	0.00	12.03	447.95	112.69	560.64

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

Table 17.E Estimated monthly income and expense flows per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	576.00
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	29.37	0.00	25.84	51.03	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.69	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	63.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	2.12	0.00	2.12	0.00	0.00	0.53	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
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	8.27	0.00	0.00	0.00	0.00	0.00	2.57	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	7.93	0.00	0.00	0.00	0.00	0.00	1.80	1.50	11.68	5.62	0.00	4.23
REPAIR & MAINTENANCE	4.48	0.00	0.00	0.00	0.00	0.00	2.48	0.82	5.75	1.31	0.00	4.81
INTEREST ON OP. CAP.	5.14	0.00	0.00	0.00	1.35	0.00	2.80	1.36	0.48	0.41	0.36	0.13
TOTAL DIRECT EXPENSES	103.31	0.00	0.00	0.00	39.84	0.00	109.35	63.34	28.66	31.62	42.75	29.08
NET INCOME	-103.31	0.00	0.00	0.00	-39.84	0.00	-109.35	-63.34	-28.66	-31.62	-42.75	546.92
NET INCOME TO DATE	-103.31	-103.31	-103.31	-103.31	-143.15	-143.15	-252.50	-315.84	-344.50	-376.12	-418.87	128.05

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

Table 17.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-223	-209	-195	-180	-166	-151	-137	-123	-108	-94	-79
			-336	-322	-307	-293	-278	-264	-250	-235	-221	-206	-192
60	36.00	bu	-182	-164	-147	-130	-113	-95	-78	-61	-44	-26	-9
			-294	-277	-260	-243	-225	-208	-191	-173	-156	-139	-122
70	42.00	bu	-140	-120	-100	-80	-60	-39	-19	0	20	40	60
			-253	-233	-213	-192	-172	-152	-132	-112	-92	-71	-51
80	48.00	bu	-99	-76	-53	-29	-6	16	39	62	85	108	131
			-211	-188	-165	-142	-119	-96	-73	-50	-27	-4	18
90	54.00	bu	-57	-31	-5	20	46	72	97	123	149	175	201
			-170	-144	-118	-92	-66	-40	-14	11	37	63	88
100	60.00	bu	-15	12	41	70	99	128	156	185	214	243	272
			-128	-99	-71	-42	-13	15	44	72	101	130	159
110	66.00	bu	25	57	88	120	152	184	215	247	279	310	342
			-87	-55	-23	7	39	71	103	134	166	198	229
120	72.00	bu	67	101	136	170	205	239	274	309	343	378	412
			-45	-10	23	58	92	127	161	196	230	265	300
130	78.00	bu	108	146	183	221	258	295	333	370	408	445	483
			-3	33	70	108	145	183	220	258	295	333	370
140	84.00	bu	150	190	230	271	311	351	392	432	472	513	553
			37	77	118	158	198	239	279	319	360	400	440
150	90.00	bu	191	235	278	321	364	407	451	494	537	580	623
			79	122	165	208	252	295	338	381	424	468	511

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

Table 18.A Estimated costs per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.17	16.0000	2.72	_____
Sodium Chlorate 5L	gal	6.54	0.6000	3.92	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	10.87	1.0000	10.87	_____
Valor SX	oz	4.28	2.0000	8.56	_____
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Liberty 280	oz	0.49	58.0000	28.42	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Zidua DF	oz	8.23	1.5000	12.35	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.27	50.0000	63.50	_____
ADJUVANTS					
Surfactant	pt	5.31	1.1000	5.84	_____
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	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4582	6.96	_____
Harvesters	hour	15.22	0.0851	1.30	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1100	1.00	_____
UNALLOCATED LABOR	hour	15.26	0.3065	4.68	_____
DIESEL FUEL					
Tractors	gal	2.30	4.3236	9.93	_____
Harvesters	gal	2.30	1.4243	3.28	_____
Contour Flood Irr.	gal	2.30	10.9974	25.29	_____
REPAIR & MAINTENANCE					
Implements	acre	5.04	1.0000	5.04	_____
Tractors	acre	2.53	1.0000	2.53	_____
Harvesters	acre	3.40	1.0000	3.40	_____
Contour Flood Irr.	acre	13.80	1.0000	13.80	_____
INTEREST ON OP. CAP.	acre	11.62	1.0000	11.62	_____
TOTAL DIRECT EXPENSES				435.40	_____
FIXED EXPENSES					
Implements	acre	10.59	1.0000	10.59	_____
Tractors	acre	17.18	1.0000	17.18	_____
Harvesters	acre	14.41	1.0000	14.41	_____
Contour Flood Irr.	acre	47.45	1.0000	47.45	_____
TOTAL FIXED EXPENSES				89.63	_____
TOTAL SPECIFIED EXPENSES				525.03	_____

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

Table 18.B Summary of estimated costs and returns per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	53.0000	508.80	_____
TOTAL INCOME				508.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
HARVEST AIDS	acre	6.64	1.0000	6.64	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	100.78	1.0000	100.78	_____
INSECTICIDES	acre	13.69	1.0000	13.69	_____
SEED/PLANTS	acre	63.50	1.0000	63.50	_____
ADJUVANTS	acre	5.83	1.0000	5.83	_____
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	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1100	1.00	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	15.22	0.5433	8.26	_____
UNALLOCATED LABOR	hour	15.26	0.3065	4.68	_____
DIESEL FUEL	gal	2.30	16.7455	38.50	_____
REPAIR & MAINTENANCE	acre	24.77	1.0000	24.77	_____
INTEREST ON OP. CAP.	acre	11.62	1.0000	11.62	_____
TOTAL DIRECT EXPENSES				435.40	_____
RETURNS ABOVE DIRECT EXPENSES				73.40	_____
TOTAL FIXED EXPENSES				89.63	_____
TOTAL SPECIFIED EXPENSES				525.03	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-16.23	_____

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

Table 18.C Estimated resource use for field operations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

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

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

Table 18.D Estimated costs for field operations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Disk Harrow	24'		1.84	1.49	2.37		0.30	6.00	5.61	11.61
Lime (Spread)	ton	14.32					0.75	15.07		15.07
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Phosphorus(46% P2O5)	cwt	15.76					0.83	16.59		16.59
Potash (60% K2O)	cwt	36.58					1.92	38.50		38.50
Spray (Broadcast)	60'		0.75	0.41	0.95		0.08	2.19	1.63	3.82
Glyphosate 3lbs a.e	oz	4.48					0.18	4.66		4.66
Select Max	pt	10.87					0.43	11.30		11.30
Surfactant	pt	2.12					0.08	2.20		2.20
Valor SX	oz	8.56					0.34	8.90		8.90
Soybeans Consultant	acre	6.50					0.17	6.67		6.67
Plant & Pre-Folding	12R-30		1.52	2.40	2.57		0.17	6.66	6.91	13.57
Soybean Seed LL	lb	63.50					1.67	65.17		65.17
CruiserMaxx	oz	6.69					0.18	6.87		6.87
Inoculant -Soybean	acre	1.55					0.04	1.59		1.59
Boundary	pt	17.68					0.46	18.14		18.14
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Surfactant	pt	2.12					0.06	2.18		2.18
Spray (Broadcast)	60'		0.63	0.38	0.95		0.05	2.01	1.40	3.41
Liberty 280	oz	14.21					0.37	14.58		14.58
Dual Magnum	pt	10.26					0.27	10.53		10.53
Spray (Broadcast)	60'		0.63	0.38	0.95		0.04	2.00	1.40	3.40
Liberty 280	oz	14.21					0.31	14.52		14.52
Zidua DF	oz	12.35					0.27	12.62		12.62
App by Air (5 gal)	appl	7.00					0.12	7.12		7.12
Quadris Top SBX	oz	16.52					0.29	16.81		16.81
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Acephate 90SP	lb	5.69					0.07	5.76		5.76
Incidental Pest										
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
IncidentalPestTrt $8	acre	8.00					0.07	8.07		8.07
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Gramoxone SL	oz	2.72					0.02	2.74		2.74
Sodium Chlorate 5L	gal	3.92					0.03	3.95		3.95
Surfactant	pt	1.06					0.01	1.07		1.07
Header -Soybean	30' Flex		3.28	4.30	2.47		0.04	10.09	15.89	25.98
Haul Soybeans	bu	14.31					0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.48	0.34	0.61		0.01	1.44	1.26	2.70
Contour Flood Irr.	acre	2.25	29.37	15.07	5.89		0.94	53.52	55.53	109.05
TOTALS		343.75	38.50	24.77	16.76	0.00	11.62	435.40	89.63	525.03

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

Table 18.E Estimated monthly income and expense flows per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	508.80
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	6.64	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	23.91	0.00	0.00	50.31	26.56	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.69	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	2.12	0.00	0.00	2.12	0.00	0.53	0.00	1.06	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.37	0.00	0.00	0.95	0.00	0.00	3.97	2.86	1.67	1.67	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	1.84	0.00	0.00	0.75	0.00	0.00	2.15	10.55	9.60	9.60	0.25	3.76
REPAIR & MAINTENANCE	1.49	0.00	0.00	0.41	0.00	0.00	2.78	9.39	2.99	2.99	0.08	4.64
INTEREST ON OP. CAP.	4.36	0.00	0.00	1.11	0.00	0.00	3.66	1.12	0.66	0.35	0.25	0.11
TOTAL DIRECT EXPENSES	87.55	0.00	0.00	29.25	0.00	0.00	143.23	52.73	38.97	27.30	30.47	25.90
NET INCOME	-87.55	0.00	0.00	-29.25	0.00	0.00	-143.23	-52.73	-38.97	-27.30	-30.47	482.90
NET INCOME TO DATE	-87.55	-87.55	-87.55	-116.80	-116.80	-116.80	-260.03	-312.76	-351.73	-379.03	-409.50	73.40

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

Table 18.F Estimated returns for various price/yield combinations, per acre
Soybeans, full-season, LL, stale seedbed, 12R 30"
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.20	7.68	8.16	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-237	-224	-211	-199	-186	-173	-161	-148	-135	-122	-110
			-327	-314	-301	-288	-276	-263	-250	-238	-225	-212	-199
60	31.80	bu	-200	-185	-170	-154	-139	-124	-109	-93	-78	-63	-48
			-290	-275	-259	-244	-229	-214	-198	-183	-168	-152	-137
70	37.10	bu	-163	-146	-128	-110	-92	-74	-57	-39	-21	-3	14
			-253	-235	-217	-200	-182	-164	-146	-128	-111	-93	-75
80	42.40	bu	-127	-106	-86	-66	-45	-25	-5	15	35	55	76
			-216	-196	-176	-155	-135	-115	-94	-74	-54	-33	-13
90	47.70	bu	-90	-67	-44	-21	1	23	46	69	92	115	138
			-180	-157	-134	-111	-88	-65	-42	-19	3	25	48
100	53.00	bu	-53	-28	-2	22	47	73	98	124	149	175	200
			-143	-117	-92	-67	-41	-16	9	34	60	85	110
110	58.30	bu	-17	10	38	66	94	122	150	178	206	234	262
			-106	-78	-50	-22	5	33	61	89	117	145	173
120	63.60	bu	19	50	80	111	141	172	202	233	263	294	324
			-69	-39	-8	21	52	82	113	143	174	204	235
130	68.90	bu	56	89	122	155	188	221	254	287	320	354	387
			-33	-0	32	65	99	132	165	198	231	264	297
140	74.20	bu	93	128	164	199	235	271	306	342	378	413	449
			3	39	74	110	145	181	217	252	288	324	359
150	79.50	bu	129	167	206	244	282	320	358	396	435	473	511
			40	78	116	154	192	230	269	307	345	383	421

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

Table 19.A Estimated costs per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.0000	28.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
Quadris Top SBX	oz	2.36	7.0000	16.52	_____
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Liberty 280	oz	0.49	29.0000	14.21	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.82	6.4000	5.25	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.27	50.0000	63.50	_____
ADJUVANTS					
Surfactant	pt	5.31	0.6000	3.19	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.1171	1.78	_____
Harvesters	hour	15.22	0.1021	1.56	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_____
Harvesters	gal	2.30	1.3935	3.21	_____
1/2-mi Pivot Irr.	gal	2.30	16.4057	37.73	_____
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_____
Tractors	acre	0.83	1.0000	0.83	_____
Harvesters	acre	3.75	1.0000	3.75	_____
1/2-mi Pivot Irr.	acre	11.79	1.0000	11.79	_____
INTEREST ON OP. CAP.	acre	9.07	1.0000	9.07	_____

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

TOTAL FIXED EXPENSES				74.85	_____

TOTAL SPECIFIED EXPENSES				456.98	_____

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

Table 19.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	50.0000	480.00	_____
TOTAL INCOME				480.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	28.00	1.0000	28.00	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	23.21	1.0000	23.21	_____
HERBICIDES	acre	50.31	1.0000	50.31	_____
INSECTICIDES	acre	34.62	1.0000	34.62	_____
SEED/PLANTS	acre	63.50	1.0000	63.50	_____
ADJUVANTS	acre	3.18	1.0000	3.18	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	15.22	0.2193	3.34	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL	gal	2.30	19.1560	44.06	_____
REPAIR & MAINTENANCE	acre	19.71	1.0000	19.71	_____
INTEREST ON OP. CAP.	acre	9.07	1.0000	9.07	_____
TOTAL DIRECT EXPENSES				382.13	_____
RETURNS ABOVE DIRECT EXPENSES				97.87	_____
TOTAL FIXED EXPENSES				74.85	_____
TOTAL SPECIFIED EXPENSES				456.98	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				23.02	_____

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

Table 19.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 19.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 19.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	480.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00	7.00	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	16.52	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	24.47	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	1.06	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.57	0.98	0.04	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.12	15.84	11.32	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.83	1.23	0.62	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.18	2.81	0.75	1.02	0.13	0.12
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	7.02	131.03	43.27	78.20	15.13	25.93
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-7.02	-131.03	-43.27	-78.20	-15.13	454.07
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.57	-219.60	-262.87	-341.07	-356.20	97.87

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

* Lease costs are based on hourly usage costs.

Table 19.F Estimated returns for various price/yield combinations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2020

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

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

Table 20.A Estimated costs per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.0000	21.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	0.8700	15.76	_____
Potash (60% K2O)	cwt	27.50	1.3300	36.58	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	1.6000	6.69	_____
HERBICIDES					
Boundary	pt	8.84	2.0000	17.68	_____
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	_____
Liberty 280	oz	0.49	29.0000	14.21	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
INSECTICIDES					
Acephate 90SP	lb	7.59	0.7500	5.69	_____
Prevathon	oz	1.12	14.0000	15.68	_____
Bifenthrin	oz	0.82	6.4000	5.25	_____
IncidentalPestTrt $8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.27	50.0000	63.50	_____
ADJUVANTS					
Surfactant	pt	5.31	0.5000	2.66	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.1171	1.78	_____
Harvesters	hour	15.22	0.1021	1.56	_____
HAND LABOR					
Implements	hour	9.06	0.0817	0.74	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL					
Tractors	gal	2.30	1.3567	3.12	_____
Harvesters	gal	2.30	1.3935	3.21	_____
REPAIR & MAINTENANCE					
Implements	acre	3.34	1.0000	3.34	_____
Tractors	acre	0.83	1.0000	0.83	_____
Harvesters	acre	3.75	1.0000	3.75	_____
INTEREST ON OP. CAP.	acre	7.80	1.0000	7.80	_____

TOTAL DIRECT EXPENSES				300.07	_____
FIXED EXPENSES					
Implements	acre	6.37	1.0000	6.37	_____
Tractors	acre	5.66	1.0000	5.66	_____
Harvesters	acre	15.90	1.0000	15.90	_____

TOTAL FIXED EXPENSES				27.93	_____

TOTAL SPECIFIED EXPENSES				328.00	_____

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

Table 20.B Summary of estimated costs and returns per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.60	25.0000	240.00	_____
TOTAL INCOME				240.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.00	1.0000	21.00	_____
FERTILIZERS	acre	52.34	1.0000	52.34	_____
FUNGICIDES	acre	6.69	1.0000	6.69	_____
HERBICIDES	acre	50.31	1.0000	50.31	_____
INSECTICIDES	acre	34.62	1.0000	34.62	_____
SEED/PLANTS	acre	63.50	1.0000	63.50	_____
ADJUVANTS	acre	2.65	1.0000	2.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0817	0.74	_____
OPERATOR LABOR	hour	15.22	0.2193	3.34	_____
UNALLOCATED LABOR	hour	15.26	0.1886	2.88	_____
DIESEL FUEL	gal	2.30	2.7503	6.33	_____
REPAIR & MAINTENANCE	acre	7.92	1.0000	7.92	_____
INTEREST ON OP. CAP.	acre	7.80	1.0000	7.80	_____
TOTAL DIRECT EXPENSES				300.07	_____
RETURNS ABOVE DIRECT EXPENSES				-60.07	_____
TOTAL FIXED EXPENSES				27.93	_____
TOTAL SPECIFIED EXPENSES				328.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-88.00	_____

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

Table 20.C Estimated resource use for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

Table 20.D Estimated costs for field operations, per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

Table 20.E Estimated monthly income and expense flows per acre
Soybeans, double crop after wheat, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	240.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	7.00	0.00
FERTILIZERS	52.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.69	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.84	24.47	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.62	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.53	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	14.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.53	0.93	0.00	0.00	3.50
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.75	0.00	0.00	3.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.48	0.41	0.00	0.00	5.03
INTEREST ON OP. CAP.	4.06	0.00	0.00	0.00	0.00	0.00	0.17	2.34	0.47	0.54	0.13	0.09
TOTAL DIRECT EXPENSES	81.55	0.00	0.00	0.00	0.00	0.00	6.67	108.85	27.03	41.69	15.13	19.15
NET INCOME	-81.55	0.00	0.00	0.00	0.00	0.00	-6.67	-108.85	-27.03	-41.69	-15.13	220.85
NET INCOME TO DATE	-81.55	-81.55	-81.55	-81.55	-81.55	-81.55	-88.22	-197.07	-224.10	-265.79	-280.92	-60.07

Note: Cost of production estimates are based on 2019 input prices.
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3rd year. Lime cost prorated for application every 3rd year.** The budget does not include a 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, LL, 12R 30"
Non-irrigated, All Areas, Mississippi, 2020

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

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

Table 21.A Estimated costs per acre
Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goa
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.50	0.2000	1.10	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	1.9570	35.44	_____
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_____
Fert 10-34-0	gal	2.90	4.0000	11.60	_____
Zinc Plus	pt	2.99	2.0000	5.98	_____
UAN + Sulfur (28%)	gal	1.39	32.1712	44.72	_____
UAN (32%)	gal	1.51	39.5570	59.73	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.60	0.5000	5.80	_____
Select Max	pt	10.87	1.0000	10.87	_____
Atrazine 4L	pt	2.09	4.0000	8.36	_____
Halex GT	pt	6.24	3.6000	22.46	_____
INSECTICIDES					
Bifenthrin	oz	0.82	1.2800	1.05	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.50	34.0000	119.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4242	6.47	_____
Harvesters	hour	15.22	0.1009	1.54	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR	hour	15.24	0.4020	6.13	_____
DIESEL FUEL					
Tractors	gal	2.30	4.7302	10.87	_____
Harvesters	gal	2.30	1.6890	3.88	_____
Roll-Out Pipe Irr.	gal	2.30	10.5901	24.36	_____
REPAIR & MAINTENANCE					
Implements	acre	8.23	1.0000	8.23	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	4.03	1.0000	4.03	_____
Roll-Out Pipe Irr.	acre	6.88	1.0000	6.88	_____
INTEREST ON OP. CAP.	acre	16.38	1.0000	16.38	_____

TOTAL DIRECT EXPENSES				579.23	_____
FIXED EXPENSES					
Implements	acre	14.17	1.0000	14.17	_____
Tractors	acre	19.55	1.0000	19.55	_____
Harvesters	acre	17.09	1.0000	17.09	_____
Roll-Out Pipe Irr.	acre	60.69	1.0000	60.69	_____

TOTAL FIXED EXPENSES				111.50	_____

TOTAL SPECIFIED EXPENSES				690.73	_____

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

Table 21.B Summary of estimated costs and returns per acre
Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goa
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.86	220.0000	849.20	_____

TOTAL INCOME				849.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.10	1.0000	8.10	_____
FERTILIZERS	acre	198.72	1.0000	198.72	_____
HERBICIDES	acre	51.97	1.0000	51.97	_____
INSECTICIDES	acre	1.05	1.0000	1.05	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	119.00	1.0000	119.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	15.22	0.5252	8.01	_____
UNALLOCATED LABOR	hour	15.24	0.4020	6.13	_____
DIESEL FUEL	gal	2.30	17.0094	39.11	_____
REPAIR & MAINTENANCE	acre	22.02	1.0000	22.02	_____
INTEREST ON OP. CAP.	acre	16.38	1.0000	16.38	_____

TOTAL DIRECT EXPENSES				579.23	_____
RETURNS ABOVE DIRECT EXPENSES				269.97	_____
TOTAL FIXED EXPENSES				111.50	_____

TOTAL SPECIFIED EXPENSES				690.73	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				158.47	_____

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

Table 21.C Estimated resource use for field operations, per acre
Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goa
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2020

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

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

Table 21.D Estimated costs for field operations, per acre
Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goa
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Spin Spreader	5 ton		1.12	0.61	1.60		0.17	3.50	2.70	6.20
Phosphorus(46% P2O5)	cwt	35.44					1.86	37.30		37.30
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed/Disk w/roller	12R-30/40		1.66	1.30	1.81		0.25	5.02	5.50	10.52
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Clarity	pt	5.80					0.20	6.00		6.00
Select Max	pt	10.87					0.38	11.25		11.25
Plant & Pre-Folding	12R-38		1.42	2.16	2.02		0.17	5.77	6.30	12.07
Corn Seed BtRR	thous	119.00					3.64	122.64		122.64
Fert 10-34-0	gal	11.60					0.36	11.96		11.96
Zinc Plus	pt	5.98					0.18	6.16		6.16
Custom Apply Fert	acre	7.50					0.20	7.70		7.70
UAN + Sulfur (28%)	gal	44.72					1.17	45.89		45.89
Spray (Broadcast)	60'		0.75	0.41	0.95		0.06	2.17	1.63	3.80
Atrazine 4L	pt	8.36					0.22	8.58		8.58
Halex GT	pt	22.46					0.59	23.05		23.05
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.05					0.02	1.07		1.07
Corn Consultant	acre	6.00					0.13	6.13		6.13
Fert Appl (Liquid)	12R-38		1.38	1.11	1.73		0.09	4.31	3.41	7.72
UAN (32%)	gal	59.73					1.31	61.04		61.04
Header - Corn	8R-38		3.88	5.72	2.92		0.05	12.57	19.85	32.42
Grain Cart Corn	700 bu		0.67	0.44	0.74		0.01	1.86	1.71	3.57
Haul Corn	bu	50.60					0.22	50.82		50.82
Stalk Shredder Flex	20'		2.20	2.77	2.39		0.03	7.39	5.41	12.80
Roll-Out Pipe Irr.	acre	7.92	26.03	7.50	4.73		0.80	46.98	64.99	111.97
TOTALS		482.83	39.11	22.02	18.89	0.00	16.38	579.23	111.50	690.73

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

Table 21.E Estimated monthly income and expense flows per acre
Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goa
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	849.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00
FERTILIZERS	76.69	0.00	0.00	0.00	0.00	17.58	44.72	59.73	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	30.82	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	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	119.00	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	50.60
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.99	0.00	0.00	0.00	0.00	2.02	0.95	1.96	3.06	0.23	0.63	6.05
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	3.63	0.00	0.00	0.00	0.00	1.42	0.75	1.38	18.71	6.09	0.38	6.75
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	2.16	0.41	1.11	6.07	0.98	0.15	8.93
INTEREST ON OP. CAP.	6.21	0.00	0.00	0.00	0.99	4.35	2.24	1.58	0.60	0.09	0.01	0.31
TOTAL DIRECT EXPENSES	124.70	0.00	0.00	0.00	29.14	146.53	87.39	73.91	36.36	7.39	1.17	72.64
NET INCOME	-124.70	0.00	0.00	0.00	-29.14	-146.53	-87.39	-73.91	-36.36	-7.39	-1.17	776.56
NET INCOME TO DATE	-124.70	-124.70	-124.70	-124.70	-153.84	-300.37	-387.76	-461.67	-498.03	-505.42	-506.59	269.97

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

Table 21.F Estimated returns for various price/yield combinations, per acre
Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goa
Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.89	3.08	3.28	3.47	3.66	3.86	4.05	4.24	4.43	4.63	4.82
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-235	-214	-192	-171	-150	-129	-107	-86	-65	-44	-23
			-346	-325	-304	-283	-261	-240	-219	-198	-177	-155	-134
60	132.00	bu	-176	-151	-125	-100	-74	-49	-23	1	27	52	77
			-288	-262	-237	-211	-186	-160	-135	-109	-84	-58	-33
70	154.00	bu	-118	-88	-58	-28	0	30	60	89	119	149	179
			-229	-199	-170	-140	-110	-81	-51	-21	8	37	67
80	176.00	bu	-59	-25	8	42	76	110	144	178	212	246	280
			-171	-137	-103	-69	-35	-1	32	66	100	134	168
90	198.00	bu	-0	37	75	113	151	190	228	266	304	342	381
			-112	-74	-36	2	40	78	116	155	193	231	269
100	220.00	bu	57	100	142	185	227	269	312	354	397	439	482
			-53	-11	31	73	116	158	200	243	285	328	370
110	242.00	bu	116	162	209	256	303	349	396	443	489	536	583
			4	51	98	144	191	238	285	331	378	425	471
120	264.00	bu	174	225	276	327	378	429	480	531	582	633	684
			63	114	165	216	267	318	369	420	471	521	572
130	286.00	bu	233	288	343	399	454	509	564	619	675	730	785
			121	177	232	287	342	397	453	508	563	618	673
140	308.00	bu	292	351	410	470	529	589	648	708	767	827	886
			180	240	299	358	418	477	537	596	656	715	775
150	330.00	bu	350	414	478	541	605	669	732	796	860	923	987
			239	302	366	430	493	557	621	685	748	812	876

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

Table 22.A Estimated costs per acre
Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
170 bu yield goal, Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.50	0.2000	1.10	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	1.6300	29.52	_____
Potash (60% K2O)	cwt	27.50	1.2500	34.38	_____
Fert 10-34-0	gal	2.90	4.0000	11.60	_____
Zinc Plus	pt	2.99	2.0000	5.98	_____
UAN + Sulfur (28%)	gal	1.39	19.3063	26.84	_____
UAN (32%)	gal	1.51	36.7200	55.45	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.60	0.5000	5.80	_____
Select Max	pt	10.87	1.0000	10.87	_____
Atrazine 4L	pt	2.09	4.0000	8.36	_____
Halex GT	pt	6.24	3.6000	22.46	_____
INSECTICIDES					
Bifenthrin	oz	0.82	1.2800	1.05	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.50	28.0000	98.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.3457	5.27	_____
Harvesters	hour	15.22	0.1009	1.54	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR	hour	15.24	0.4020	6.13	_____
DIESEL FUEL					
Tractors	gal	2.30	4.0040	9.20	_____
Harvesters	gal	2.30	1.3770	3.17	_____
REPAIR & MAINTENANCE					
Implements	acre	8.03	1.0000	8.03	_____
Tractors	acre	2.46	1.0000	2.46	_____
Harvesters	acre	3.70	1.0000	3.70	_____
INTEREST ON OP. CAP.	acre	13.64	1.0000	13.64	_____

TOTAL DIRECT EXPENSES				461.82	_____
FIXED EXPENSES					
Implements	acre	12.73	1.0000	12.73	_____
Tractors	acre	16.69	1.0000	16.69	_____
Harvesters	acre	15.71	1.0000	15.71	_____

TOTAL FIXED EXPENSES				45.13	_____

TOTAL SPECIFIED EXPENSES				506.95	_____

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

Table 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, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.86	170.0000	656.20	_____
TOTAL INCOME				656.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.10	1.0000	8.10	_____
FERTILIZERS	acre	163.77	1.0000	163.77	_____
HERBICIDES	acre	51.97	1.0000	51.97	_____
INSECTICIDES	acre	1.05	1.0000	1.05	_____
SEED/PLANTS	acre	98.00	1.0000	98.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
OPERATOR LABOR	hour	15.22	0.4466	6.81	_____
UNALLOCATED LABOR	hour	15.24	0.4020	6.13	_____
DIESEL FUEL	gal	2.30	5.3810	12.37	_____
REPAIR & MAINTENANCE	acre	14.19	1.0000	14.19	_____
INTEREST ON OP. CAP.	acre	13.64	1.0000	13.64	_____
TOTAL DIRECT EXPENSES				461.82	_____
RETURNS ABOVE DIRECT EXPENSES				194.38	_____
TOTAL FIXED EXPENSES				45.13	_____
TOTAL SPECIFIED EXPENSES				506.95	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				149.25	_____

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

Table 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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 22.D Estimated costs for field operations, per acre
Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
170 bu yield goal, Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Spin Spreader	5 ton		1.12	0.61	1.60		0.17	3.50	2.70	6.20
Phosphorus(46% P2O5)	cwt	29.52					1.55	31.07		31.07
Potash (60% K2O)	cwt	34.38					1.80	36.18		36.18
Bed/Disk w/roller	12R-30/40		1.66	1.30	1.81		0.25	5.02	5.50	10.52
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Clarity	pt	5.80					0.20	6.00		6.00
Select Max	pt	10.87					0.38	11.25		11.25
Plant & Pre-Folding	12R-38		1.42	2.16	2.02		0.17	5.77	6.30	12.07
Corn Seed BtRR	thous	98.00					3.00	101.00		101.00
Fert 10-34-0	gal	11.60					0.36	11.96		11.96
Zinc Plus	pt	5.98					0.18	6.16		6.16
Custom Apply Fert	acre	7.50					0.20	7.70		7.70
UAN + Sulfur (28%)	gal	26.84					0.70	27.54		27.54
Spray (Broadcast)	60'		0.75	0.41	0.95		0.06	2.17	1.63	3.80
Atrazine 4L	pt	8.36					0.22	8.58		8.58
Halex GT	pt	22.46					0.59	23.05		23.05
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.05					0.02	1.07		1.07
Corn Consultant	acre	6.00					0.13	6.13		6.13
Fert Appl (Liquid)	12R-38		1.38	1.11	1.73		0.09	4.31	3.41	7.72
UAN (32%)	gal	55.45					1.21	56.66		56.66
Header - Corn	8R-38		3.17	5.39	2.92		0.05	11.53	18.47	30.00
Grain Cart Corn	700 bu		0.67	0.44	0.74		0.01	1.86	1.71	3.57
Haul Corn	bu	39.10					0.17	39.27		39.27
Stalk Shredder Flex	20'		2.20	2.77	2.39		0.03	7.39	5.41	12.80
TOTALS		407.46	12.37	14.19	14.16	0.00	13.64	461.82	45.13	506.95

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

Table 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, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	656.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00
FERTILIZERS	63.90	0.00	0.00	0.00	0.00	17.58	26.84	55.45	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	30.82	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	98.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.41	0.00	0.00	0.00	0.00	2.02	0.95	1.73	0.00	0.00	0.00	6.05
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	2.78	0.00	0.00	0.00	0.00	1.42	0.75	1.38	0.00	0.00	0.00	6.04
REPAIR & MAINTENANCE	1.91	0.00	0.00	0.00	0.00	2.16	0.41	1.11	0.00	0.00	0.00	8.60
INTEREST ON OP. CAP.	5.44	0.00	0.00	0.00	0.99	3.71	1.77	1.47	0.00	0.00	0.00	0.26
TOTAL DIRECT EXPENSES	109.41	0.00	0.00	0.00	29.14	124.89	69.04	69.29	0.00	0.00	0.00	60.05
NET INCOME	-109.41	0.00	0.00	0.00	-29.14	-124.89	-69.04	-69.29	0.00	0.00	0.00	596.15
NET INCOME TO DATE	-109.41	-109.41	-109.41	-109.41	-138.55	-263.44	-332.48	-401.77	-401.77	-401.77	-401.77	194.38

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

Table 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, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.89	3.08	3.28	3.47	3.66	3.86	4.05	4.24	4.43	4.63	4.82
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-196	-179	-163	-146	-130	-114	-97	-81	-64	-48	-32
			-241	-224	-208	-192	-175	-159	-142	-126	-110	-93	-77
60	102.00	bu	-150	-131	-111	-91	-72	-52	-32	-13	6	26	46
			-195	-176	-156	-136	-117	-97	-77	-58	-38	-18	0
70	119.00	bu	-105	-82	-59	-36	-13	9	32	55	78	101	124
			-150	-127	-104	-81	-58	-35	-12	10	33	56	79
80	136.00	bu	-60	-33	-7	18	44	70	97	123	149	175	202
			-105	-79	-52	-26	-0	25	52	78	104	130	157
90	153.00	bu	-14	14	44	73	103	132	162	191	221	250	280
			-60	-30	-1	28	58	87	117	146	176	205	235
100	170.00	bu	30	63	95	128	161	194	227	260	292	325	358
			-14	18	50	83	116	149	182	214	247	280	313
110	187.00	bu	75	111	147	183	219	256	292	328	364	400	436
			30	66	102	138	174	210	247	283	319	355	391
120	204.00	bu	120	160	199	239	278	317	357	396	435	475	514
			75	115	154	193	233	272	312	351	390	430	469
130	221.00	bu	166	208	251	294	336	379	422	464	507	550	592
			121	163	206	249	291	334	376	419	462	504	547
140	238.00	bu	211	257	303	349	395	441	487	533	578	624	670
			166	212	258	304	350	396	441	487	533	579	625
150	255.00	bu	256	305	355	404	453	502	552	601	650	699	748
			211	260	310	359	408	457	506	556	605	654	703

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

Table 23.A Estimated costs per acre
Corn, conventional tillage, RR2 seed, 12-row 38",
220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.50	1.2000	6.60	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	1.9570	35.44	_____
Potash (60% K2O)	cwt	27.50	1.5000	41.25	_____
UAN + Sulfur (28%)	gal	1.39	32.1712	44.72	_____
UAN (32%)	gal	1.51	39.5570	59.73	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.60	0.5000	5.80	_____
Select Max	pt	10.87	1.0000	10.87	_____
Atrazine 4L	pt	2.09	4.0000	8.36	_____
Halex GT	pt	6.24	3.6000	22.46	_____
INSECTICIDES					
Bifenthrin	oz	0.82	1.2800	1.05	_____
Intrepid 2F	oz	2.15	4.0000	8.60	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.50	34.0000	119.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.7026	10.72	_____
Harvesters	hour	15.22	0.1009	1.54	_____
Self-Propelled	hour	15.22	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	15.22	0.6684	10.18	_____
DIESEL FUEL					
Tractors	gal	2.30	7.9543	18.29	_____
Harvesters	gal	2.30	1.3770	3.17	_____
Self-Propelled	gal	2.30	0.1586	0.36	_____
Roll-Out Pipe Irr.	gal	2.30	10.5901	24.36	_____
REPAIR & MAINTENANCE					
Implements	acre	9.95	1.0000	9.95	_____
Tractors	acre	4.85	1.0000	4.85	_____
Harvesters	acre	3.70	1.0000	3.70	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
Roll-Out Pipe Irr.	acre	6.88	1.0000	6.88	_____
INTEREST ON OP. CAP.	acre	16.95	1.0000	16.95	_____

TOTAL DIRECT EXPENSES				595.44	_____
FIXED EXPENSES					
Implements	acre	19.07	1.0000	19.07	_____
Tractors	acre	32.99	1.0000	32.99	_____
Harvesters	acre	15.71	1.0000	15.71	_____
Self-Propelled	acre	1.44	1.0000	1.44	_____
Roll-Out Pipe Irr.	acre	60.69	1.0000	60.69	_____

TOTAL FIXED EXPENSES				129.90	_____

TOTAL SPECIFIED EXPENSES				725.34	_____

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

Table 23.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, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.86	220.0000	849.20	_____

TOTAL INCOME				849.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.60	1.0000	13.60	_____
FERTILIZERS	acre	181.14	1.0000	181.14	_____
HERBICIDES	acre	51.97	1.0000	51.97	_____
INSECTICIDES	acre	9.65	1.0000	9.65	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	119.00	1.0000	119.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	15.22	0.8212	12.53	_____
UNALLOCATED LABOR	hour	15.22	0.6684	10.18	_____
DIESEL FUEL	gal	2.30	20.0802	46.18	_____
REPAIR & MAINTENANCE	acre	25.58	1.0000	25.58	_____
INTEREST ON OP. CAP.	acre	16.95	1.0000	16.95	_____

TOTAL DIRECT EXPENSES				595.44	_____
RETURNS ABOVE DIRECT EXPENSES				253.76	_____
TOTAL FIXED EXPENSES				129.90	_____

TOTAL SPECIFIED EXPENSES				725.34	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				123.86	_____

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

Table 23.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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.9570				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond./Roll-Fold.	26'	MFWD 225	0.072	1.00	Mar		0.07	0.07	0.07	0.06
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					34.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					39.5570				
Cultivate	12R-38	MFWD 225	0.054	1.00	May		0.05	0.05	0.05	0.04
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.82	0.80	1.33	0.66

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

Table 23.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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Subsoiler	3 shank		2.72	0.92	2.95		0.35	6.94	5.49	12.43
Disk Harrow	24'		2.18	1.59	2.37		0.32	6.46	6.27	12.73
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Spin Spreader	5 ton		1.12	0.61	1.60		0.17	3.50	2.70	6.20
Phosphorus(46% P2O5)	cwt	35.44					1.86	37.30		37.30
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed/Disk w/roller	12R-30/40		1.66	1.30	1.81		0.25	5.02	5.50	10.52
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Clarity	pt	5.80					0.20	6.00		6.00
Select Max	pt	10.87					0.38	11.25		11.25
Row Cond./Roll-Fold.	26'		1.92	0.87	2.09		0.15	5.03	4.51	9.54
Plant - Folding	12R-38		1.32	1.84	1.89		0.15	5.20	5.52	10.72
Corn Seed RR2	thous	119.00					3.64	122.64		122.64
Custom Apply Fert	acre	7.50					0.20	7.70		7.70
UAN + Sulfur (28%)	gal	44.72					1.17	45.89		45.89
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.59		0.03	1.18	1.44	2.62
Atrazine 4L	pt	8.36					0.22	8.58		8.58
Halex GT	pt	22.46					0.59	23.05		23.05
Corn Consultant	acre	6.00					0.13	6.13		6.13
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.05					0.02	1.07		1.07
Fert Appl (Liquid)	12R-38		1.38	1.11	1.73		0.09	4.31	3.41	7.72
UAN (32%)	gal	59.73					1.31	61.04		61.04
Cultivate	12R-38		1.45	1.04	1.57		0.09	4.15	4.48	8.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Intrepid 2F	oz	8.60					0.15	8.75		8.75
Header - Corn	8R-38		3.17	5.39	2.92		0.05	11.53	18.47	30.00
Grain Cart Corn	700 bu		0.67	0.44	0.74		0.01	1.86	1.71	3.57
Haul Corn	bu	50.60					0.22	50.82		50.82
Stalk Shredder Flex	20'		2.20	2.77	2.39		0.03	7.39	5.41	12.80
Roll-Out Pipe Irr.	acre	7.92	26.03	7.50	4.73		0.80	46.98	64.99	111.97
TOTALS		479.35	46.18	25.58	27.38	0.00	16.95	595.44	129.90	725.34

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

Table 23.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, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	849.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	5.50	0.00	0.00	0.00
FERTILIZERS	76.69	0.00	0.00	0.00	0.00	0.00	44.72	59.73	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	30.82	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	8.60	0.00	0.00	0.00
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	119.00	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	50.60
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	9.31	0.00	0.00	0.00	0.00	3.98	0.59	3.53	3.06	0.23	0.63	6.05
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	8.53	0.00	0.00	0.00	0.00	3.24	0.36	2.83	18.71	6.09	0.38	6.04
REPAIR & MAINTENANCE	4.72	0.00	0.00	0.00	0.00	2.71	0.20	2.15	6.07	0.98	0.15	8.60
INTEREST ON OP. CAP.	6.88	0.00	0.00	0.00	0.99	3.94	2.21	1.67	0.85	0.09	0.01	0.31
TOTAL DIRECT EXPENSES	138.10	0.00	0.00	0.00	29.14	132.87	86.40	78.06	50.71	7.39	1.17	71.60
NET INCOME	-138.10	0.00	0.00	0.00	-29.14	-132.87	-86.40	-78.06	-50.71	-7.39	-1.17	777.60
NET INCOME TO DATE	-138.10	-138.10	-138.10	-138.10	-167.24	-300.11	-386.51	-464.57	-515.28	-522.67	-523.84	253.76

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

Table 23.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, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.89	3.08	3.28	3.47	3.66	3.86	4.05	4.24	4.43	4.63	4.82
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-251	-230	-209	-187	-166	-145	-124	-102	-81	-60	-39
			-381	-360	-339	-317	-296	-275	-254	-232	-211	-190	-169
60	132.00	bu	-192	-167	-142	-116	-91	-65	-40	-14	10	36	61
			-322	-297	-271	-246	-220	-195	-170	-144	-119	-93	-68
70	154.00	bu	-134	-104	-74	-45	-15	14	43	73	103	133	162
			-264	-234	-204	-175	-145	-115	-85	-56	-26	3	32
80	176.00	bu	-75	-41	-7	26	60	94	128	162	195	229	263
			-205	-171	-137	-103	-69	-35	-1	32	66	100	134
90	198.00	bu	-17	21	59	97	135	173	212	250	288	326	364
			-147	-108	-70	-32	5	44	82	120	158	196	235
100	220.00	bu	41	83	126	168	211	253	296	338	381	423	466
			-88	-45	-3	38	81	123	166	208	251	293	336
110	242.00	bu	100	146	193	240	286	333	380	427	473	520	567
			-29	16	63	110	156	203	250	297	343	390	437
120	264.00	bu	158	209	260	311	362	413	464	515	566	617	668
			28	79	130	181	232	283	334	385	436	487	538
130	286.00	bu	217	272	327	382	438	493	548	603	658	714	769
			87	142	197	252	308	363	418	473	528	584	639
140	308.00	bu	275	335	394	454	513	573	632	692	751	810	870
			145	205	264	324	383	443	502	562	621	680	740
150	330.00	bu	334	398	461	525	589	652	716	780	844	907	971
			204	268	331	395	459	523	586	650	714	777	841

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

Table 24.A Estimated costs per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi,2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.50	1.2000	6.60	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	1.6300	29.52	_____
Potash (60% K2O)	cwt	27.50	1.2500	34.38	_____
UAN + Sulfur (28%)	gal	1.39	19.3063	26.84	_____
UAN (32%)	gal	1.51	36.7200	55.45	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.60	0.5000	5.80	_____
Select Max	pt	10.87	1.0000	10.87	_____
Atrazine 4L	pt	2.09	4.0000	8.36	_____
Halex GT	pt	6.24	3.6000	22.46	_____
INSECTICIDES					
Bifenthrin	oz	0.82	1.2804	1.05	_____
Intrepid 2F	oz	2.15	4.0000	8.60	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.50	28.0000	98.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5690	8.68	_____
Harvesters	hour	15.22	0.1009	1.54	_____
Self-Propelled	hour	15.22	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	15.23	0.6188	9.43	_____
DIESEL FUEL					
Tractors	gal	2.30	6.5903	15.15	_____
Harvesters	gal	2.30	1.3770	3.17	_____
Self-Propelled	gal	2.30	0.1586	0.36	_____
REPAIR & MAINTENANCE					
Implements	acre	8.52	1.0000	8.52	_____
Tractors	acre	4.04	1.0000	4.04	_____
Harvesters	acre	3.70	1.0000	3.70	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	14.10	1.0000	14.10	_____

TOTAL DIRECT EXPENSES				474.28	_____
FIXED EXPENSES					
Implements	acre	14.53	1.0000	14.53	_____
Tractors	acre	27.47	1.0000	27.47	_____
Harvesters	acre	15.71	1.0000	15.71	_____
Self-Propelled	acre	1.44	1.0000	1.44	_____

TOTAL FIXED EXPENSES				59.15	_____

TOTAL SPECIFIED EXPENSES				533.43	_____

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

Table 24.B Summary of estimated costs and returns per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi,2020

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

TOTAL INCOME				656.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.60	1.0000	13.60	_____
FERTILIZERS	acre	146.19	1.0000	146.19	_____
HERBICIDES	acre	51.97	1.0000	51.97	_____
INSECTICIDES	acre	9.65	1.0000	9.65	_____
SEED/PLANTS	acre	98.00	1.0000	98.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
OPERATOR LABOR	hour	15.22	0.6876	10.49	_____
UNALLOCATED LABOR	hour	15.23	0.6188	9.43	_____
DIESEL FUEL	gal	2.30	8.1261	18.68	_____
REPAIR & MAINTENANCE	acre	16.46	1.0000	16.46	_____
INTEREST ON OP. CAP.	acre	14.10	1.0000	14.10	_____

TOTAL DIRECT EXPENSES				474.28	_____
RETURNS ABOVE DIRECT EXPENSES				181.92	_____
TOTAL FIXED EXPENSES				59.15	_____

TOTAL SPECIFIED EXPENSES				533.43	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				122.77	_____

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

Table 24.C Estimated resource use for field operations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
Bed/Disk (Hipper)Rd	8R-38	MFWD 225	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	Mar		0.05	0.05	0.05	0.05
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2804				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					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							0.68	0.67	0.81	0.61

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

Table 24.D Estimated costs for field operations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Subsoiler	3 shank		2.72	0.92	2.95		0.35	6.94	5.49	12.43
Disk Harrow	24'		2.18	1.59	2.37		0.32	6.46	6.27	12.73
Soil Test	acre	3.33					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Spin Spreader	5 ton		1.12	0.61	1.60		0.17	3.50	2.70	6.20
Phosphorus(46% P2O5)	cwt	29.52					1.55	31.07		31.07
Potash (60% K2O)	cwt	34.38					1.80	36.18		36.18
Bed/Disk (Hipper)Rd	8R-38		1.97	0.92	2.15		0.26	5.30	4.70	10.00
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Clarity	pt	5.80					0.20	6.00		6.00
Select Max	pt	10.87					0.38	11.25		11.25
Row Cond Rigid	26'		1.59	0.67	1.73		0.12	4.11	4.03	8.14
Plant - Folding	12R-38		1.32	1.84	1.89		0.15	5.20	5.52	10.72
Corn Seed RR2	thous	98.00					3.00	101.00		101.00
Custom Apply Fert	acre	7.50					0.20	7.70		7.70
UAN + Sulfur (28%)	gal	26.84					0.70	27.54		27.54
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.59		0.03	1.18	1.44	2.62
Atrazine 4L	pt	8.36					0.22	8.58		8.58
Halex GT	pt	22.46					0.59	23.05		23.05
Corn Consultant	acre	6.00					0.13	6.13		6.13
App by Air (3 gal)	appl	1.10					0.02	1.12		1.12
Bifenthrin	oz	1.05					0.02	1.07		1.07
Fert Appl (Liquid)	12R-38		1.38	1.11	1.73		0.09	4.31	3.41	7.72
UAN (32%)	gal	55.45					1.21	56.66		56.66
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Intrepid 2F	oz	8.60					0.15	8.75		8.75
Header - Corn	8R-38		3.17	5.39	2.92		0.05	11.53	18.47	30.00
Grain Cart Corn	700 bu		0.67	0.44	0.74		0.01	1.86	1.71	3.57
Haul Corn	bu	39.10					0.17	39.27		39.27
Stalk Shredder Flex	20'		2.20	2.77	2.39		0.03	7.39	5.41	12.80
TOTALS		403.98	18.68	16.46	21.06	0.00	14.10	474.28	59.15	533.43

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

Table 24.E Estimated monthly income and expense flows per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	656.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.10	5.50	0.00	0.00	0.00
FERTILIZERS	63.90	0.00	0.00	0.00	0.00	0.00	26.84	55.45	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	30.82	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	8.60	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	98.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	9.07	0.00	0.00	0.00	0.00	3.62	0.59	1.73	0.00	0.00	0.00	6.05
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	7.99	0.00	0.00	0.00	0.00	2.91	0.36	1.38	0.00	0.00	0.00	6.04
REPAIR & MAINTENANCE	4.04	0.00	0.00	0.00	0.00	2.51	0.20	1.11	0.00	0.00	0.00	8.60
INTEREST ON OP. CAP.	6.12	0.00	0.00	0.00	0.99	3.27	1.74	1.47	0.25	0.00	0.00	0.26
TOTAL DIRECT EXPENSES	123.09	0.00	0.00	0.00	29.14	110.31	68.05	69.29	14.35	0.00	0.00	60.05
NET INCOME	-123.09	0.00	0.00	0.00	-29.14	-110.31	-68.05	-69.29	-14.35	0.00	0.00	596.15
NET INCOME TO DATE	-123.09	-123.09	-123.09	-123.09	-152.23	-262.54	-330.59	-399.88	-414.23	-414.23	-414.23	181.92

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

Table 24.F Estimated returns for various price/yield combinations, per acre
Corn, conventional tillage, RR2 seed, 12-row 38"
170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			2.89	3.08	3.28	3.47	3.66	3.86	4.05	4.24	4.43	4.63	4.82
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-208	-192	-175	-159	-142	-126	-110	-93	-77	-60	-44
			-267	-251	-234	-218	-202	-185	-169	-152	-136	-120	-103
60	102.00	bu	-163	-143	-123	-104	-84	-64	-45	-25	-5	13	33
			-222	-202	-183	-163	-143	-124	-104	-84	-64	-45	-25
70	119.00	bu	-117	-95	-72	-49	-26	-3	19	42	65	88	111
			-177	-154	-131	-108	-85	-62	-39	-16	6	29	52
80	136.00	bu	-72	-46	-20	6	32	58	84	111	137	163	189
			-131	-105	-79	-53	-26	-0	25	51	78	104	130
90	153.00	bu	-27	2	31	61	90	120	149	179	208	238	267
			-86	-57	-27	2	31	61	90	120	149	179	208
100	170.00	bu	17	50	83	116	149	181	214	247	280	313	345
			-41	-8	24	57	89	122	155	188	221	254	286
110	187.00	bu	63	99	135	171	207	243	279	315	351	387	424
			4	40	76	112	148	184	220	256	292	328	364
120	204.00	bu	108	147	187	226	265	305	344	384	423	462	502
			49	88	128	167	206	246	285	324	364	403	443
130	221.00	bu	153	196	239	281	324	366	409	452	494	537	580
			94	137	179	222	265	307	350	393	435	478	521
140	238.00	bu	199	244	290	336	382	428	474	520	566	612	658
			139	185	231	277	323	369	415	461	507	553	599
150	255.00	bu	244	293	342	391	441	490	539	588	638	687	736
			185	234	283	332	382	431	480	529	578	628	677

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

Table 25.A Estimated costs per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	1.3000	23.54	_____
Potash (60% K2O)	cwt	27.50	1.0000	27.50	_____
UAN + Sulfur (28%)	gal	1.39	38.2883	53.22	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Select Max	pt	10.87	1.0000	10.87	_____
Lexar	pt	7.67	6.0000	46.02	_____
INSECTICIDES					
Sivanto Prime	oz	2.54	8.0000	20.32	_____
Karate Z	oz	2.48	1.5000	3.72	_____
Prevathon	oz	1.12	14.0000	15.68	_____
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.94	4.5000	17.73	_____
ADJUVANTS					
Surfactant	pt	5.31	0.3000	1.59	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Sorghum Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.3120	4.76	_____
Harvesters	hour	15.22	0.1021	1.56	_____
Self-Propelled	hour	15.22	0.0661	1.00	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0330	0.30	_____
UNALLOCATED LABOR	hour	15.22	0.4322	6.58	_____
DIESEL FUEL					
Tractors	gal	2.30	2.7303	6.29	_____
Harvesters	gal	2.30	1.3935	3.21	_____
Self-Propelled	gal	2.30	0.8505	1.95	_____
REPAIR & MAINTENANCE					
Implements	acre	5.23	1.0000	5.23	_____
Tractors	acre	1.51	1.0000	1.51	_____
Harvesters	acre	3.75	1.0000	3.75	_____
Self-Propelled	acre	1.00	1.0000	1.00	_____
INTEREST ON OP. CAP.	acre	8.53	1.0000	8.53	_____

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

TOTAL FIXED EXPENSES				44.50	_____

TOTAL SPECIFIED EXPENSES				391.58	_____

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

Table 25.B Summary of estimated costs and returns per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

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

TOTAL INCOME				367.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_____
FERTILIZERS	acre	104.26	1.0000	104.26	_____
HERBICIDES	acre	66.83	1.0000	66.83	_____
INSECTICIDES	acre	39.72	1.0000	39.72	_____
SEED/PLANTS	acre	17.73	1.0000	17.73	_____
ADJUVANTS	acre	1.59	1.0000	1.59	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1772	1.61	_____
OPERATOR LABOR	hour	15.22	0.4803	7.32	_____
UNALLOCATED LABOR	hour	15.22	0.4322	6.58	_____
DIESEL FUEL	gal	2.30	4.9745	11.45	_____
REPAIR & MAINTENANCE	acre	11.49	1.0000	11.49	_____
INTEREST ON OP. CAP.	acre	8.53	1.0000	8.53	_____

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

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

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

Table 25.C Estimated resource use for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

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

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

Table 25.D Estimated costs for field operations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

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

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

Table 25.E Estimated monthly income and expense flows per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	367.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	51.04	53.22	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	20.81	0.00	46.02	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.16	29.56	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	17.73	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
CUSTOM LIME	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	2.37	0.00	0.00	0.00	0.00	5.78	2.64	0.44	1.32	0.00	2.96
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	1.65	0.00	0.00	0.00	0.00	3.45	1.58	0.39	1.17	0.00	3.21
REPAIR & MAINTENANCE	0.00	1.41	0.00	0.00	0.00	0.00	3.40	1.59	0.20	0.60	0.00	4.29
INTEREST ON OP. CAP.	1.67	0.26	0.00	0.00	1.04	0.00	3.36	1.42	0.20	0.42	0.00	0.16
TOTAL DIRECT EXPENSES	33.64	5.69	0.00	0.00	30.44	0.00	130.78	66.45	11.39	33.07	0.00	35.62
NET INCOME	-33.64	-5.69	0.00	0.00	-30.44	0.00	-130.78	-66.45	-11.39	-33.07	0.00	331.38
NET INCOME TO DATE	-33.64	-39.33	-39.33	-39.33	-69.77	-69.77	-200.55	-267.00	-278.39	-311.46	-311.46	19.92

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

Table 25.F Estimated returns for various price/yield combinations, per acre
Grain sorghum, 12-row 30", 100 bu yield goal
All Areas, Mississippi, 2020

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

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

Table 26.A Estimated costs per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.0000	14.00	_____
App by Air (3 gal)	appl	5.50	1.0000	5.50	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	18.11	1.0000	18.11	_____
Potash (60% K2O)	cwt	27.50	0.7500	20.63	_____
Fert 41-0-0-4	cwt	18.60	3.0480	56.69	_____
FUNGICIDES					
CruiserMaxx	oz	4.18	4.5000	18.81	_____
Prosaro	oz	2.45	8.0000	19.60	_____
HERBICIDES					
Axiom	oz	1.84	10.0000	18.40	_____
Harmony Extra SG	oz	13.81	0.7500	10.36	_____
Axial XL	oz	1.21	16.4000	19.84	_____
INSECTICIDES					
Karate Z	oz	2.48	1.5000	3.72	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.24	90.0000	21.60	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	3.0480	22.86	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.6660	28.64	_____
CROP CONSULTANT					
Wheat Consultant	acre	5.50	1.0000	5.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.2648	4.04	_____
Harvesters	hour	15.22	0.1021	1.56	_____
HAND LABOR					
Implements	hour	9.06	0.1363	1.23	_____
UNALLOCATED LABOR	hour	15.22	0.2936	4.47	_____
DIESEL FUEL					
Tractors	gal	2.30	2.3178	5.34	_____
Harvesters	gal	2.30	1.3935	3.21	_____
REPAIR & MAINTENANCE					
Implements	acre	3.75	1.0000	3.75	_____
Tractors	acre	1.29	1.0000	1.29	_____
Harvesters	acre	3.75	1.0000	3.75	_____
INTEREST ON OP. CAP.	acre	9.47	1.0000	9.47	_____

TOTAL DIRECT EXPENSES				343.91	_____
FIXED EXPENSES					
Implements	acre	9.08	1.0000	9.08	_____
Tractors	acre	8.74	1.0000	8.74	_____
Harvesters	acre	15.90	1.0000	15.90	_____

TOTAL FIXED EXPENSES				33.72	_____

TOTAL SPECIFIED EXPENSES				377.63	_____

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

Table 26.B Summary of estimated costs and returns per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	4.24	70.0000	296.80	_____
TOTAL INCOME				296.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
FERTILIZERS	acre	95.44	1.0000	95.44	_____
FUNGICIDES	acre	38.41	1.0000	38.41	_____
HERBICIDES	acre	48.60	1.0000	48.60	_____
INSECTICIDES	acre	3.72	1.0000	3.72	_____
SEED/PLANTS	acre	21.60	1.0000	21.60	_____
CUSTOM FERTILIZE	acre	22.86	1.0000	22.86	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
CROP CONSULTANT	acre	5.50	1.0000	5.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1363	1.23	_____
OPERATOR LABOR	hour	15.22	0.3670	5.60	_____
UNALLOCATED LABOR	hour	15.22	0.2936	4.47	_____
DIESEL FUEL	gal	2.30	3.7114	8.55	_____
REPAIR & MAINTENANCE	acre	8.79	1.0000	8.79	_____
INTEREST ON OP. CAP.	acre	9.47	1.0000	9.47	_____
TOTAL DIRECT EXPENSES				343.91	_____
RETURNS ABOVE DIRECT EXPENSES				-47.11	_____
TOTAL FIXED EXPENSES				33.72	_____
TOTAL SPECIFIED EXPENSES				377.63	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-80.83	_____

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

Table 26.C Estimated resource use for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Sep	0.3330				
Lime (Spread)	ton			0.33	Sep	0.6660				
Disk Harrow	24'	MFWD 170	0.081	1.00	Sep		0.08	0.08	0.08	0.06
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Sep		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0000				
Potash (60% K2O)	cwt					0.7500				
Field Cultivate Fld	32'	MFWD 170	0.046	1.00	Sep		0.04	0.04	0.04	0.03
Grain Drill	20'	MFWD 170	0.094	1.00	Oct		0.09	0.09	0.18	0.07
Wheat Seed Private	lb					90.0000				
CruiserMaxx	oz					4.5000				
Wheat Consultant	acre			1.00	Oct	1.0000				
App by Air (5 gal)	appl			1.00	Nov	1.0000				
Axiom	oz					10.0000				
App by Air (3 gal)	appl			1.00	Feb	1.0000				
Karate Z	oz					1.5000				
Harmony Extra SG	oz					0.7500				
Axial XL	oz					16.4000				
App Fert by Air	cwt			1.00	Feb	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App Fert by Air	cwt			1.00	Mar	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Prosaro	oz					8.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Jun		0.10	0.10	0.10	0.08
Haul Wheat	bu					70.0000				
							-------	-------	-------	-------
TOTALS							0.36	0.36	0.50	0.29

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

Table 26.D Estimated costs for field operations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

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

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

Table 26.E Estimated monthly income and expense flows per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

ITEM	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	296.80
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	5.50	0.00	7.00	0.00	0.00
FERTILIZERS	0.00	0.00	38.74	0.00	0.00	0.00	0.00	28.35	28.35	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	18.81	0.00	0.00	0.00	0.00	0.00	19.60	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	18.40	0.00	0.00	30.20	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.72	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	21.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.43	11.43	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.20
CUSTOM LIME	0.00	0.00	28.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	5.06	3.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	3.44	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.21
REPAIR & MAINTENANCE	0.00	0.00	2.65	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.29
INTEREST ON OP. CAP.	0.00	0.00	3.58	2.09	0.89	0.00	0.00	1.73	0.70	0.35	0.00	0.13
TOTAL DIRECT EXPENSES	0.00	0.00	85.44	55.19	26.29	0.00	0.00	80.93	40.48	26.95	0.00	28.63
NET INCOME	0.00	0.00	-85.44	-55.19	-26.29	0.00	0.00	-80.93	-40.48	-26.95	0.00	268.17
NET INCOME TO DATE	0.00	0.00	-85.44	-140.63	-166.92	-166.92	-166.92	-247.85	-288.33	-315.28	-315.28	-47.11

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

Table 26.F Estimated returns for various price/yield combinations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2020

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

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

Table 27.A Estimated costs per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.28	75.0000	21.00	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.28	13.6000	3.81	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	1.5000	5.32	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc.(Pet.)	pt	3.00	0.4000	1.20	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.2030	3.09	_____
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	15.21	0.5633	8.57	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	3.3975	7.81	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.85	1.0000	8.85	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	8.10	1.0000	8.10	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	14.07	1.0000	14.07	_____

TOTAL DIRECT EXPENSES				759.69	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	34.38	1.0000	34.38	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____

TOTAL FIXED EXPENSES				127.73	_____

TOTAL SPECIFIED EXPENSES				887.42	_____

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

Table 27.B Summary of estimated costs and returns per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	160.0000	792.00	_____
TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	50.50	1.0000	50.50	_____
ADJUVANTS	acre	11.01	1.0000	11.01	_____
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	15.22	0.7506	11.42	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.21	0.5633	8.57	_____
DIESEL FUEL	gal	2.30	36.2688	83.39	_____
REPAIR & MAINTENANCE	acre	34.35	1.0000	34.35	_____
INTEREST ON OP. CAP.	acre	14.07	1.0000	14.07	_____
TOTAL DIRECT EXPENSES				759.69	_____
RETURNS ABOVE DIRECT EXPENSES				32.31	_____
TOTAL FIXED EXPENSES				127.73	_____
TOTAL SPECIFIED EXPENSES				887.42	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-95.42	_____

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

Table 27.C Estimated resource use for field operations, per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Sep	0.3330				
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				
Stratego	pt					1.1875				
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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 27.D Estimated costs for field operations, per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.01	3.34		3.34
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Seed Conv.	lb	21.00					0.55	21.55		21.55
Rice Seed Trt/Insect	lbseed	21.75					0.57	22.32		22.32
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
Class Act NG	pt	1.22					0.03	1.25		1.25
MSO	pt	1.78					0.05	1.83		1.83
Seed Levees										
Rice Seed Cv(Levees)	lb	3.81					0.10	3.91		3.91
Rice Seed Trt/Insect	lbseed	3.94					0.10	4.04		4.04
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Regiment	oz	21.33					0.47	21.80		21.80
Dyne-A-Pak	pt	2.73					0.06	2.79		2.79
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
Rice Management										
RICE MGT. LABOR	hour				2.72		0.06	2.78		2.78
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Facet L	pt	36.61					0.80	37.41		37.41
Permit	oz	15.92					0.35	16.27		16.27
Crop Oil Conc.(Pet.)	pt	1.20					0.03	1.23		1.23
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				4.53		0.08	4.61		4.61
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				4.53		0.06	4.59		4.59
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (CL)	25' Rigid		7.81	10.96	5.87		0.22	24.86	39.27	64.13
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.49	56.49		56.49
Dry Rice	bu	64.00					0.56	64.56		64.56
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	4.50	64.32	14.59	33.85		2.33	119.59	53.22	172.81
TOTALS		559.36	83.39	34.35	68.52	0.00	14.07	759.69	127.73	887.42

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

Table 27.E Estimated monthly income and expense flows per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	50.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	0.53	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	16.27	9.52	11.33	11.33	11.88	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	9.02	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	11.44	3.33
INTEREST ON OP. CAP.	0.50	0.00	0.00	0.00	0.68	0.00	3.53	5.20	1.68	1.08	1.34	0.06
TOTAL DIRECT EXPENSES	10.05	0.00	0.00	0.00	19.86	0.00	137.94	242.26	98.05	82.73	153.68	15.12
NET INCOME	-10.05	0.00	0.00	0.00	-19.86	0.00	-137.94	-242.26	-98.05	-82.73	638.32	-15.12
NET INCOME TO DATE	-10.05	-10.05	-10.05	-10.05	-29.91	-29.91	-167.85	-410.11	-508.16	-590.89	47.43	32.31

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
* Lease costs are based on hourly usage costs

Table 27.F Estimated returns for various price/yield combinations, per acre
Contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-402	-382	-362	-342	-322	-303	-283	-263	-243	-223	-204
			-529	-510	-490	-470	-450	-430	-411	-391	-371	-351	-331
60	96.00	bu	-354	-331	-307	-283	-259	-236	-212	-188	-164	-141	-117
			-482	-458	-435	-411	-387	-363	-340	-316	-292	-268	-245
70	112.00	bu	-307	-279	-252	-224	-196	-168	-141	-113	-85	-58	-30
			-435	-407	-379	-352	-324	-296	-268	-241	-213	-185	-158
80	128.00	bu	-260	-228	-196	-165	-133	-101	-70	-38	-6	24	56
			-388	-356	-324	-292	-261	-229	-197	-166	-134	-102	-71
90	144.00	bu	-212	-177	-141	-106	-70	-34	0	36	72	107	143
			-340	-305	-269	-233	-198	-162	-126	-91	-55	-19	15
100	160.00	bu	-165	-126	-86	-46	-7	32	71	111	151	190	230
			-293	-253	-214	-174	-135	-95	-55	-16	23	62	102
110	176.00	bu	-118	-74	-31	12	55	99	142	186	230	273	317
			-246	-202	-159	-115	-71	-28	15	58	102	145	189
120	192.00	bu	-71	-23	23	71	118	166	214	261	309	356	404
			-198	-151	-103	-56	-8	38	86	133	181	228	276
130	208.00	bu	-23	27	79	130	182	233	285	336	388	439	490
			-151	-100	-48	2	54	105	157	208	260	311	363
140	224.00	bu	23	78	134	189	245	300	356	411	467	522	577
			-104	-48	6	62	117	172	228	283	339	394	450
150	240.00	bu	70	130	189	248	308	367	427	486	545	605	664
			-56	2	61	121	180	240	299	358	418	477	537

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

Table 28.A Estimated costs per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.28	75.0000	21.00	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.28	13.6000	3.81	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc.(Pet.)	pt	3.00	0.4000	1.20	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	13.58	1.0000	13.58	_____

TOTAL DIRECT EXPENSES				722.77	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____

TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				870.23	_____

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

Table 28.B Summary of estimated costs and returns per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	160.0000	792.00	_____
TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	50.50	1.0000	50.50	_____
ADJUVANTS	acre	11.01	1.0000	11.01	_____
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	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	13.58	1.0000	13.58	_____
TOTAL DIRECT EXPENSES				722.77	_____
RETURNS ABOVE DIRECT EXPENSES				69.23	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				870.23	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-78.23	_____

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

Table 28.C Estimated resource use for field operations, per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 28.D Estimated costs for field operations, per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Seed Conv.	lb	21.00					0.55	21.55		21.55
Rice Seed Trt/Insect	lbseed	21.75					0.57	22.32		22.32
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed Cv(Levees)	lb	3.81					0.10	3.91		3.91
Rice Seed Trt/Insect	lbseed	3.94					0.10	4.04		4.04
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Regiment	oz	21.33					0.47	21.80		21.80
Dyne-A-Pak	pt	2.73					0.06	2.79		2.79
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Facet L	pt	36.61					0.80	37.41		37.41
Permit	oz	15.92					0.35	16.27		16.27
Crop Oil Conc.(Pet.)	pt	1.20					0.03	1.23		1.23
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.49	56.49		56.49
Dry Rice	bu	64.00					0.56	64.56		64.56
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	2.25	52.15	14.27	22.69		1.84	93.20	78.19	171.39
TOTALS		557.11	70.18	32.57	49.33	0.00	13.58	722.77	147.46	870.23

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

Table 28.E Estimated monthly income and expense flows per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	50.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	0.53	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	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	3.36	5.02	1.53	0.96	1.31	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	131.10	234.15	89.06	73.77	149.50	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-131.10	-234.15	-89.06	-73.77	642.50	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-164.51	-398.66	-487.72	-561.49	81.01	69.23

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

Table 28.F Estimated returns for various price/yield combinations, per acre
Straight levee rice
Flood irrigated, 27 ac-in, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-365	-345	-325	-305	-286	-266	-246	-226	-206	-187	-167
			-512	-492	-473	-453	-433	-413	-393	-374	-354	-334	-314
60	96.00	bu	-317	-294	-270	-246	-222	-199	-175	-151	-127	-104	-80
			-465	-441	-417	-394	-370	-346	-322	-299	-275	-251	-227
70	112.00	bu	-270	-242	-215	-187	-159	-132	-104	-76	-48	-21	6
			-418	-390	-362	-334	-307	-279	-251	-224	-196	-168	-140
80	128.00	bu	-223	-191	-160	-128	-96	-64	-33	-1	30	61	93
			-370	-339	-307	-275	-244	-212	-180	-149	-117	-85	-54
90	144.00	bu	-176	-140	-104	-69	-33	2	37	73	109	144	180
			-323	-287	-252	-216	-180	-145	-109	-74	-38	-2	32
100	160.00	bu	-128	-89	-49	-9	29	69	108	148	188	227	267
			-276	-236	-197	-157	-117	-78	-38	0	40	80	119
110	176.00	bu	-81	-37	5	49	92	136	179	223	267	310	354
			-228	-185	-141	-98	-54	-11	32	75	119	163	206
120	192.00	bu	-34	13	60	108	155	203	250	298	345	393	441
			-181	-134	-86	-39	8	55	103	151	198	246	293
130	208.00	bu	13	64	116	167	219	270	321	373	424	476	527
			-134	-82	-31	20	71	123	174	226	277	328	380
140	224.00	bu	60	115	171	226	282	337	393	448	503	559	614
			-87	-31	23	79	134	190	245	301	356	411	467
150	240.00	bu	107	167	226	285	345	404	464	523	582	642	701
			-39	19	79	138	197	257	316	376	435	494	554

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

Table 29.A Estimated costs per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.28	75.0000	21.00	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.28	13.6000	3.81	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	1.5000	5.32	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc.(Pet.)	pt	3.00	0.5000	1.50	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	13.43	1.0000	13.43	_____

TOTAL DIRECT EXPENSES				713.23	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____

TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				862.02	_____

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

Table 29.B Summary of estimated costs and returns per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	160.0000	792.00	_____
TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	50.50	1.0000	50.50	_____
ADJUVANTS	acre	11.31	1.0000	11.31	_____
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	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	13.43	1.0000	13.43	_____
TOTAL DIRECT EXPENSES				713.23	_____
RETURNS ABOVE DIRECT EXPENSES				78.77	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				862.02	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-70.02	_____

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

Table 29.C Estimated resource use for field operations, per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.5000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 29.D Estimated costs for field operations, per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Seed Conv.	lb	21.00					0.55	21.55		21.55
Rice Seed Trt/Insect	lbseed	21.75					0.57	22.32		22.32
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
Class Act NG	pt	1.22					0.03	1.25		1.25
MSO	pt	1.78					0.05	1.83		1.83
Seed Levees										
Rice Seed Cv(Levees)	lb	3.81					0.10	3.91		3.91
Rice Seed Trt/Insect	lbseed	3.94					0.10	4.04		4.04
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Regiment	oz	21.33					0.47	21.80		21.80
Dyne-A-Pak	pt	2.73					0.06	2.79		2.79
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Facet L	pt	36.61					0.80	37.41		37.41
Permit	oz	15.92					0.35	16.27		16.27
Crop Oil Conc.(Pet.)	pt	1.50					0.03	1.53		1.53
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.49	56.49		56.49
Dry Rice	bu	64.00					0.56	64.56		64.56
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	10.17	45.21	14.17	12.12		1.69	83.36	79.52	162.88
TOTALS		565.33	63.24	32.47	38.76	0.00	13.43	713.23	148.79	862.02

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

Table 29.E Estimated monthly income and expense flows per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	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	50.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	4.23	3.55	0.53	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	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	3.48	4.92	1.44	0.89	1.30	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	135.61	229.68	84.30	69.03	149.42	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-135.61	-229.68	-84.30	-69.03	642.58	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-169.02	-398.70	-483.00	-552.03	90.55	78.77

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

Table 29.F Estimated returns for various price/yield combinations, per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-355	-335	-316	-296	-276	-256	-236	-217	-197	-177	-157
			-504	-484	-464	-445	-425	-405	-385	-365	-346	-326	-306
60	96.00	bu	-308	-284	-260	-237	-213	-189	-165	-142	-118	-94	-70
			-457	-433	-409	-385	-362	-338	-314	-290	-267	-243	-219
70	112.00	bu	-261	-233	-205	-177	-150	-122	-94	-67	-39	-11	16
			-409	-382	-354	-326	-299	-271	-243	-215	-188	-160	-132
80	128.00	bu	-213	-182	-150	-118	-87	-55	-23	7	39	71	102
			-362	-330	-299	-267	-235	-204	-172	-140	-109	-77	-45
90	144.00	bu	-166	-130	-95	-59	-23	11	47	82	118	154	189
			-315	-279	-244	-208	-172	-137	-101	-65	-30	5	41
100	160.00	bu	-119	-79	-40	-0	39	78	118	157	197	237	276
			-268	-228	-188	-149	-109	-70	-30	9	48	88	127
110	176.00	bu	-71	-28	15	58	102	145	189	232	276	320	363
			-220	-177	-133	-90	-46	-2	40	84	127	171	214
120	192.00	bu	-24	22	70	117	165	212	260	308	355	403	450
			-173	-125	-78	-30	16	64	111	159	206	254	301
130	208.00	bu	22	74	125	177	228	280	331	383	434	485	537
			-126	-74	-23	28	79	131	182	234	285	337	388
140	224.00	bu	69	125	180	236	291	347	402	458	513	568	624
			-78	-23	32	87	142	198	253	309	364	420	475
150	240.00	bu	117	176	236	295	354	414	473	533	592	651	711
			-31	27	87	146	206	265	324	384	443	503	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 2019 input prices.

Table 30.A Estimated costs per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.28	75.0000	21.00	_____
Rice Seed Trt/Insect	lbseed	0.29	75.0000	21.75	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	1.5000	5.32	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc.(Pet.)	pt	3.00	0.5000	1.50	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	12.66	1.0000	12.66	_____

TOTAL DIRECT EXPENSES				679.63	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____

TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				823.34	_____

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

Table 30.B Summary of estimated costs and returns per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	160.0000	792.00	_____

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	42.75	1.0000	42.75	_____
ADJUVANTS	acre	11.31	1.0000	11.31	_____
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	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	12.66	1.0000	12.66	_____

TOTAL DIRECT EXPENSES				679.63	_____
RETURNS ABOVE DIRECT EXPENSES				112.37	_____
TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				823.34	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-31.34	_____

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

Table 30.C Estimated resource use for field operations, per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.5000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 30.D Estimated costs for field operations, per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Seed Conv.	lb	21.00					0.55	21.55		21.55
Rice Seed Trt/Insect	lbseed	21.75					0.57	22.32		22.32
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
Class Act NG	pt	1.22					0.03	1.25		1.25
MSO	pt	1.78					0.05	1.83		1.83
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Regiment	oz	21.33					0.47	21.80		21.80
Dyne-A-Pak	pt	2.73					0.06	2.79		2.79
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Facet L	pt	36.61					0.80	37.41		37.41
Permit	oz	15.92					0.35	16.27		16.27
Crop Oil Conc.(Pet.)	pt	1.50					0.03	1.53		1.53
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.49	56.49		56.49
Dry Rice	bu	64.00					0.56	64.56		64.56
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre		35.60	11.46	9.53		1.12	57.71	74.44	132.15
TOTALS		547.41	53.63	29.76	36.17	0.00	12.66	679.63	143.71	823.34

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

Table 30.E Estimated monthly income and expense flows per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	42.75	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	4.23	3.55	0.53	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	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	2.81	4.88	1.41	0.87	1.29	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	109.75	227.72	82.35	67.09	147.53	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-109.75	-227.72	-82.35	-67.09	644.47	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-143.16	-370.88	-453.23	-520.32	124.15	112.37

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

Table 30.F Estimated returns for various price/yield combinations, per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-322	-302	-282	-262	-242	-223	-203	-183	-163	-143	-124
			-465	-446	-426	-406	-386	-366	-347	-327	-307	-287	-267
60	96.00	bu	-274	-251	-227	-203	-179	-156	-132	-108	-84	-60	-37
			-418	-394	-371	-347	-323	-299	-275	-252	-228	-204	-180
70	112.00	bu	-227	-199	-172	-144	-116	-88	-61	-33	-5	21	49
			-371	-343	-315	-288	-260	-232	-204	-177	-149	-121	-94
80	128.00	bu	-180	-148	-116	-85	-53	-21	9	41	73	104	136
			-323	-292	-260	-228	-197	-165	-133	-102	-70	-38	-7
90	144.00	bu	-132	-97	-61	-26	9	45	80	116	152	187	223
			-276	-240	-205	-169	-134	-98	-62	-27	8	44	79
100	160.00	bu	-85	-46	-6	33	72	112	151	191	231	270	310
			-229	-189	-150	-110	-70	-31	8	47	87	127	166
110	176.00	bu	-38	5	48	92	135	179	223	266	310	353	397
			-182	-138	-94	-51	-7	35	79	122	166	209	253
120	192.00	bu	8	56	104	151	199	246	294	341	389	436	484
			-134	-87	-39	7	55	102	150	197	245	292	340
130	208.00	bu	56	107	159	210	262	313	365	416	468	519	571
			-87	-35	15	66	118	169	221	272	324	375	427
140	224.00	bu	103	158	214	269	325	380	436	491	547	602	657
			-40	15	70	126	181	237	292	347	403	458	514
150	240.00	bu	150	210	269	329	388	447	507	566	626	685	744
			7	66	125	185	244	304	363	422	482	541	601

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

Table 31.A Estimated costs per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.15	23.0000	141.45	_____
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	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc.(Pet.)	pt	3.00	0.4000	1.20	_____
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	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	16.07	1.0000	16.07	_____

TOTAL DIRECT EXPENSES				812.79	_____
FIXED EXPENSES					
Implements	acre	20.07	1.0000	20.07	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____

TOTAL FIXED EXPENSES				122.49	_____

TOTAL SPECIFIED EXPENSES				935.28	_____

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

Table 31.B Summary of estimated costs and returns per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	180.0000	891.00	_____

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	150.88	1.0000	150.88	_____
ADJUVANTS	acre	10.48	1.0000	10.48	_____
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	15.22	0.7235	11.01	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	35.8158	82.35	_____
REPAIR & MAINTENANCE	acre	32.89	1.0000	32.89	_____
INTEREST ON OP. CAP.	acre	16.07	1.0000	16.07	_____

TOTAL DIRECT EXPENSES				812.79	_____
RETURNS ABOVE DIRECT EXPENSES				78.21	_____
TOTAL FIXED EXPENSES				122.49	_____

TOTAL SPECIFIED EXPENSES				935.28	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-44.28	_____

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

Table 31.C Estimated resource use for field operations, per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 31.D Estimated costs for field operations, per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Conv Hyb Trt	lb	141.45					3.71	145.16		145.16
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.22	8.42		8.42
Rice Seed Trt/Insect	lbseed	1.23					0.03	1.26		1.26
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Regiment	oz	21.33					0.47	21.80		21.80
Dyne-A-Pak	pt	2.73					0.06	2.79		2.79
App Fert by Air	cwt	20.02					0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99					1.18	55.17		55.17
NBPT	pt	6.38					0.14	6.52		6.52
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Facet L	pt	36.61					0.80	37.41		37.41
Permit	oz	15.92					0.35	16.27		16.27
Crop Oil Conc.(Pet.)	pt	1.20					0.03	1.23		1.23
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	4.89					0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18					0.23	13.41		13.41
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.55	63.55		63.55
Dry Rice	bu	72.00					0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	4.50	64.32	14.59	33.85		2.33	119.59	53.22	172.81
TOTALS		620.99	82.35	32.89	60.49	0.00	16.07	812.79	122.49	935.28

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

Table 31.E Estimated monthly income and expense flows per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	150.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	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	16.27	7.71	8.61	8.61	11.10	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	7.98	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	9.98	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.17	5.27	1.22	0.57	1.44	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	240.96	245.63	71.36	44.15	165.50	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-240.96	-245.63	-71.36	-44.15	725.50	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-274.37	-520.00	-591.36	-635.51	89.99	78.21

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

Table 31.F Estimated returns for various price/yield combinations, per acre
Conventional hybrid contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-410	-388	-366	-343	-321	-299	-276	-254	-232	-210	-187
			-533	-510	-488	-466	-443	-421	-399	-377	-354	-332	-310
60	108.00	bu	-357	-330	-303	-277	-250	-223	-196	-170	-143	-116	-90
			-479	-453	-426	-399	-372	-346	-319	-292	-266	-239	-212
70	126.00	bu	-304	-272	-241	-210	-179	-148	-117	-85	-54	-23	7
			-426	-395	-364	-333	-301	-270	-239	-208	-177	-145	-114
80	144.00	bu	-250	-215	-179	-144	-108	-72	-37	-1	34	69	105
			-373	-337	-302	-266	-230	-195	-159	-123	-88	-52	-17
90	162.00	bu	-197	-157	-117	-77	-37	2	42	82	123	163	203
			-320	-280	-240	-199	-159	-119	-79	-39	0	40	80
100	180.00	bu	-144	-99	-55	-10	33	78	122	167	211	256	300
			-267	-222	-177	-133	-88	-44	0	44	89	133	178
110	198.00	bu	-91	-42	6	55	104	153	202	251	300	349	398
			-213	-164	-115	-66	-17	31	80	129	178	227	276
120	216.00	bu	-38	15	68	122	175	229	282	336	389	443	496
			-160	-107	-53	-0	53	106	160	213	267	320	373
130	234.00	bu	15	72	130	188	246	304	362	420	478	536	594
			-107	-49	8	66	124	182	240	297	355	413	471
140	252.00	bu	68	130	193	255	317	380	442	504	567	629	691
			-54	8	70	132	195	257	320	382	444	507	569
150	270.00	bu	121	188	255	321	388	455	522	589	656	722	789
			-0	65	132	199	266	333	399	466	533	600	667

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

Table 32.A Estimated costs per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.15	23.0000	141.45	_____
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	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc.(Pet.)	pt	3.00	0.4000	1.20	_____
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	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	15.58	1.0000	15.58	_____

TOTAL DIRECT EXPENSES				786.40	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____

TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				933.86	_____

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

Table 32.B Summary of estimated costs and returns per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	180.0000	891.00	_____
TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	150.88	1.0000	150.88	_____
ADJUVANTS	acre	10.48	1.0000	10.48	_____
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	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	15.58	1.0000	15.58	_____
TOTAL DIRECT EXPENSES				786.40	_____
RETURNS ABOVE DIRECT EXPENSES				104.60	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				933.86	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-42.86	_____

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

Table 32.C Estimated resource use for field operations, per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 32.D Estimated costs for field operations, per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Conv Hyb Trt	lb	141.45					3.71	145.16		145.16
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.22	8.42		8.42
Rice Seed Trt/Insect	lbseed	1.23					0.03	1.26		1.26
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Regiment	oz	21.33					0.47	21.80		21.80
Dyne-A-Pak	pt	2.73					0.06	2.79		2.79
App Fert by Air	cwt	20.02					0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99					1.18	55.17		55.17
NBPT	pt	6.38					0.14	6.52		6.52
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Facet L	pt	36.61					0.80	37.41		37.41
Permit	oz	15.92					0.35	16.27		16.27
Crop Oil Conc.(Pet.)	pt	1.20					0.03	1.23		1.23
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	4.89					0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18					0.23	13.41		13.41
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.55	63.55		63.55
Dry Rice	bu	72.00					0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	2.25	52.15	14.27	22.69		1.84	93.20	78.19	171.39
TOTALS		618.74	70.18	32.57	49.33	0.00	15.58	786.40	147.46	933.86

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

Table 32.E Estimated monthly income and expense flows per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	150.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	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	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.00	5.13	1.12	0.49	1.44	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	234.12	239.37	65.14	37.95	164.63	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-234.12	-239.37	-65.14	-37.95	726.37	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-267.53	-506.90	-572.04	-609.99	116.38	104.60

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

Table 32.F Estimated returns for various price/yield combinations, per acre
Conventional hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-384	-361	-339	-317	-295	-272	-250	-228	-205	-183	-161
			-531	-509	-487	-464	-442	-420	-397	-375	-353	-331	-308
60	108.00	bu	-330	-304	-277	-250	-224	-197	-170	-143	-117	-90	-63
			-478	-451	-424	-398	-371	-344	-318	-291	-264	-237	-211
70	126.00	bu	-277	-246	-215	-184	-153	-121	-90	-59	-28	2	34
			-425	-394	-362	-331	-300	-269	-238	-206	-175	-144	-113
80	144.00	bu	-224	-188	-153	-117	-82	-46	-10	24	60	96	131
			-372	-336	-300	-265	-229	-193	-158	-122	-86	-51	-15
90	162.00	bu	-171	-131	-91	-51	-10	29	69	109	149	189	229
			-318	-278	-238	-198	-158	-118	-78	-38	1	42	82
100	180.00	bu	-118	-73	-29	15	60	104	149	193	238	282	327
			-265	-221	-176	-131	-87	-42	1	46	90	135	179
110	198.00	bu	-64	-15	33	82	131	180	229	278	327	376	425
			-212	-163	-114	-65	-16	32	81	130	179	228	277
120	216.00	bu	-11	41	95	148	202	255	309	362	415	469	522
			-159	-105	-52	1	54	108	161	215	268	321	375
130	234.00	bu	41	99	157	215	273	331	388	446	504	562	620
			-105	-48	9	67	125	183	241	299	357	415	473
140	252.00	bu	94	157	219	281	344	406	468	531	593	656	718
			-52	9	71	134	196	259	321	383	446	508	570
150	270.00	bu	147	214	281	348	415	482	548	615	682	749	816
			0	67	134	200	267	334	401	468	535	601	668

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

Table 33.A Estimated costs per acre
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.15	23.0000	141.45	_____
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	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc.(Pet.)	pt	3.00	0.4000	1.20	_____
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	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	15.43	1.0000	15.43	_____

TOTAL DIRECT EXPENSES				776.56	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____

TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				925.35	_____

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

Table 33.B Summary of estimated costs and returns per acre
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	180.0000	891.00	_____
TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	150.88	1.0000	150.88	_____
ADJUVANTS	acre	10.48	1.0000	10.48	_____
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	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	15.43	1.0000	15.43	_____
TOTAL DIRECT EXPENSES				776.56	_____
RETURNS ABOVE DIRECT EXPENSES				114.44	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				925.35	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-34.35	_____

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

Table 33.C Estimated resource use for field operations, per acre
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 33.D Estimated costs for field operations, per acre
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Conv Hyb Trt	lb	141.45					3.71	145.16		145.16
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.22	8.42		8.42
Rice Seed Trt/Insect	lbseed	1.23					0.03	1.26		1.26
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Regiment	oz	21.33					0.47	21.80		21.80
Dyne-A-Pak	pt	2.73					0.06	2.79		2.79
App Fert by Air	cwt	20.02					0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99					1.18	55.17		55.17
NBPT	pt	6.38					0.14	6.52		6.52
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Facet L	pt	36.61					0.80	37.41		37.41
Permit	oz	15.92					0.35	16.27		16.27
Crop Oil Conc.(Pet.)	pt	1.20					0.03	1.23		1.23
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	4.89					0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18					0.23	13.41		13.41
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.55	63.55		63.55
Dry Rice	bu	72.00					0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	10.17	45.21	14.17	12.12		1.69	83.36	79.52	162.88
TOTALS		626.66	63.24	32.47	38.76	0.00	15.43	776.56	148.79	925.35

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

Table 33.E Estimated monthly income and expense flows per acre
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	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	150.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	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	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.12	5.03	1.03	0.42	1.43	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	238.63	234.60	60.38	33.21	164.55	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-238.63	-234.60	-60.38	-33.21	726.45	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-272.04	-506.64	-567.02	-600.23	126.22	114.44

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

Table 33.F Estimated returns for various price/yield combinations, per acre
Conventional hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-374	-352	-329	-307	-285	-262	-240	-218	-196	-173	-151
			-523	-500	-478	-456	-434	-411	-389	-367	-344	-322	-300
60	108.00	bu	-321	-294	-267	-240	-214	-187	-160	-134	-107	-80	-53
			-469	-443	-416	-389	-363	-336	-309	-282	-256	-229	-202
70	126.00	bu	-267	-236	-205	-174	-143	-112	-80	-49	-18	12	43
			-416	-385	-354	-323	-291	-260	-229	-198	-167	-136	-104
80	144.00	bu	-214	-179	-143	-107	-72	-36	-0	34	70	106	141
			-363	-327	-292	-256	-220	-185	-149	-114	-78	-42	-7
90	162.00	bu	-161	-121	-81	-41	-1	38	79	119	159	199	239
			-310	-270	-230	-190	-149	-109	-69	-29	10	50	90
100	180.00	bu	-108	-63	-19	25	69	114	158	203	248	292	337
			-257	-212	-168	-123	-78	-34	10	54	99	143	188
110	198.00	bu	-55	-6	42	91	140	189	238	287	336	385	434
			-203	-154	-105	-56	-7	41	90	139	188	237	286
120	216.00	bu	-1	51	105	158	211	265	318	372	425	479	532
			-150	-97	-43	9	63	116	170	223	276	330	383
130	234.00	bu	51	109	167	225	282	340	398	456	514	572	630
			-97	-39	18	76	134	192	250	307	365	423	481
140	252.00	bu	104	166	229	291	353	416	478	541	603	665	728
			-44	18	80	142	205	267	329	392	454	517	579
150	270.00	bu	157	224	291	358	425	491	558	625	692	759	825
			8	75	142	209	276	343	409	476	543	610	677

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

Table 34.A Estimated costs per acre
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.15	23.0000	141.45	_____
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	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc.(Pet.)	pt	3.00	0.4000	1.20	_____
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	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	14.86	1.0000	14.86	_____

TOTAL DIRECT EXPENSES				750.91	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____

TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				894.62	_____

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

Table 34.B Summary of estimated costs and returns per acre
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	180.0000	891.00	_____
TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	150.88	1.0000	150.88	_____
ADJUVANTS	acre	10.48	1.0000	10.48	_____
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	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	14.86	1.0000	14.86	_____
TOTAL DIRECT EXPENSES				750.91	_____
RETURNS ABOVE DIRECT EXPENSES				140.09	_____
TOTAL FIXED EXPENSES				143.71	_____
TOTAL SPECIFIED EXPENSES				894.62	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-3.62	_____

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

Table 34.C Estimated resource use for field operations, per acre
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 34.D Estimated costs for field operations, per acre
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Conv Hyb Trt	lb	141.45					3.71	145.16		145.16
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.22	8.42		8.42
Rice Seed Trt/Insect	lbseed	1.23					0.03	1.26		1.26
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Regiment	oz	21.33					0.47	21.80		21.80
Dyne-A-Pak	pt	2.73					0.06	2.79		2.79
App Fert by Air	cwt	20.02					0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99					1.18	55.17		55.17
NBPT	pt	6.38					0.14	6.52		6.52
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	7.00					0.15	7.15		7.15
Facet L	pt	36.61					0.80	37.41		37.41
Permit	oz	15.92					0.35	16.27		16.27
Crop Oil Conc.(Pet.)	pt	1.20					0.03	1.23		1.23
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	4.89					0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18					0.23	13.41		13.41
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.55	63.55		63.55
Dry Rice	bu	72.00					0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre		35.60	11.46	9.53		1.12	57.71	74.44	132.15
TOTALS		616.49	53.63	29.76	36.17	0.00	14.86	750.91	143.71	894.62

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

Table 34.E Estimated monthly income and expense flows per acre
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	150.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	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	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.65	4.99	1.00	0.40	1.42	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	220.72	232.64	58.43	31.27	162.66	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-220.72	-232.64	-58.43	-31.27	728.34	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-254.13	-486.77	-545.20	-576.47	151.87	140.09

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

Table 34.F Estimated returns for various price/yield combinations, per acre
Conventional hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-348	-326	-304	-281	-259	-237	-215	-192	-170	-148	-125
			-492	-470	-447	-425	-403	-381	-358	-336	-314	-291	-269
60	108.00	bu	-295	-268	-242	-215	-188	-161	-135	-108	-81	-54	-28
			-439	-412	-385	-359	-332	-305	-278	-252	-225	-198	-171
70	126.00	bu	-242	-211	-179	-148	-117	-86	-55	-23	7	38	69
			-385	-354	-323	-292	-261	-230	-198	-167	-136	-105	-74
80	144.00	bu	-189	-153	-117	-82	-46	-10	24	60	96	131	167
			-332	-297	-261	-225	-190	-154	-118	-83	-47	-12	23
90	162.00	bu	-135	-95	-55	-15	24	64	104	144	184	224	265
			-279	-239	-199	-159	-119	-79	-39	1	41	81	121
100	180.00	bu	-82	-38	6	50	95	140	184	229	273	318	362
			-226	-181	-137	-92	-48	-3	40	85	130	174	219
110	198.00	bu	-29	19	68	117	166	215	264	313	362	411	460
			-173	-124	-75	-26	22	71	120	169	218	267	316
120	216.00	bu	23	77	130	184	237	291	344	397	451	504	558
			-119	-66	-13	40	93	147	200	254	307	361	414
130	234.00	bu	76	134	192	250	308	366	424	482	540	598	656
			-66	-8	49	106	164	222	280	338	396	454	512
140	252.00	bu	130	192	254	317	379	442	504	566	629	691	753
			-13	48	111	173	235	298	360	423	485	547	610
150	270.00	bu	183	250	317	383	450	517	584	651	717	784	851
			39	106	173	240	306	373	440	507	574	641	707

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

Table 35.A Estimated costs per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clearfield	lb	0.95	65.0000	61.75	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	0.95	12.0000	11.40	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	1.5000	5.32	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.2030	3.09	_____
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	15.21	0.5633	8.57	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	3.3975	7.81	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.85	1.0000	8.85	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	8.10	1.0000	8.10	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	15.51	1.0000	15.51	_____

TOTAL DIRECT EXPENSES				802.01	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	34.38	1.0000	34.38	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____

TOTAL FIXED EXPENSES				127.73	_____

TOTAL SPECIFIED EXPENSES				929.74	_____

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

Table 35.B Summary of estimated costs and returns per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	160.0000	792.00	_____

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	95.48	1.0000	95.48	_____
ADJUVANTS	acre	19.08	1.0000	19.08	_____
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	15.22	0.7506	11.42	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.21	0.5633	8.57	_____
DIESEL FUEL	gal	2.30	36.2688	83.39	_____
REPAIR & MAINTENANCE	acre	34.35	1.0000	34.35	_____
INTEREST ON OP. CAP.	acre	15.51	1.0000	15.51	_____

TOTAL DIRECT EXPENSES				802.01	_____
RETURNS ABOVE DIRECT EXPENSES				-10.01	_____
TOTAL FIXED EXPENSES				127.73	_____

TOTAL SPECIFIED EXPENSES				929.74	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-137.74	_____

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

Table 35.C Estimated resource use for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 35.D Estimated costs for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Clearfield	lb	61.75					1.62	63.37		63.37
Rice Seed Trt/Insect	lbseed	18.85					0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
Class Act NG	pt	1.22					0.03	1.25		1.25
MSO	pt	1.78					0.05	1.83		1.83
Seed Levees										
Rice Seed CF(Levees)	lb	11.40					0.30	11.70		11.70
Rice Seed Trt/Insect	lbseed	3.48					0.09	3.57		3.57
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Clearpath	lb	28.79					0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Newpath	oz	22.38					0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Aim	oz	8.52					0.19	8.71		8.71
Rice Management										
RICE MGT. LABOR	hour				2.72		0.06	2.78		2.78
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				4.53		0.08	4.61		4.61
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				4.53		0.06	4.59		4.59
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (CL)	25' Rigid		7.81	10.96	5.87		0.22	24.86	39.27	64.13
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.49	56.49		56.49
Dry Rice	bu	64.00					0.56	64.56		64.56
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	4.50	64.32	14.59	33.85		2.33	119.59	53.22	172.81
TOTALS		600.24	83.39	34.35	68.52	0.00	15.51	802.01	127.73	929.74

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

Table 35.E Estimated monthly income and expense flows per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	95.48	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.53	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	16.27	9.52	11.33	11.33	11.88	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	9.02	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	11.44	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.81	4.20	1.68	1.08	1.34	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	226.99	195.37	98.05	82.73	153.68	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-226.99	-195.37	-98.05	-82.73	638.32	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-260.40	-455.77	-553.82	-636.55	1.77	-10.01

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

Table 35.F Estimated returns for various price/yield combinations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-444	-424	-404	-385	-365	-345	-325	-305	-286	-266	-246
			-572	-552	-532	-512	-493	-473	-453	-433	-413	-394	-374
60	96.00	bu	-397	-373	-349	-325	-302	-278	-254	-230	-207	-183	-159
			-524	-501	-477	-453	-429	-406	-382	-358	-334	-311	-287
70	112.00	bu	-349	-322	-294	-266	-239	-211	-183	-155	-128	-100	-72
			-477	-449	-422	-394	-366	-339	-311	-283	-255	-228	-200
80	128.00	bu	-302	-270	-239	-207	-175	-144	-112	-80	-49	-17	14
			-430	-398	-366	-335	-303	-271	-240	-208	-176	-145	-113
90	144.00	bu	-255	-219	-184	-148	-112	-77	-41	-5	29	65	101
			-383	-347	-311	-276	-240	-204	-169	-133	-97	-62	-26
100	160.00	bu	-208	-168	-128	-89	-49	-10	29	69	108	148	187
			-335	-296	-256	-216	-177	-137	-98	-58	-18	20	60
110	176.00	bu	-160	-117	-73	-30	13	57	100	144	187	231	274
			-288	-244	-201	-157	-114	-70	-27	16	60	103	147
120	192.00	bu	-113	-65	-18	29	76	124	171	219	266	314	361
			-241	-193	-146	-98	-51	-3	43	91	139	186	234
130	208.00	bu	-66	-14	36	88	139	191	242	294	345	397	448
			-193	-142	-90	-39	12	63	115	166	217	269	320
140	224.00	bu	-18	36	92	147	202	258	313	369	424	480	535
			-146	-91	-35	19	75	130	186	241	296	352	407
150	240.00	bu	28	87	147	206	266	325	384	444	503	563	622
			-99	-39	19	78	138	197	257	316	375	435	494

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

Table 36.A Estimated costs per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clearfield	lb	0.95	65.0000	61.75	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	0.95	12.0000	11.40	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	14.86	1.0000	14.86	_____

TOTAL DIRECT EXPENSES				764.93	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____

TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				912.39	_____

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

Table 36.B Summary of estimated costs and returns per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	160.0000	792.00	_____

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	95.48	1.0000	95.48	_____
ADJUVANTS	acre	19.08	1.0000	19.08	_____
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	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	14.86	1.0000	14.86	_____

TOTAL DIRECT EXPENSES				764.93	_____
RETURNS ABOVE DIRECT EXPENSES				27.07	_____
TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				912.39	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-120.39	_____

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

Table 36.C Estimated resource use for field operations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 36.D Estimated costs for field operations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Clearfield	lb	61.75					1.62	63.37		63.37
Rice Seed Trt/Insect	lbseed	18.85					0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CF(Levees)	lb	11.40					0.30	11.70		11.70
Rice Seed Trt/Insect	lbseed	3.48					0.09	3.57		3.57
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Clearpath	lb	28.79					0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Newpath	oz	22.38					0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Aim	oz	8.52					0.19	8.71		8.71
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.49	56.49		56.49
Dry Rice	bu	64.00					0.56	64.56		64.56
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	2.25	52.15	14.27	22.69		1.84	93.20	78.19	171.39
TOTALS		597.99	70.18	32.57	49.33	0.00	14.86	764.93	147.46	912.39

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

Table 36.E Estimated monthly income and expense flows per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	95.48	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.53	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	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.64	4.02	1.53	0.96	1.31	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	220.15	187.26	89.06	73.77	149.50	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-220.15	-187.26	-89.06	-73.77	642.50	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-253.56	-440.82	-529.88	-603.65	38.85	27.07

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

Table 36.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-407	-387	-367	-348	-328	-308	-288	-268	-249	-229	-209
			-554	-535	-515	-495	-475	-455	-436	-416	-396	-376	-356
60	96.00	bu	-360	-336	-312	-288	-265	-241	-217	-193	-170	-146	-122
			-507	-483	-460	-436	-412	-388	-365	-341	-317	-293	-269
70	112.00	bu	-312	-285	-257	-229	-201	-174	-146	-118	-91	-63	-35
			-460	-432	-404	-377	-349	-321	-293	-266	-238	-210	-183
80	128.00	bu	-265	-233	-202	-170	-138	-107	-75	-43	-12	19	51
			-412	-381	-349	-317	-286	-254	-222	-191	-159	-127	-96
90	144.00	bu	-218	-182	-146	-111	-75	-40	-4	31	66	102	138
			-365	-330	-294	-258	-223	-187	-151	-116	-80	-44	-9
100	160.00	bu	-170	-131	-91	-52	-12	27	66	106	145	185	225
			-318	-278	-239	-199	-159	-120	-80	-41	-1	38	77
110	176.00	bu	-123	-80	-36	7	50	94	137	181	224	268	311
			-271	-227	-183	-140	-96	-53	-9	33	77	120	164
120	192.00	bu	-76	-28	18	66	113	161	208	256	303	351	398
			-223	-176	-128	-81	-33	13	61	108	156	203	251
130	208.00	bu	-29	22	73	125	176	228	279	331	382	434	485
			-176	-125	-73	-22	29	80	132	183	235	286	338
140	224.00	bu	18	73	129	184	240	295	350	406	461	517	572
			-129	-73	-18	37	92	147	203	258	314	369	425
150	240.00	bu	65	124	184	243	303	362	421	481	540	600	659
			-81	-22	36	96	155	215	274	333	393	452	512

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

Table 37.A Estimated costs per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Clearfield	lb	0.95	65.0000	61.75	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	0.95	12.0000	11.40	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	14.71	1.0000	14.71	_____

TOTAL DIRECT EXPENSES				755.09	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____

TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				903.88	_____

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

Table 37.B Summary of estimated costs and returns per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	160.0000	792.00	_____
TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	95.48	1.0000	95.48	_____
ADJUVANTS	acre	19.08	1.0000	19.08	_____
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	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	14.71	1.0000	14.71	_____
TOTAL DIRECT EXPENSES				755.09	_____
RETURNS ABOVE DIRECT EXPENSES				36.91	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				903.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-111.88	_____

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

Table 37.C Estimated resource use for field operations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 37.D Estimated costs for field operations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Clearfield	lb	61.75					1.62	63.37		63.37
Rice Seed Trt/Insect	lbseed	18.85					0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CF(Levees)	lb	11.40					0.30	11.70		11.70
Rice Seed Trt/Insect	lbseed	3.48					0.09	3.57		3.57
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Clearpath	lb	28.79					0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Newpath	oz	22.38					0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Aim	oz	8.52					0.19	8.71		8.71
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.49	56.49		56.49
Dry Rice	bu	64.00					0.56	64.56		64.56
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	10.17	45.21	14.17	12.12		1.69	83.36	79.52	162.88
TOTALS		605.91	63.24	32.47	38.76	0.00	14.71	755.09	148.79	903.88

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

Table 37.E Estimated monthly income and expense flows per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	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	95.48	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.53	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	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.76	3.92	1.44	0.89	1.30	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	224.66	182.49	84.30	69.03	149.42	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-224.66	-182.49	-84.30	-69.03	642.58	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-258.07	-440.56	-524.86	-593.89	48.69	36.91

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

Table 37.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-397	-377	-357	-338	-318	-298	-278	-258	-239	-219	-199
			-546	-526	-506	-486	-467	-447	-427	-407	-387	-368	-348
60	96.00	bu	-350	-326	-302	-278	-255	-231	-207	-183	-160	-136	-112
			-499	-475	-451	-427	-404	-380	-356	-332	-308	-285	-261
70	112.00	bu	-302	-275	-247	-219	-192	-164	-136	-108	-81	-53	-25
			-451	-424	-396	-368	-340	-313	-285	-257	-230	-202	-174
80	128.00	bu	-255	-224	-192	-160	-128	-97	-65	-33	-2	29	61
			-404	-372	-341	-309	-277	-246	-214	-182	-151	-119	-87
90	144.00	bu	-208	-172	-137	-101	-65	-30	5	41	76	112	148
			-357	-321	-285	-250	-214	-178	-143	-107	-72	-36	-0
100	160.00	bu	-161	-121	-81	-42	-2	36	76	116	155	195	234
			-309	-270	-230	-191	-151	-111	-72	-32	6	46	86
110	176.00	bu	-113	-70	-26	16	60	104	147	191	234	278	321
			-262	-219	-175	-131	-88	-44	-1	42	85	129	173
120	192.00	bu	-66	-18	28	76	123	171	218	266	313	361	408
			-215	-167	-120	-72	-25	22	69	117	164	212	259
130	208.00	bu	-19	32	83	135	186	238	289	341	392	444	495
			-167	-116	-65	-13	37	89	140	192	243	295	346
140	224.00	bu	28	83	138	194	249	305	360	416	471	527	582
			-120	-65	-9	45	101	156	211	267	322	378	433
150	240.00	bu	75	134	194	253	312	372	431	491	550	609	669
			-73	-14	45	104	164	223	282	342	401	461	520

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

Table 38.A Estimated costs per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clearfield	lb	0.95	65.0000	61.75	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	0.95	12.0000	11.40	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	14.14	1.0000	14.14	_____

TOTAL DIRECT EXPENSES				729.44	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____

TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				873.15	_____

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

Table 38.B Summary of estimated costs and returns per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	160.0000	792.00	_____

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	95.48	1.0000	95.48	_____
ADJUVANTS	acre	19.08	1.0000	19.08	_____
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	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	14.14	1.0000	14.14	_____

TOTAL DIRECT EXPENSES				729.44	_____
RETURNS ABOVE DIRECT EXPENSES				62.56	_____
TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				873.15	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-81.15	_____

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

Table 38.C Estimated resource use for field operations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 38.D Estimated costs for field operations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Clearfield	lb	61.75					1.62	63.37		63.37
Rice Seed Trt/Insect	lbseed	18.85					0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CF(Levees)	lb	11.40					0.30	11.70		11.70
Rice Seed Trt/Insect	lbseed	3.48					0.09	3.57		3.57
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Clearpath	lb	28.79					0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Newpath	oz	22.38					0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Aim	oz	8.52					0.19	8.71		8.71
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	56.00					0.49	56.49		56.49
Dry Rice	bu	64.00					0.56	64.56		64.56
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre		35.60	11.46	9.53		1.12	57.71	74.44	132.15
TOTALS		595.74	53.63	29.76	36.17	0.00	14.14	729.44	143.71	873.15

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

Table 38.E Estimated monthly income and expense flows per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	95.48	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.53	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	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.29	3.88	1.41	0.87	1.29	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	206.75	180.53	82.35	67.09	147.53	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-206.75	-180.53	-82.35	-67.09	644.47	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-240.16	-420.69	-503.04	-570.13	74.34	62.56

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

Table 38.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-371	-352	-332	-312	-292	-272	-253	-233	-213	-193	-173
			-515	-495	-476	-456	-436	-416	-396	-377	-357	-337	-317
60	96.00	bu	-324	-300	-277	-253	-229	-205	-182	-158	-134	-110	-87
			-468	-444	-420	-397	-373	-349	-325	-302	-278	-254	-230
70	112.00	bu	-277	-249	-221	-194	-166	-138	-111	-83	-55	-27	-0
			-421	-393	-365	-337	-310	-282	-254	-226	-199	-171	-143
80	128.00	bu	-230	-198	-166	-134	-103	-71	-39	-8	23	55	86
			-373	-342	-310	-278	-247	-215	-183	-151	-120	-88	-56
90	144.00	bu	-182	-147	-111	-75	-40	-4	31	66	102	138	173
			-326	-290	-255	-219	-183	-148	-112	-76	-41	-5	29
100	160.00	bu	-135	-95	-56	-16	22	62	102	141	181	220	260
			-279	-239	-199	-160	-120	-81	-41	-1	37	77	116
110	176.00	bu	-88	-44	-1	42	86	129	173	216	260	303	347
			-231	-188	-144	-101	-57	-14	29	73	116	160	203
120	192.00	bu	-40	6	54	101	149	196	244	291	339	386	434
			-184	-137	-89	-42	5	53	100	148	195	243	290
130	208.00	bu	6	57	109	160	212	263	315	366	418	469	521
			-137	-85	-34	17	68	120	171	223	274	326	377
140	224.00	bu	53	109	164	220	275	330	386	441	497	552	608
			-89	-34	20	76	131	187	242	298	353	408	464
150	240.00	bu	101	160	219	279	338	398	457	516	576	635	695
			-42	16	76	135	194	254	313	373	432	491	551

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

Table 39.A Estimated costs per acre
Clearfield hybrid countour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clrfld Hyb Trt	lb	6.10	23.0000	140.30	_____
Rice Seed CFH(Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
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	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	16.22	1.0000	16.22	_____

TOTAL DIRECT EXPENSES				810.84	_____
FIXED EXPENSES					
Implements	acre	20.07	1.0000	20.07	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____

TOTAL FIXED EXPENSES				122.49	_____

TOTAL SPECIFIED EXPENSES				933.33	_____

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

Table 39.B Summary of estimated costs and returns per acre
Clearfield hybrid countour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	180.0000	891.00	_____

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	152.88	1.0000	152.88	_____
ADJUVANTS	acre	18.55	1.0000	18.55	_____
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	15.22	0.7235	11.01	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	35.8158	82.35	_____
REPAIR & MAINTENANCE	acre	32.89	1.0000	32.89	_____
INTEREST ON OP. CAP.	acre	16.22	1.0000	16.22	_____

TOTAL DIRECT EXPENSES				810.84	_____
RETURNS ABOVE DIRECT EXPENSES				80.16	_____
TOTAL FIXED EXPENSES				122.49	_____

TOTAL SPECIFIED EXPENSES				933.33	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-42.33	_____

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

Table 39.C Estimated resource use for field operations, per acre
Clearfield hybrid countour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
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 Clrfld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 39.D Estimated costs for field operations, per acre
Clearfield hybrid countour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Clrfld Hyb Trt	lb	140.30					3.68	143.98		143.98
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CFH(Levee)	lb	11.35					0.30	11.65		11.65
Rice Seed Trt/Insect	lbseed	1.23					0.03	1.26		1.26
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Clearpath	lb	28.79					0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	20.02					0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99					1.18	55.17		55.17
NBPT	pt	6.38					0.14	6.52		6.52
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Newpath	oz	22.38					0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Aim	oz	8.52					0.19	8.71		8.71
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	4.89					0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18					0.23	13.41		13.41
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.55	63.55		63.55
Dry Rice	bu	72.00					0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	4.50	64.32	14.59	33.85		2.33	119.59	53.22	172.81
TOTALS		618.89	82.35	32.89	60.49	0.00	16.22	810.84	122.49	933.33

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

Table 39.E Estimated monthly income and expense flows per acre
Clearfield hybrid countour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	152.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	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	16.27	7.71	8.61	8.61	11.10	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	7.98	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	9.98	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	7.32	4.27	1.22	0.57	1.44	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	285.90	198.74	71.36	44.15	165.50	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-285.90	-198.74	-71.36	-44.15	725.50	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-319.31	-518.05	-589.41	-633.56	91.94	80.16

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

Table 39.F Estimated returns for various price/yield combinations, per acre
Clearfield hybrid countour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-408	-386	-364	-341	-319	-297	-274	-252	-230	-208	-185
			-531	-508	-486	-464	-442	-419	-397	-375	-352	-330	-308
60	108.00	bu	-355	-328	-301	-275	-248	-221	-195	-168	-141	-114	-88
			-477	-451	-424	-397	-370	-344	-317	-290	-264	-237	-210
70	126.00	bu	-302	-271	-239	-208	-177	-146	-115	-83	-52	-21	9
			-424	-393	-362	-331	-299	-268	-237	-206	-175	-144	-112
80	144.00	bu	-249	-213	-177	-142	-106	-70	-35	0	36	71	107
			-371	-335	-300	-264	-228	-193	-157	-122	-86	-50	-15
90	162.00	bu	-195	-155	-115	-75	-35	4	44	84	124	165	205
			-318	-278	-238	-198	-157	-117	-77	-37	2	42	82
100	180.00	bu	-142	-98	-53	-8	35	80	124	169	213	258	302
			-265	-220	-175	-131	-86	-42	2	46	91	135	180
110	198.00	bu	-89	-40	8	57	106	155	204	253	302	351	400
			-211	-162	-113	-64	-15	33	82	131	180	229	278
120	216.00	bu	-36	17	70	124	177	231	284	338	391	444	498
			-158	-105	-51	1	55	108	162	215	269	322	375
130	234.00	bu	17	74	132	190	248	306	364	422	480	538	596
			-105	-47	10	68	126	184	242	299	357	415	473
140	252.00	bu	70	132	194	257	319	382	444	506	569	631	693
			-52	10	72	134	197	259	321	384	446	509	571
150	270.00	bu	123	190	257	323	390	457	524	591	658	724	791
			0	67	134	201	268	335	401	468	535	602	669

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

Table 40.A Estimated costs per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clrfld Hyb Trt	lb	6.10	23.0000	140.30	_____
Rice Seed CFH(Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
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	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	15.73	1.0000	15.73	_____

TOTAL DIRECT EXPENSES				784.45	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____

TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				931.91	_____

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

Table 40.B Summary of estimated costs and returns per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	180.0000	891.00	_____
TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	152.88	1.0000	152.88	_____
ADJUVANTS	acre	18.55	1.0000	18.55	_____
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	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	15.73	1.0000	15.73	_____
TOTAL DIRECT EXPENSES				784.45	_____
RETURNS ABOVE DIRECT EXPENSES				106.55	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				931.91	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-40.91	_____

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

Table 40.C Estimated resource use for field operations, per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
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 Clrfld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 40.D Estimated costs for field operations, per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Clrfld Hyb Trt	lb	140.30					3.68	143.98		143.98
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CFH(Levee)	lb	11.35					0.30	11.65		11.65
Rice Seed Trt/Insect	lbseed	1.23					0.03	1.26		1.26
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Clearpath	lb	28.79					0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	20.02					0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99					1.18	55.17		55.17
NBPT	pt	6.38					0.14	6.52		6.52
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Newpath	oz	22.38					0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Aim	oz	8.52					0.19	8.71		8.71
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	4.89					0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18					0.23	13.41		13.41
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.55	63.55		63.55
Dry Rice	bu	72.00					0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	2.25	52.15	14.27	22.69		1.84	93.20	78.19	171.39
TOTALS		616.64	70.18	32.57	49.33	0.00	15.73	784.45	147.46	931.91

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

Table 40.E Estimated monthly income and expense flows per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	152.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	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	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	7.15	4.13	1.12	0.49	1.44	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	279.06	192.48	65.14	37.95	164.63	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-279.06	-192.48	-65.14	-37.95	726.37	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-312.47	-504.95	-570.09	-608.04	118.33	106.55

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

Table 40.F Estimated returns for various price/yield combinations, per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-382	-359	-337	-315	-293	-270	-248	-226	-204	-181	-159
			-529	-507	-485	-462	-440	-418	-396	-373	-351	-329	-306
60	108.00	bu	-329	-302	-275	-248	-222	-195	-168	-141	-115	-88	-61
			-476	-449	-423	-396	-369	-342	-316	-289	-262	-235	-209
70	126.00	bu	-275	-244	-213	-182	-151	-119	-88	-57	-26	4	36
			-423	-392	-360	-329	-298	-267	-236	-204	-173	-142	-111
80	144.00	bu	-222	-186	-151	-115	-80	-44	-8	26	62	98	133
			-370	-334	-298	-263	-227	-191	-156	-120	-84	-49	-13
90	162.00	bu	-169	-129	-89	-49	-9	31	71	111	151	191	231
			-316	-276	-236	-196	-156	-116	-76	-36	3	43	84
100	180.00	bu	-116	-71	-27	17	62	106	151	195	240	284	329
			-263	-219	-174	-130	-85	-40	3	48	92	137	181
110	198.00	bu	-62	-13	35	84	133	182	231	280	329	378	427
			-210	-161	-112	-63	-14	34	83	132	181	230	279
120	216.00	bu	-9	43	97	150	204	257	310	364	417	471	524
			-157	-103	-50	3	56	110	163	216	270	323	377
130	234.00	bu	43	101	159	217	275	332	390	448	506	564	622
			-104	-46	11	69	127	185	243	301	359	417	475
140	252.00	bu	96	158	221	283	346	408	470	533	595	657	720
			-50	11	73	136	198	261	323	385	448	510	572
150	270.00	bu	149	216	283	350	417	483	550	617	684	751	818
			2	69	136	202	269	336	403	470	536	603	670

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

Table 41.A Estimated costs per acre
Clearfield hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Clrfld Hyb Trt	lb	6.10	23.0000	140.30	_____
Rice Seed CFH(Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
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	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	15.58	1.0000	15.58	_____

TOTAL DIRECT EXPENSES				774.61	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____

TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				923.40	_____

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

Table 41.B Summary of estimated costs and returns per acre
Clearfield hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	180.0000	891.00	_____
TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	152.88	1.0000	152.88	_____
ADJUVANTS	acre	18.55	1.0000	18.55	_____
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	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	15.58	1.0000	15.58	_____
TOTAL DIRECT EXPENSES				774.61	_____
RETURNS ABOVE DIRECT EXPENSES				116.39	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				923.40	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-32.40	_____

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

Table 41.C Estimated resource use for field operations, per acre
Clearfield hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
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 Clrfld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 41.D Estimated costs for field operations, per acre
Clearfield hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Clrfld Hyb Trt	lb	140.30					3.68	143.98		143.98
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CFH(Levee)	lb	11.35					0.30	11.65		11.65
Rice Seed Trt/Insect	lbseed	1.23					0.03	1.26		1.26
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Clearpath	lb	28.79					0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	20.02					0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99					1.18	55.17		55.17
NBPT	pt	6.38					0.14	6.52		6.52
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Newpath	oz	22.38					0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Aim	oz	8.52					0.19	8.71		8.71
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	4.89					0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18					0.23	13.41		13.41
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.55	63.55		63.55
Dry Rice	bu	72.00					0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	10.17	45.21	14.17	12.12		1.69	83.36	79.52	162.88
TOTALS		624.56	63.24	32.47	38.76	0.00	15.58	774.61	148.79	923.40

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

Table 41.E Estimated monthly income and expense flows per acre
Clearfield hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	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	152.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	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	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	7.27	4.03	1.03	0.42	1.43	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	283.57	187.71	60.38	33.21	164.55	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-283.57	-187.71	-60.38	-33.21	726.45	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-316.98	-504.69	-565.07	-598.28	128.17	116.39

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

Table 41.F Estimated returns for various price/yield combinations, per acre
Clearfield hybrid straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-372	-350	-327	-305	-283	-261	-238	-216	-194	-171	-149
			-521	-498	-476	-454	-432	-409	-387	-365	-342	-320	-298
60	108.00	bu	-319	-292	-265	-238	-212	-185	-158	-132	-105	-78	-51
			-467	-441	-414	-387	-361	-334	-307	-280	-254	-227	-200
70	126.00	bu	-265	-234	-203	-172	-141	-110	-78	-47	-16	14	45
			-414	-383	-352	-321	-290	-258	-227	-196	-165	-134	-102
80	144.00	bu	-212	-177	-141	-105	-70	-34	1	36	72	107	143
			-361	-325	-290	-254	-219	-183	-147	-112	-76	-40	-5
90	162.00	bu	-159	-119	-79	-39	0	40	81	121	161	201	241
			-308	-268	-228	-188	-147	-107	-67	-27	12	52	92
100	180.00	bu	-106	-61	-17	27	71	116	160	205	250	294	339
			-255	-210	-166	-121	-76	-32	12	56	101	145	190
110	198.00	bu	-53	-4	44	93	142	191	240	289	338	387	436
			-201	-152	-103	-54	-5	43	92	141	190	239	288
120	216.00	bu	0	53	106	160	213	267	320	374	427	481	534
			-148	-95	-41	11	65	118	172	225	278	332	385
130	234.00	bu	53	111	169	227	284	342	400	458	516	574	632
			-95	-37	20	78	136	194	251	309	367	425	483
140	252.00	bu	106	168	231	293	355	418	480	543	605	667	730
			-42	20	82	144	207	269	331	394	456	519	581
150	270.00	bu	159	226	293	360	426	493	560	627	694	761	827
			10	77	144	211	278	345	411	478	545	612	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 2019 input prices.

Table 42.A Estimated costs per acre
Clearfield hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clrfld Hyb Trt	lb	6.10	23.0000	140.30	_____
Rice Seed CFH(Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
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	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	15.01	1.0000	15.01	_____

TOTAL DIRECT EXPENSES				748.96	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____

TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				892.67	_____

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

Table 42.B Summary of estimated costs and returns per acre
Clearfield hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	180.0000	891.00	_____
TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	152.88	1.0000	152.88	_____
ADJUVANTS	acre	18.55	1.0000	18.55	_____
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	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	15.01	1.0000	15.01	_____
TOTAL DIRECT EXPENSES				748.96	_____
RETURNS ABOVE DIRECT EXPENSES				142.04	_____
TOTAL FIXED EXPENSES				143.71	_____
TOTAL SPECIFIED EXPENSES				892.67	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-1.67	_____

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

Table 42.C Estimated resource use for field operations, per acre
Clearfield hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
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 Clrfld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 42.D Estimated costs for field operations, per acre
Clearfield hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Clrfld Hyb Trt	lb	140.30					3.68	143.98		143.98
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed CFH(Levee)	lb	11.35					0.30	11.65		11.65
Rice Seed Trt/Insect	lbseed	1.23					0.03	1.26		1.26
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Clearpath	lb	28.79					0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	20.02					0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99					1.18	55.17		55.17
NBPT	pt	6.38					0.14	6.52		6.52
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Newpath	oz	22.38					0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Aim	oz	8.52					0.19	8.71		8.71
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Clincher SF	oz	17.40					0.30	17.70		17.70
MSO	pt	3.55					0.06	3.61		3.61
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	4.89					0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18					0.23	13.41		13.41
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	63.00					0.55	63.55		63.55
Dry Rice	bu	72.00					0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre		35.60	11.46	9.53		1.12	57.71	74.44	132.15
TOTALS		614.39	53.63	29.76	36.17	0.00	15.01	748.96	143.71	892.67

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

Table 42.E Estimated monthly income and expense flows per acre
Clearfield hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	152.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	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	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.80	3.99	1.00	0.40	1.42	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	265.66	185.75	58.43	31.27	162.66	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-265.66	-185.75	-58.43	-31.27	728.34	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-299.07	-484.82	-543.25	-574.52	153.82	142.04

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

Table 42.F Estimated returns for various price/yield combinations, per acre
Clearfield hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-346	-324	-302	-279	-257	-235	-213	-190	-168	-146	-123
			-490	-468	-445	-423	-401	-379	-356	-334	-312	-289	-267
60	108.00	bu	-293	-266	-240	-213	-186	-159	-133	-106	-79	-52	-26
			-437	-410	-383	-357	-330	-303	-276	-250	-223	-196	-169
70	126.00	bu	-240	-209	-177	-146	-115	-84	-53	-22	9	40	71
			-384	-352	-321	-290	-259	-228	-196	-165	-134	-103	-72
80	144.00	bu	-187	-151	-115	-80	-44	-8	26	62	97	133	169
			-330	-295	-259	-223	-188	-152	-116	-81	-45	-10	25
90	162.00	bu	-133	-93	-53	-13	26	66	106	146	186	226	267
			-277	-237	-197	-157	-117	-77	-37	3	43	83	123
100	180.00	bu	-80	-36	8	52	97	142	186	231	275	320	364
			-224	-179	-135	-90	-46	-1	42	87	131	176	221
110	198.00	bu	-27	21	70	119	168	217	266	315	364	413	462
			-171	-122	-73	-24	24	73	122	171	220	269	318
120	216.00	bu	25	79	132	186	239	293	346	399	453	506	560
			-118	-64	-11	42	95	149	202	256	309	363	416
130	234.00	bu	78	136	194	252	310	368	426	484	542	600	658
			-64	-6	51	108	166	224	282	340	398	456	514
140	252.00	bu	132	194	256	319	381	443	506	568	631	693	755
			-11	50	113	175	237	300	362	424	487	549	612
150	270.00	bu	185	252	318	385	452	519	586	653	719	786	853
			41	108	175	242	308	375	442	509	576	643	709

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

Table 43.A Estimated costs per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Provisia	oz	0.83	31.0000	25.73	_____
Aim	oz	5.68	1.0000	5.68	_____
Permit	oz	21.22	0.7500	15.92	_____
Regiment	oz	42.66	0.2500	10.67	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.08	77.0000	83.16	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	0.5000	1.78	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
Dyne-A-Pak	pt	5.45	0.2500	1.36	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.2030	3.09	_____
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	15.21	0.5633	8.57	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	3.3975	7.81	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.85	1.0000	8.85	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	8.10	1.0000	8.10	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	15.35	1.0000	15.35	_____
TOTAL DIRECT EXPENSES				787.59	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	34.38	1.0000	34.38	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____
TOTAL FIXED EXPENSES				127.73	_____
TOTAL SPECIFIED EXPENSES				915.32	_____

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

Table 43.B Summary of estimated costs and returns per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	156.0000	772.20	_____
TOTAL INCOME				772.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	102.08	1.0000	102.08	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	105.49	1.0000	105.49	_____
ADJUVANTS	acre	16.89	1.0000	16.89	_____
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	15.22	0.7506	11.42	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.21	0.5633	8.57	_____
DIESEL FUEL	gal	2.30	36.2688	83.39	_____
REPAIR & MAINTENANCE	acre	34.35	1.0000	34.35	_____
INTEREST ON OP. CAP.	acre	15.35	1.0000	15.35	_____
TOTAL DIRECT EXPENSES				787.59	_____
RETURNS ABOVE DIRECT EXPENSES				-15.39	_____
TOTAL FIXED EXPENSES				127.73	_____
TOTAL SPECIFIED EXPENSES				915.32	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-143.12	_____

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

Table 43.C Estimated resource use for field operations, per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 43.D Estimated costs for field operations, per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Seed Provisia	lb	70.20					1.84	72.04		72.04
Rice Seed Trt/Insect	lbseed	18.85					0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
Class Act NG	pt	1.22					0.03	1.25		1.25
MSO	pt	1.78					0.05	1.83		1.83
Seed Levees										
Rice Seed Provisia	lb	12.96					0.34	13.30		13.30
Rice Seed Trt/Insect	lbseed	3.48					0.09	3.57		3.57
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Provisia	oz	12.87					0.34	13.21		13.21
Aim	oz	5.68					0.15	5.83		5.83
Permit	oz	15.92					0.42	16.34		16.34
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Provisia	oz	12.87					0.28	13.15		13.15
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Rice Management										
RICE MGT. LABOR	hour				2.72		0.06	2.78		2.78
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Regiment	oz	10.67					0.19	10.86		10.86
Dyne-A-Pak	pt	1.36					0.02	1.38		1.38
Rice Management										
RICE MGT. LABOR	hour				4.53		0.08	4.61		4.61
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				4.53		0.06	4.59		4.59
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (CL)	25' Rigid		7.81	10.96	5.87		0.22	24.86	39.27	64.13
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.48	55.08		55.08
Dry Rice	bu	62.40					0.55	62.95		62.95
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	4.50	64.32	14.59	33.85		2.33	119.59	53.22	172.81
TOTALS		585.98	83.39	34.35	68.52	0.00	15.35	787.59	127.73	915.32

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

Table 43.E Estimated monthly income and expense flows per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	772.20	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	66.36	12.87	10.67	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.49	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	1.36	0.53	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	16.27	9.52	11.33	11.33	11.88	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	9.02	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	11.44	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.22	3.80	1.53	1.08	1.32	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	243.09	176.94	88.98	82.73	150.66	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-243.09	-176.94	-88.98	-82.73	621.54	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-276.50	-453.44	-542.42	-625.15	-3.61	-15.39

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

Table 43.F Estimated returns for various price/yield combinations, per acre
Provisia contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-439	-419	-400	-381	-361	-342	-323	-303	-284	-265	-245
			-566	-547	-528	-508	-489	-470	-450	-431	-412	-392	-373
60	93.60	bu	-392	-369	-346	-323	-300	-277	-253	-230	-207	-184	-161
			-520	-497	-474	-451	-427	-404	-381	-358	-335	-312	-288
70	109.20	bu	-346	-319	-292	-265	-238	-211	-184	-157	-130	-103	-76
			-474	-447	-420	-393	-366	-339	-312	-285	-258	-231	-204
80	124.80	bu	-300	-269	-238	-208	-177	-146	-115	-84	-53	-22	8
			-428	-397	-366	-335	-304	-273	-243	-212	-181	-150	-119
90	140.40	bu	-254	-219	-185	-150	-115	-80	-46	-11	23	58	92
			-382	-347	-312	-278	-243	-208	-173	-139	-104	-69	-34
100	156.00	bu	-208	-169	-131	-92	-54	-15	23	61	100	139	177
			-336	-297	-258	-220	-181	-143	-104	-65	-27	11	49
110	171.60	bu	-162	-119	-77	-34	7	50	92	134	177	219	262
			-290	-247	-205	-162	-120	-77	-35	7	49	92	134
120	187.20	bu	-116	-69	-23	22	69	115	161	208	254	300	347
			-243	-197	-151	-104	-58	-12	34	80	126	173	219
130	202.80	bu	-70	-19	30	80	130	180	231	281	331	381	431
			-197	-147	-97	-47	2	53	103	153	203	253	304
140	218.40	bu	-23	30	84	138	192	246	300	354	408	462	516
			-151	-97	-43	10	64	118	172	226	280	334	388
150	234.00	bu	22	80	137	195	253	311	369	427	485	543	601
			-105	-47	10	68	126	183	241	299	357	415	473

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

Table 44.A Estimated costs per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Provisia	oz	0.83	31.0000	25.73	_____
Aim	oz	5.68	1.0000	5.68	_____
Permit	oz	21.22	0.7500	15.92	_____
Regiment	oz	42.66	0.2500	10.67	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.08	77.0000	83.16	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	3.55	0.5000	1.78	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
Dyne-A-Pak	pt	5.45	0.2500	1.36	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	14.70	1.0000	14.70	_____

TOTAL DIRECT EXPENSES				750.51	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____

TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				897.97	_____

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

Table 44.B Summary of estimated costs and returns per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	156.0000	772.20	_____
TOTAL INCOME				772.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	102.08	1.0000	102.08	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	105.49	1.0000	105.49	_____
ADJUVANTS	acre	16.89	1.0000	16.89	_____
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	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	14.70	1.0000	14.70	_____
TOTAL DIRECT EXPENSES				750.51	_____
RETURNS ABOVE DIRECT EXPENSES				21.69	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				897.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-125.77	_____

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

Table 44.C Estimated resource use for field operations, per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 44.D Estimated costs for field operations, per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Seed Provisia	lb	70.20					1.84	72.04		72.04
Rice Seed Trt/Insect	lbseed	18.85					0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed Provisia	lb	12.96					0.34	13.30		13.30
Rice Seed Trt/Insect	lbseed	3.48					0.09	3.57		3.57
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Provisia	oz	12.87					0.34	13.21		13.21
Aim	oz	5.68					0.15	5.83		5.83
Permit	oz	15.92					0.42	16.34		16.34
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Provisia	oz	12.87					0.28	13.15		13.15
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Regiment	oz	10.67					0.19	10.86		10.86
Dyne-A-Pak	pt	1.36					0.02	1.38		1.38
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.48	55.08		55.08
Dry Rice	bu	62.40					0.55	62.95		62.95
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	2.25	52.15	14.27	22.69		1.84	93.20	78.19	171.39
TOTALS		583.73	70.18	32.57	49.33	0.00	14.70	750.51	147.46	897.97

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

Table 44.E Estimated monthly income and expense flows per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	772.20	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	66.36	12.87	10.67	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.49	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	1.36	0.53	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	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.05	3.62	1.38	0.96	1.29	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	236.25	168.83	79.99	73.77	146.48	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-236.25	-168.83	-79.99	-73.77	625.72	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-269.66	-438.49	-518.48	-592.25	33.47	21.69

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

Table 44.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-401	-382	-363	-344	-324	-305	-286	-266	-247	-228	-208
			-549	-530	-510	-491	-472	-452	-433	-414	-394	-375	-356
60	93.60	bu	-355	-332	-309	-286	-263	-239	-216	-193	-170	-147	-124
			-503	-480	-456	-433	-410	-387	-364	-341	-317	-294	-271
70	109.20	bu	-309	-282	-255	-228	-201	-174	-147	-120	-93	-66	-39
			-457	-430	-403	-376	-349	-322	-294	-267	-240	-213	-186
80	124.80	bu	-263	-232	-201	-170	-140	-109	-78	-47	-16	14	45
			-411	-380	-349	-318	-287	-256	-225	-194	-163	-133	-102
90	140.40	bu	-217	-182	-147	-113	-78	-43	-8	25	60	95	130
			-364	-330	-295	-260	-225	-191	-156	-121	-86	-52	-17
100	156.00	bu	-171	-132	-94	-55	-16	21	60	98	137	176	214
			-318	-280	-241	-202	-164	-125	-87	-48	-9	28	67
110	171.60	bu	-125	-82	-40	2	44	87	129	172	214	256	299
			-272	-230	-187	-145	-102	-60	-17	24	67	109	152
120	187.20	bu	-79	-32	13	59	106	152	198	245	291	337	384
			-226	-180	-133	-87	-41	5	51	97	144	190	236
130	202.80	bu	-33	17	67	117	167	217	268	318	368	418	468
			-180	-130	-80	-29	20	70	120	170	221	271	321
140	218.40	bu	13	67	121	175	229	283	337	391	445	499	553
			-134	-80	-26	27	81	135	189	244	298	352	406
150	234.00	bu	59	117	175	232	290	348	406	464	522	580	638
			-88	-30	27	85	143	201	259	317	375	432	490

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

Table 45.A Estimated costs per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Provisia	oz	0.83	31.0000	25.73	_____
Aim	oz	5.68	1.0000	5.68	_____
Permit	oz	21.22	0.7500	15.92	_____
Regiment	oz	42.66	0.2500	10.67	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.08	77.0000	83.16	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	3.55	0.5000	1.78	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
Dyne-A-Pak	pt	5.45	0.2500	1.36	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	14.55	1.0000	14.55	_____

TOTAL DIRECT EXPENSES				740.67	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____

TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				889.46	_____

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

Table 45.B Summary of estimated costs and returns per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	156.0000	772.20	_____
TOTAL INCOME				772.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	102.08	1.0000	102.08	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	105.49	1.0000	105.49	_____
ADJUVANTS	acre	16.89	1.0000	16.89	_____
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	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	14.55	1.0000	14.55	_____
TOTAL DIRECT EXPENSES				740.67	_____
RETURNS ABOVE DIRECT EXPENSES				31.53	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				889.46	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-117.26	_____

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

Table 45.C Estimated resource use for field operations, per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 45.D Estimated costs for field operations, per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Seed Provisia	lb	70.20					1.84	72.04		72.04
Rice Seed Trt/Insect	lbseed	18.85					0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed Provisia	lb	12.96					0.34	13.30		13.30
Rice Seed Trt/Insect	lbseed	3.48					0.09	3.57		3.57
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Provisia	oz	12.87					0.34	13.21		13.21
Aim	oz	5.68					0.15	5.83		5.83
Permit	oz	15.92					0.42	16.34		16.34
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Provisia	oz	12.87					0.28	13.15		13.15
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Regiment	oz	10.67					0.19	10.86		10.86
Dyne-A-Pak	pt	1.36					0.02	1.38		1.38
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.48	55.08		55.08
Dry Rice	bu	62.40					0.55	62.95		62.95
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre	10.17	45.21	14.17	12.12		1.69	83.36	79.52	162.88
TOTALS		591.65	63.24	32.47	38.76	0.00	14.55	740.67	148.79	889.46

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

Table 45.E Estimated monthly income and expense flows per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	772.20	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	66.36	12.87	10.67	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	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	105.49	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	1.36	0.53	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	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.17	3.52	1.29	0.89	1.28	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	240.76	164.06	75.23	69.03	146.40	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-240.76	-164.06	-75.23	-69.03	625.80	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-274.17	-438.23	-513.46	-582.49	43.31	31.53

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

Table 45.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee multi inlet rice
Flood irrigated, 23 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-392	-372	-353	-334	-314	-295	-276	-256	-237	-218	-199
			-540	-521	-502	-482	-463	-444	-425	-405	-386	-367	-347
60	93.60	bu	-345	-322	-299	-276	-253	-230	-206	-183	-160	-137	-114
			-494	-471	-448	-425	-402	-378	-355	-332	-309	-286	-263
70	109.20	bu	-299	-272	-245	-218	-191	-164	-137	-110	-83	-56	-29
			-448	-421	-394	-367	-340	-313	-286	-259	-232	-205	-178
80	124.80	bu	-253	-222	-191	-161	-130	-99	-68	-37	-6	24	55
			-402	-371	-340	-309	-278	-248	-217	-186	-155	-124	-93
90	140.40	bu	-207	-172	-138	-103	-68	-33	0	35	70	105	139
			-356	-321	-286	-252	-217	-182	-147	-113	-78	-43	-8
100	156.00	bu	-161	-122	-84	-45	-7	31	70	108	147	185	224
			-310	-271	-233	-194	-155	-117	-78	-40	-1	37	75
110	171.60	bu	-115	-72	-30	12	54	96	139	181	224	266	309
			-264	-221	-179	-136	-94	-51	-9	33	75	118	160
120	187.20	bu	-69	-22	23	69	116	162	208	255	301	347	394
			-218	-171	-125	-79	-32	13	59	106	152	198	245
130	202.80	bu	-23	27	77	127	177	227	277	328	378	428	478
			-171	-121	-71	-21	28	78	129	179	229	279	329
140	218.40	bu	22	76	131	185	239	293	347	401	455	509	563
			-125	-71	-17	36	90	144	198	252	306	360	414
150	234.00	bu	69	126	184	242	300	358	416	474	532	590	648
			-79	-21	36	93	151	209	267	325	383	441	499

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

Table 46.A Estimated costs per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Provisia	oz	0.83	31.0000	25.73	_____
Aim	oz	5.68	1.0000	5.68	_____
Permit	oz	21.22	0.7500	15.92	_____
Regiment	oz	42.66	0.2500	10.67	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.08	77.0000	83.16	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	3.55	0.5000	1.78	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
Dyne-A-Pak	pt	5.45	0.2500	1.36	_____
Surfactant	pt	5.31	0.1000	0.53	_____
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	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
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	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	_____

TOTAL DIRECT EXPENSES				715.02	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____

TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				858.73	_____

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

Table 46.B Summary of estimated costs and returns per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	156.0000	772.20	_____
TOTAL INCOME				772.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	102.08	1.0000	102.08	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	105.49	1.0000	105.49	_____
ADJUVANTS	acre	16.89	1.0000	16.89	_____
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	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	_____
TOTAL DIRECT EXPENSES				715.02	_____
RETURNS ABOVE DIRECT EXPENSES				57.18	_____
TOTAL FIXED EXPENSES				143.71	_____
TOTAL SPECIFIED EXPENSES				858.73	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-86.53	_____

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

Table 46.C Estimated resource use for field operations, per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior 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 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.

Table 46.D Estimated costs for field operations, per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Soil Test	acre	3.33					0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70		0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12		0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72					0.24	6.96		6.96
2,4-D Amine 4	pt	5.46					0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99		0.20	7.77	7.83	15.60
Rice Seed Provisia	lb	70.20					1.84	72.04		72.04
Rice Seed Trt/Insect	lbseed	18.85					0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44		0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48					0.12	4.60		4.60
Command 3ME	pt	16.09					0.42	16.51		16.51
Sharpen	oz	11.32					0.30	11.62		11.62
MSO	pt	1.78					0.05	1.83		1.83
Class Act NG	pt	1.22					0.03	1.25		1.25
Seed Levees										
Rice Seed Provisia	lb	12.96					0.34	13.30		13.30
Rice Seed Trt/Insect	lbseed	3.48					0.09	3.57		3.57
App by Air (5 gal)	appl	7.00					0.18	7.18		7.18
Provisia	oz	12.87					0.34	13.21		13.21
Aim	oz	5.68					0.15	5.83		5.83
Permit	oz	15.92					0.42	16.34		16.34
Crop Oil Conc.(Pet.)	pt	6.00					0.16	6.16		6.16
App Fert by Air	cwt	7.50					0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73					0.19	8.92		8.92
DAP	cwt	11.32					0.25	11.57		11.57
Rice Consultant	acre	8.00					0.18	8.18		8.18
App Fert by Air	cwt	18.75					0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55					1.11	51.66		51.66
NBPT	pt	5.98					0.13	6.11		6.11
App by Air (10 gal)	appl	9.00					0.20	9.20		9.20
Provisia	oz	12.87					0.28	13.15		13.15
Crop Oil Conc.(Pet.)	pt	6.00					0.13	6.13		6.13
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.50					0.06	3.56		3.56
Regiment	oz	10.67					0.19	10.86		10.86
Dyne-A-Pak	pt	1.36					0.02	1.38		1.38
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	11.25					0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33					0.53	30.86		30.86
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	7.00					0.09	7.09		7.09
Stratego	pt	27.82					0.37	28.19		28.19
Surfactant	pt	0.53					0.01	0.54		0.54
App by Air (3 gal)	appl	8.25					0.11	8.36		8.36
Warrior ZT	oz	7.71					0.10	7.81		7.81
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09		0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32		0.01	0.81	0.74	1.55
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.48	55.08		55.08
Dry Rice	bu	62.40					0.55	62.95		62.95
Disk Heavy	28'		4.03	3.33	4.37		0.05	11.78	12.51	24.29
Flood Irr.	acre		35.60	11.46	9.53		1.12	57.71	74.44	132.15
TOTALS		581.48	53.63	29.76	36.17	0.00	13.98	715.02	143.71	858.73

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

Table 46.E Estimated monthly income and expense flows per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	772.20	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	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	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	66.36	12.87	10.67	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.49	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	1.36	0.53	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	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.70	3.48	1.26	0.87	1.27	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	222.85	162.10	73.28	67.09	144.51	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-222.85	-162.10	-73.28	-67.09	627.69	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-256.26	-418.36	-491.64	-558.73	68.96	57.18

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

Table 46.F Estimated returns for various price/yield combinations, per acre
Provisia straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-366	-347	-327	-308	-289	-269	-250	-231	-211	-192	-173
			-510	-490	-471	-452	-432	-413	-394	-375	-355	-336	-317
60	93.60	bu	-320	-297	-273	-250	-227	-204	-181	-158	-134	-111	-88
			-464	-440	-417	-394	-371	-348	-325	-301	-278	-255	-232
70	109.20	bu	-274	-247	-220	-193	-166	-139	-112	-85	-57	-30	-3
			-417	-390	-363	-336	-309	-282	-255	-228	-201	-174	-147
80	124.80	bu	-228	-197	-166	-135	-104	-73	-42	-11	19	49	80
			-371	-340	-310	-279	-248	-217	-186	-155	-124	-93	-62
90	140.40	bu	-181	-147	-112	-77	-42	-8	26	61	96	130	165
			-325	-290	-256	-221	-186	-151	-117	-82	-47	-12	21
100	156.00	bu	-135	-97	-58	-20	18	57	95	134	173	211	250
			-279	-240	-202	-163	-125	-86	-47	-9	29	67	106
110	171.60	bu	-89	-47	-4	37	80	122	165	207	250	292	334
			-233	-190	-148	-106	-63	-21	21	63	106	148	191
120	187.20	bu	-43	2	49	95	141	188	234	280	327	373	419
			-187	-141	-94	-48	-2	44	90	136	183	229	275
130	202.80	bu	2	52	102	153	203	253	303	353	404	454	504
			-141	-91	-40	9	59	109	159	210	260	310	360
140	218.40	bu	48	102	156	210	264	318	372	426	481	535	589
			-95	-41	12	67	121	175	229	283	337	391	445
150	234.00	bu	94	152	210	268	326	384	442	500	558	615	673
			-49	8	66	124	182	240	298	356	414	472	530

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

Table 47.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.35	5.5000	34.92	_____
Abound	oz	0.98	36.0000	35.28	_____
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Valor SX	oz	4.28	3.0000	12.84	_____
Storm	pt	11.58	1.5000	17.37	_____
Cadre	oz	3.10	4.0000	12.40	_____
Butyrac 200 (2,4-DB)	pt	3.49	2.0000	6.98	_____
Select Max	pt	10.87	1.0000	10.87	_____
INSECTICIDES					
Admire Pro	oz	1.33	9.0000	11.97	_____
Acephate 90%	lb	7.17	0.1375	0.99	_____
SEED/PLANTS					
Peanut Seed	lb	0.89	125.0000	111.25	_____
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	3.22	6.0000	19.32	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	_____
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
INOCULANT					
Optimize LIFT	oz	0.51	14.8000	7.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	1.6246	24.72	_____
Self-Propelled	hour	15.22	0.1983	3.04	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	15.18	1.4583	22.14	_____
DIESEL FUEL					
Tractors	gal	2.30	17.5722	40.41	_____
Self-Propelled	gal	2.30	1.7850	4.05	_____
REPAIR & MAINTENANCE					
Implements	acre	12.60	1.0000	12.60	_____
Tractors	acre	10.70	1.0000	10.70	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	7.05	1.0000	7.05	_____

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

TOTAL FIXED EXPENSES				137.21	_____

TOTAL SPECIFIED EXPENSES				644.49	_____

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

Table 47.B Summary of estimated costs and returns per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____

TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	73.72	1.0000	73.72	_____
HERBICIDES	acre	79.36	1.0000	79.36	_____
INSECTICIDES	acre	12.96	1.0000	12.96	_____
SEED/PLANTS	acre	111.25	1.0000	111.25	_____
ADJUVANTS	acre	19.32	1.0000	19.32	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
INOCULANT	acre	7.55	1.0000	7.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	15.22	1.8229	27.76	_____
UNALLOCATED LABOR	hour	15.18	1.4583	22.14	_____
DIESEL FUEL	gal	2.30	19.3573	44.46	_____
REPAIR & MAINTENANCE	acre	25.55	1.0000	25.55	_____
INTEREST ON OP. CAP.	acre	7.05	1.0000	7.05	_____

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

TOTAL SPECIFIED EXPENSES				644.49	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				115.51	_____

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

Table 47.C Estimated resource use for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Plt&Pre Rigid	8R-38	MFWD 190	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	4R-38	MFWD 190	0.186	1.00	Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep		0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
							---	---	---	---
TOTALS							1.82	1.62	2.04	1.45

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

Table 47.D Estimated costs for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

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

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

Table 47.E Estimated monthly income and expense flows per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.52	27.52	27.16	9.52
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	23.10	33.26	14.36	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.25	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.44	12.88	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	14.32	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.55	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.56	7.10	1.12	2.24	1.12	39.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.36	4.81	0.72	1.44	0.72	36.41
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.59	0.40	0.80	0.40	20.16
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.73	3.72	0.90	0.75	0.25	0.70
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	28.14	174.08	52.36	59.99	29.65	163.06
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-174.08	-52.36	-59.99	-29.65	596.94
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-202.22	-254.58	-314.57	-344.22	252.72

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 47.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.95	ton	-193	-174	-155	-136	-117	-98	-79	-60	-41	-22	-3
			-331	-312	-293	-274	-255	-236	-217	-198	-179	-160	-141
60	1.14	ton	-142	-119	-96	-74	-51	-28	-5	17	39	62	85
			-279	-256	-234	-211	-188	-165	-142	-120	-97	-74	-51
70	1.33	ton	-91	-64	-38	-11	15	41	68	94	121	148	174
			-228	-201	-175	-148	-122	-95	-68	-42	-15	10	37
80	1.52	ton	-39	-9	20	51	81	112	142	172	203	233	264
			-177	-146	-116	-85	-55	-25	5	35	66	96	126
90	1.71	ton	11	45	79	113	148	182	216	250	284	319	353
			-125	-91	-57	-23	10	45	79	113	147	181	216
100	1.90	ton	62	100	138	176	214	252	290	328	366	404	442
			-74	-36	1	39	77	115	153	191	229	267	305
110	2.09	ton	114	155	197	239	281	323	364	406	448	490	532
			-23	18	60	102	144	185	227	269	311	353	394
120	2.28	ton	165	210	256	302	347	393	438	484	530	575	621
			28	73	119	164	210	256	301	347	392	438	484
130	2.47	ton	216	266	315	364	414	463	513	562	611	661	710
			79	128	178	227	277	326	375	425	474	524	573
140	2.66	ton	268	321	374	427	480	534	587	640	693	746	800
			130	184	237	290	343	396	450	503	556	609	662
150	2.85	ton	319	376	433	490	547	604	661	718	775	832	889
			182	239	296	353	410	467	524	581	638	695	752

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

Table 48.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.35	5.5000	34.92	_____
Abound	oz	0.98	36.0000	35.28	_____
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Valor SX	oz	4.28	3.0000	12.84	_____
Storm	pt	11.58	1.5000	17.37	_____
Cadre	oz	3.10	4.0000	12.40	_____
Butyrac 200 (2,4-DB)	pt	3.49	2.0000	6.98	_____
Select Max	pt	10.87	1.0000	10.87	_____
INSECTICIDES					
Admire Pro	oz	1.33	9.0000	11.97	_____
Acephate 90%	lb	7.17	0.1375	0.99	_____
SEED/PLANTS					
Peanut Seed	lb	0.89	125.0000	111.25	_____
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	3.22	6.0000	19.32	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	_____
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
INOCULANT					
Optimize LIFT	oz	0.51	29.6000	15.10	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	1.6246	24.72	_____
Self-Propelled	hour	15.22	0.1983	3.04	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	15.18	1.4583	22.14	_____
DIESEL FUEL					
Tractors	gal	2.30	17.5722	40.41	_____
Self-Propelled	gal	2.30	1.7850	4.05	_____
REPAIR & MAINTENANCE					
Implements	acre	15.67	1.0000	15.67	_____
Tractors	acre	10.70	1.0000	10.70	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	7.27	1.0000	7.27	_____

TOTAL DIRECT EXPENSES				518.12	_____
FIXED EXPENSES					
Implements	acre	54.37	1.0000	54.37	_____
Tractors	acre	72.84	1.0000	72.84	_____
Self-Propelled	acre	16.20	1.0000	16.20	_____

TOTAL FIXED EXPENSES				143.41	_____

TOTAL SPECIFIED EXPENSES				661.53	_____

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

Table 48.B Summary of estimated costs and returns per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____
TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	73.72	1.0000	73.72	_____
HERBICIDES	acre	79.36	1.0000	79.36	_____
INSECTICIDES	acre	12.96	1.0000	12.96	_____
SEED/PLANTS	acre	111.25	1.0000	111.25	_____
ADJUVANTS	acre	19.32	1.0000	19.32	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
INOCULANT	acre	15.10	1.0000	15.10	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	15.22	1.8229	27.76	_____
UNALLOCATED LABOR	hour	15.18	1.4583	22.14	_____
DIESEL FUEL	gal	2.30	19.3573	44.46	_____
REPAIR & MAINTENANCE	acre	28.62	1.0000	28.62	_____
INTEREST ON OP. CAP.	acre	7.27	1.0000	7.27	_____
TOTAL DIRECT EXPENSES				518.12	_____
RETURNS ABOVE DIRECT EXPENSES				241.88	_____
TOTAL FIXED EXPENSES				143.41	_____
TOTAL SPECIFIED EXPENSES				661.53	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				98.47	_____

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

Table 48.C Estimated resource use for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Rigid	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Ptlt&PreTwin	8R-30/40	MFWD 190	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					29.6000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	4R-38	MFWD 190	0.186	1.00	Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep		0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
							---	---	---	---
TOTALS							1.82	1.62	2.04	1.45

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

Table 48.D Estimated costs for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

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

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

Table 48.E Estimated monthly income and expense flows per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.52	27.52	27.16	9.52
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	23.10	33.26	14.36	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.25	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.44	12.88	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	14.32	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.10	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.56	7.10	1.12	2.24	1.12	39.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.36	4.81	0.72	1.44	0.72	36.41
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	6.66	0.40	0.80	0.40	20.16
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.73	3.94	0.90	0.75	0.25	0.70
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	28.14	184.92	52.36	59.99	29.65	163.06
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-184.92	-52.36	-59.99	-29.65	596.94
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-213.06	-265.42	-325.41	-355.06	241.88

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 48.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.95	ton	-204	-185	-166	-147	-128	-109	-90	-71	-52	-33	-14
			-348	-329	-310	-291	-272	-253	-234	-215	-196	-177	-158
60	1.14	ton	-153	-130	-107	-85	-62	-39	-16	6	28	51	74
			-296	-274	-251	-228	-205	-182	-160	-137	-114	-91	-68
70	1.33	ton	-102	-75	-48	-22	4	30	57	84	110	137	163
			-245	-218	-192	-165	-139	-112	-85	-59	-32	-6	20
80	1.52	ton	-50	-20	10	40	70	101	131	162	192	222	253
			-194	-163	-133	-102	-72	-42	-11	18	49	79	109
90	1.71	ton	0	34	68	103	137	171	205	239	274	308	342
			-142	-108	-74	-40	-6	28	62	96	130	164	199
100	1.90	ton	51	89	127	165	203	241	279	317	355	393	431
			-91	-53	-15	22	60	98	136	174	212	250	288
110	2.09	ton	103	145	186	228	270	312	354	395	437	479	521
			-40	1	43	85	126	168	210	252	294	335	377
120	2.28	ton	154	200	245	291	336	382	428	473	519	564	610
			11	56	102	147	193	239	284	330	375	421	467
130	2.47	ton	205	255	304	354	403	452	502	551	601	650	699
			62	111	161	210	260	309	358	408	457	507	556
140	2.66	ton	257	310	363	416	469	523	576	629	682	735	789
			113	166	220	273	326	379	432	486	539	592	645
150	2.85	ton	308	365	422	479	536	593	650	707	764	821	878
			165	222	279	336	393	450	507	564	621	678	735

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

Table 49.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.35	5.5000	34.92	_____
Abound	oz	0.98	36.0000	35.28	_____
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Valor SX	oz	4.28	3.0000	12.84	_____
Storm	pt	11.58	1.5000	17.37	_____
Cadre	oz	3.10	4.0000	12.40	_____
Butyrac 200 (2,4-DB)	pt	3.49	2.0000	6.98	_____
Select Max	pt	10.87	1.0000	10.87	_____
INSECTICIDES					
Admire Pro	oz	1.33	9.0000	11.97	_____
Acephate 90%	lb	7.17	0.1375	0.99	_____
SEED/PLANTS					
Peanut Seed	lb	0.89	125.0000	111.25	_____
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	3.22	6.0000	19.32	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	_____
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
INOCULANT					
Optimize LIFT	oz	0.51	14.8000	7.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	1.1856	18.04	_____
Self-Propelled	hour	15.22	0.1983	3.04	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	15.16	1.1072	16.79	_____
DIESEL FUEL					
Tractors	gal	2.30	12.8051	29.45	_____
Self-Propelled	gal	2.30	1.7850	4.05	_____
REPAIR & MAINTENANCE					
Implements	acre	9.78	1.0000	9.78	_____
Tractors	acre	7.79	1.0000	7.79	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	6.87	1.0000	6.87	_____

TOTAL DIRECT EXPENSES				478.02	_____
FIXED EXPENSES					
Implements	acre	39.67	1.0000	39.67	_____
Tractors	acre	53.08	1.0000	53.08	_____
Self-Propelled	acre	16.20	1.0000	16.20	_____

TOTAL FIXED EXPENSES				108.95	_____

TOTAL SPECIFIED EXPENSES				586.97	_____

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

Table 49.B Summary of estimated costs and returns per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	_____
TOTAL INCOME				760.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	73.72	1.0000	73.72	_____
HERBICIDES	acre	79.36	1.0000	79.36	_____
INSECTICIDES	acre	12.96	1.0000	12.96	_____
SEED/PLANTS	acre	111.25	1.0000	111.25	_____
ADJUVANTS	acre	19.32	1.0000	19.32	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
INOCULANT	acre	7.55	1.0000	7.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	15.22	1.3840	21.08	_____
UNALLOCATED LABOR	hour	15.16	1.1072	16.79	_____
DIESEL FUEL	gal	2.30	14.5901	33.50	_____
REPAIR & MAINTENANCE	acre	19.82	1.0000	19.82	_____
INTEREST ON OP. CAP.	acre	6.87	1.0000	6.87	_____
TOTAL DIRECT EXPENSES				478.02	_____
RETURNS ABOVE DIRECT EXPENSES				281.98	_____
TOTAL FIXED EXPENSES				108.95	_____
TOTAL SPECIFIED EXPENSES				586.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				173.03	_____

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

Table 49.C Estimated resource use for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 190	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.38	1.18	1.56	1.10

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

Table 49.D Estimated costs for field operations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

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

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

Table 49.E Estimated monthly income and expense flows per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.52	27.52	27.16	9.52
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	23.10	33.26	14.36	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.25	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.44	12.88	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	14.32	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.55	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.56	4.89	1.12	2.24	1.12	29.57
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.36	3.49	0.72	1.44	0.72	26.77
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.89	0.40	0.80	0.40	14.13
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.73	3.65	0.90	0.75	0.25	0.59
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	28.14	170.78	52.36	59.99	29.65	137.10
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-170.78	-52.36	-59.99	-29.65	622.90
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-28.14	-198.92	-251.28	-311.27	-340.92	281.98

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 49.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.95	ton	-164	-145	-126	-107	-88	-69	-50	-31	-12	6	25
			-273	-254	-235	-216	-197	-178	-159	-140	-121	-102	-83
60	1.14	ton	-113	-90	-67	-44	-22	0	23	46	69	91	114
			-222	-199	-176	-153	-131	-108	-85	-62	-39	-17	5
70	1.33	ton	-61	-35	-8	17	44	71	97	124	150	177	204
			-170	-144	-117	-91	-64	-37	-11	15	41	68	95
80	1.52	ton	-10	19	50	80	110	141	171	202	232	262	293
			-119	-89	-58	-28	1	32	62	93	123	153	184
90	1.71	ton	40	74	109	143	177	211	245	280	314	348	382
			-68	-34	0	34	68	102	136	171	205	239	273
100	1.90	ton	91	129	167	205	243	281	319	357	395	433	471
			-16	21	59	97	135	173	211	249	287	325	363
110	2.09	ton	143	185	226	268	310	352	394	435	477	519	561
			34	76	117	159	201	243	285	326	368	410	452
120	2.28	ton	194	240	285	331	377	422	468	513	559	605	650
			85	131	176	222	268	313	359	404	450	496	541
130	2.47	ton	245	295	344	394	443	492	542	591	641	690	739
			136	186	235	285	334	383	433	482	532	581	630
140	2.66	ton	297	350	403	456	510	563	616	669	722	776	829
			188	241	294	347	401	454	507	560	613	667	720
150	2.85	ton	348	405	462	519	576	633	690	747	804	861	918
			239	296	353	410	467	524	581	638	695	752	809

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

Table 50.A Estimated costs per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.35	5.5000	34.92	_____
Abound	oz	0.98	36.0000	35.28	_____
Tebuconazole 3.6	oz	0.49	7.2000	3.53	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.16	4.0000	8.64	_____
Dual Magnum	pt	10.26	1.0000	10.26	_____
Valor SX	oz	4.28	3.0000	12.84	_____
Storm	pt	11.58	1.5000	17.37	_____
Cadre	oz	3.10	4.0000	12.40	_____
Butyrac 200 (2,4-DB)	pt	3.49	2.0000	6.98	_____
Select Max	pt	10.87	1.0000	10.87	_____
INSECTICIDES					
Admire Pro	oz	1.33	9.0000	11.97	_____
Acephate 90%	lb	7.17	0.1375	0.99	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Peanut Seed	lb	0.89	125.0000	111.25	_____
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	3.22	6.0000	19.32	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.8700	33.66	_____
DRYING					
Dry Peanuts	ton	24.00	1.3200	31.68	_____
CUSTOM LIME					
Lime (Spread)	ton	43.00	0.3330	14.32	_____
INOCULANT					
Optimize LIFT	oz	0.51	14.8000	7.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	1.2642	19.24	_____
Self-Propelled	hour	15.22	0.1983	3.04	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	15.16	1.1072	16.79	_____
DIESEL FUEL					
Tractors	gal	2.30	13.5313	31.12	_____
Self-Propelled	gal	2.30	1.7850	4.05	_____
Irrigate Peanuts	gal	2.30	9.7755	22.48	_____
REPAIR & MAINTENANCE					
Implements	acre	9.98	1.0000	9.98	_____
Tractors	acre	8.21	1.0000	8.21	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
Irrigate Peanuts	acre	6.88	1.0000	6.88	_____
INTEREST ON OP. CAP.	acre	7.68	1.0000	7.68	_____

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

TOTAL FIXED EXPENSES				173.94	_____

TOTAL SPECIFIED EXPENSES				705.89	_____

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

Table 50.B Summary of estimated costs and returns per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	2.2000	880.00	_____
TOTAL INCOME				880.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	73.72	1.0000	73.72	_____
HERBICIDES	acre	79.36	1.0000	79.36	_____
INSECTICIDES	acre	12.96	1.0000	12.96	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	111.25	1.0000	111.25	_____
ADJUVANTS	acre	19.32	1.0000	19.32	_____
CLEANING	acre	33.66	1.0000	33.66	_____
DRYING	acre	31.68	1.0000	31.68	_____
CUSTOM LIME	acre	14.32	1.0000	14.32	_____
INOCULANT	acre	7.55	1.0000	7.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	15.22	1.4625	22.28	_____
UNALLOCATED LABOR	hour	15.16	1.1072	16.79	_____
DIESEL FUEL	gal	2.30	25.0919	57.65	_____
REPAIR & MAINTENANCE	acre	27.32	1.0000	27.32	_____
INTEREST ON OP. CAP.	acre	7.68	1.0000	7.68	_____
TOTAL DIRECT EXPENSES				531.95	_____
RETURNS ABOVE DIRECT EXPENSES				348.05	_____
TOTAL FIXED EXPENSES				173.94	_____
TOTAL SPECIFIED EXPENSES				705.89	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				174.11	_____

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

Table 50.C Estimated resource use for field operations, per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 190	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	oz					18.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.3200				
Cleaning Peanuts	ton					1.8700				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
Irrigate Peanuts	acre				Jan	1.0000	0.07	0.07	0.46	
TOTALS							1.46	1.26	2.02	1.10

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

Table 50.D Estimated costs for field operations, per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2020

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

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

Table 50.E Estimated monthly income and expense flows per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	dollars											
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	880.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.52	27.52	27.16	9.52
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.64	23.10	33.26	14.36	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.96	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	111.25	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.44	12.88	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.66
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.68
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	14.32	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.55	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.58	0.00	0.00	0.00	0.00	0.00	0.79	7.26	1.35	2.70	1.98	29.57
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.85	0.00	0.00	0.00	0.00	0.00	0.36	3.93	6.34	12.68	6.72	26.77
REPAIR & MAINTENANCE	0.30	0.00	0.00	0.00	0.00	0.00	0.20	7.02	1.38	2.76	1.53	14.13
INTEREST ON OP. CAP.	0.09	0.00	0.00	0.00	0.00	0.00	0.74	3.95	1.02	0.93	0.32	0.63
TOTAL DIRECT EXPENSES	1.82	0.00	0.00	0.00	0.00	0.00	28.38	184.94	59.31	73.83	37.71	145.96
NET INCOME	-1.82	0.00	0.00	0.00	0.00	0.00	-28.38	-184.94	-59.31	-73.83	-37.71	734.04
NET INCOME TO DATE	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-30.20	-215.14	-274.45	-348.28	-385.99	348.05

Note: Cost of production estimates are based on 2019 input prices.
Fertilizer recommendations are based on the nutrients that the peanut crop removes.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.
60% of all peanuts harvested need drying.
85% of all peanuts harvested need cleaning.
* Lease costs are based on hourly usage costs.

Table 50.F Estimated returns for various price/yield combinations, per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	1.10	ton	-169	-147	-125	-103	-81	-59	-37	-15	6	28	50
			-343	-321	-299	-277	-255	-233	-211	-189	-167	-145	-123
60	1.32	ton	-109	-83	-56	-30	-4	22	48	75	101	127	154
			-283	-257	-230	-204	-178	-151	-125	-98	-72	-46	-19
70	1.54	ton	-50	-19	11	42	72	103	134	165	196	226	257
			-224	-193	-162	-131	-101	-70	-39	-8	22	52	83
80	1.76	ton	9	44	79	114	149	185	220	255	290	325	361
			-164	-129	-94	-59	-23	11	46	81	116	152	187
90	1.98	ton	68	108	147	187	227	266	306	345	385	425	464
			-105	-65	-26	13	53	92	132	171	211	251	290
100	2.20	ton	128	172	216	260	304	348	392	436	480	524	568
			-45	-1	42	86	130	174	218	262	306	350	394
110	2.42	ton	187	235	284	332	381	429	477	526	574	623	671
			13	61	110	158	207	255	303	352	400	449	497
120	2.64	ton	246	299	352	405	458	510	563	616	669	722	774
			72	125	178	231	284	336	389	442	495	548	600
130	2.86	ton	306	363	420	477	535	592	649	706	763	821	878
			132	189	246	304	361	418	475	532	590	647	704
140	3.08	ton	365	427	488	550	612	673	735	796	858	920	981
			191	253	315	376	438	499	561	623	684	746	807
150	3.30	ton	425	491	557	623	689	755	821	887	953	1019	1085
			251	317	383	449	515	581	647	713	779	845	911

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

APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2020

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	----------$/hour----------					
Combine (250-299 hp)	265 hp	352,000	300	8	13.64	15.22	31.37	36.66	83.25	155.57	238.83
Combine (300-349 hp)	325 hp	383,000	300	8	16.73	15.22	38.47	39.89	93.59	169.27	262.87
Combine (350-399 hp)	355 hp	395,000	300	8	18.27	15.22	42.02	41.14	98.38	174.58	272.96
Combine (400-449 hp)	425 hp	425,000	300	8	21.87	15.22	50.31	44.27	109.80	187.84	297.64
Combine (450-499hp)	475 hp	455,000	300	8	24.44	15.22	56.23	47.39	118.84	201.09	319.94
Tractor(20-39hp)CB	MFWD 30	30,000	600	8	1.54	15.22	3.55	0.93	19.70	6.12	25.83
Tractor(20-39hp)RB	MFWD 30	20,800	600	8	1.54	15.22	3.55	0.65	19.42	4.24	23.67
Tractor(40-59hp)CB	2WD 50	30,400	600	8	2.57	15.22	5.91	0.95	22.08	6.21	28.29
Tractor(40-59hp)CB	MFWD 50	40,300	600	8	2.57	15.22	5.91	1.25	22.39	8.23	30.63
Tractor(40-59hp)RB	2WD 50	21,600	600	8	2.57	15.22	5.91	0.67	21.81	4.41	26.22
Tractor(40-59hp)RB	MFWD 50	27,500	600	8	2.57	15.22	5.91	0.85	21.99	5.61	27.61
Tractor(60-89hp)CB	2WD 75	50,200	600	8	3.86	15.22	8.87	1.56	25.66	10.25	35.92
Tractor(60-89hp)CB	MFWD 75	56,800	600	8	3.86	15.22	8.87	1.77	25.87	11.60	37.47
Tractor(60-89hp)RB	2WD 75	35,800	600	8	3.86	15.22	8.87	1.11	25.21	7.31	32.53
Tractor(60-89hp)RB	MFWD 75	42,000	600	8	3.86	15.22	8.87	1.31	25.41	8.58	33.99
Tractor(90-119hp)CB	2WD 105	69,300	600	8	5.40	15.22	12.43	2.16	29.81	14.15	43.97
Tractor(90-119hp)CB	MFWD 105	88,100	600	8	5.40	15.22	12.43	2.75	30.40	17.99	48.40
Tractor(90-119hp)RB	2WD 105	62,300	600	8	5.40	15.22	12.43	1.94	29.59	12.72	42.32
Tractor(90-119hp)RB	MFWD 105	69,700	600	8	5.40	15.22	12.43	2.17	29.82	14.23	44.06
Tractor(120-139hp)CB	2WD 130	110,000	600	8	6.69	15.22	15.39	3.43	34.04	22.47	56.52
Tractor(120-139hp)CB	MFWD 130	125,000	600	8	6.69	15.22	15.39	3.90	34.51	25.53	60.05
Tractor(140-159hp)	2WD 150	108,000	600	8	7.72	15.22	17.75	3.37	36.35	22.06	58.41
Tractor(140-159hp)CB	MFWD 150	140,000	600	8	7.72	15.22	17.75	4.37	37.35	28.60	65.95
Tractor(160-179hp)CB	MFWD 170	155,000	600	8	8.75	15.22	20.12	4.84	40.18	32.95	73.14
Tractor(180-199hp)CB	MFWD 190	189,000	600	8	9.77	15.22	22.49	5.90	43.61	40.18	83.80
Tractor(200-249hp)CB	MFWD 225	227,000	600	8	11.58	15.22	26.63	7.09	48.95	48.27	97.22
Tractor(250-349hp)CB	4WD 300	298,000	600	8	15.44	15.22	35.51	9.31	60.04	63.36	123.41
Tractor(250-349hp)CB	MFWD 300	301,000	600	8	15.44	15.22	35.51	9.40	60.14	64.00	124.14
Tractor(250-349hp)CB	Track 300	327,000	600	8	15.44	15.22	35.51	10.21	60.95	69.53	130.48
Tractor(350-449hp)	Track 400	426,000	600	8	20.58	15.22	47.35	13.31	75.88	90.58	166.47
Tractor(350-449hp)CB	4WD 400	342,000	600	8	20.58	15.22	47.35	10.68	73.26	72.72	145.98
Tractor(450-550hp)CB	4WD 500	412,000	600	8	25.73	15.22	59.19	12.87	87.28	87.60	174.89
Tractor(450-550hp)CB	Track 500	466,000	600	8	25.73	15.22	59.19	14.56	88.97	99.09	188.06
Utility Vehicle	800 CC	12,200	200	8	0.70	15.22	1.54	1.90	18.66	8.08	26.75
Utility Vehicle	900 CC	15,800	200	8	1.00	15.22	2.20	2.46	19.88	10.47	30.36

Notes:
Labor: Includes allocated labor from power unit.
Total Direct: Does not include interest on operating capital.

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate,and direct and fixed cost per acre, Mississippi, 2020

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

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

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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	----------$/acre----------							
Bed-Rip/Disk Fold.	8R-38	MFWD 190	48,700	300	20	0.073	1.11	1.64	0.17	0.43	3.36	0.96	2.93	7.26
Bed-Rip/Disk Fold.	12R-30	MFWD 225	67,900	300	20	0.061	0.93	1.64	0.20	0.43	3.22	1.13	2.97	7.32
Bed-Rip/Disk Fold.	12R-38	MFWD 225	67,900	300	20	0.046	0.70	1.23	0.15	0.32	2.41	0.84	2.23	5.49
Bed-Rip/Disk Rigid	4R-30	MFWD 190	21,400	300	20	0.184	2.81	4.15	0.19	1.09	8.26	1.06	7.42	16.76
Bed-Rip/Disk Rigid	4R-38	MFWD 190	21,400	300	20	0.146	2.23	3.30	0.15	0.86	6.55	0.84	5.89	13.30
Bed-Rip/Disk Rigid	6R-30	MFWD 190	29,800	300	20	0.123	1.87	2.77	0.18	0.72	5.55	0.99	4.95	11.50
Bed-Rip/Disk Rigid	6R-38	MFWD 190	39,800	300	20	0.097	1.48	2.18	0.19	0.57	4.43	1.04	3.91	9.39
Bed-Rip/Disk Rigid	8R-30	MFWD 190	39,800	300	20	0.139	2.11	3.12	0.27	0.82	6.33	1.49	5.58	13.42
Bed-Rip/Disk Rigid	8R-38	MFWD 190	29,800	300	20	0.073	1.11	1.64	0.10	0.43	3.29	0.58	2.93	6.82
Bed-Subsoil Fold	8R-38	MFWD 225	48,700	150	12	0.080	1.22	2.15	1.42	0.57	5.37	2.71	3.89	11.98
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	67,900	150	12	0.053	0.81	1.43	1.31	0.38	3.95	2.51	2.59	9.06
Bed-Subsoil Fold	12R-38	MFWD 225	67,900	150	12	0.053	0.81	1.43	1.31	0.38	3.95	2.51	2.59	9.06
Bed-Subsoil Rigid	4R-30	MFWD 225	21,400	150	12	0.204	3.10	5.44	1.57	1.44	11.58	3.01	9.86	24.45
Bed-Subsoil Rigid	4R-38	MFWD 225	21,400	150	12	0.160	2.44	4.28	1.24	1.14	9.11	2.37	7.76	19.25
Bed-Subsoil Rigid	6R-30	MFWD 225	29,800	150	12	0.136	2.07	3.62	1.46	0.96	8.13	2.79	6.57	17.50
Bed-Subsoil Rigid	6R-38	MFWD 225	29,800	150	12	0.107	1.63	2.86	1.15	0.76	6.42	2.20	5.19	13.82
Bed-Subsoil Rigid	8R-30	MFWD 225	39,800	150	12	0.102	1.55	2.72	1.46	0.72	6.46	2.80	4.93	14.20
Bed-Subsoil Rigid	8R-38	MFWD 225	39,800	150	12	0.080	1.22	2.15	1.16	0.57	5.11	2.21	3.89	11.22
Bed/Disk (Hipper)	4R-38	MFWD 150	9,200	160	10	0.147	2.24	2.62	0.33	0.64	5.85	0.97	4.22	11.05
Bed/Disk (Hipper)	6R-38	MFWD 170	15,200	160	10	0.098	1.50	1.98	0.37	0.47	4.34	1.07	3.25	8.67
Bed/Disk (Hipper)	8R-30	MFWD 190	19,500	160	10	0.093	1.42	2.10	0.45	0.55	4.54	1.31	3.76	9.62
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	37,400	160	10	0.049	0.75	1.10	0.46	0.29	2.61	1.32	1.98	5.92
Bed/Disk (Hipper)	12R-30	MFWD 225	34,500	160	10	0.062	0.95	1.66	0.53	0.44	3.59	1.54	3.01	8.16
Bed/Disk (Hipper)	12R-38	MFWD 225	37,400	160	10	0.049	0.75	1.31	0.46	0.35	2.87	1.32	2.38	6.58
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	27,200	160	10	0.074	1.12	1.66	0.50	0.43	3.73	1.44	2.97	8.16
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	21,000	160	10	0.074	1.12	1.66	0.38	0.43	3.62	1.11	2.97	7.71
Bed/Lister-Roll-Fo	8R-38	MFWD 190	24,300	160	10	0.095	1.45	2.15	0.58	0.56	4.76	1.67	3.85	10.29
Bed/Lister-Roll-Fo	12R-30	MFWD 225	36,175	160	10	0.080	1.23	2.15	0.73	0.57	4.69	2.10	3.90	10.69
Bed/Lister-Roll-Fo	12R-38	MFWD 225	35,700	160	10	0.063	0.97	1.70	0.56	0.45	3.69	1.63	3.08	8.41
Bed/Lister-Roll-Fo	16R-30	MFWD 225	40,400	160	10	0.060	0.92	1.61	0.61	0.43	3.58	1.76	2.92	8.27
Bed/Lister-Roll-Ri	8R-38	MFWD 190	24,300	160	10	0.095	1.45	2.15	0.58	0.56	4.76	1.67	3.85	10.29
Blade-Box	6'-7'	MFWD 105	1,620	200	20	0.020	0.30	0.24	0.01	0.04	0.61	0.01	0.28	0.91
Blade-Box	8'-10'	MFWD 105	3,830	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'-7'	MFWD 105	1,330	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	8'-10'	MFWD 105	4,100	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-38(250)	MFWD 190	30,500	200	10	0.257	3.92	5.79	1.96	1.52	13.20	4.37	10.36	27.94
Boll Buggy	4R-38(350)	MFWD 190	30,500	200	10	0.257	3.92	5.79	1.96	1.52	13.20	4.37	10.36	27.94
Boll Buggy	4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.62	3.87	1.31	1.01	8.82	2.92	6.92	18.67
Boll Buggy	6R-30(355)	MFWD 190	30,500	200	10	0.218	3.32	4.90	1.66	1.28	11.18	3.70	8.77	23.65
Boll Buggy	6R-38(355)	MFWD 190	30,500	200	10	0.172	2.62	3.87	1.31	1.01	8.82	2.92	6.92	18.67
Chisel Plow-Folding	24'	MFWD 190	42,200	150	12	0.076	1.16	1.71	1.16	0.45	4.49	2.22	3.07	9.79
Chisel Plow-Folding	32'	MFWD 225	54,200	150	12	0.057	0.87	1.53	1.13	0.40	3.95	2.15	2.78	8.90
Chisel Plow-Folding	42'	MFWD 225	65,100	150	12	0.044	0.66	1.17	1.03	0.31	3.18	1.97	2.12	7.28
Chisel Plow-Folding	50'	MFWD 225	85,200	150	12	0.036	0.56	0.98	1.13	0.26	2.94	2.17	1.78	6.90
Chisel Plow-Folding	61'	MFWD 225	97,700	150	12	0.030	0.46	0.80	1.06	0.21	2.55	2.04	1.46	6.05
Chisel Plow-Rigid	10'	MFWD 170	7,790	150	12	0.184	2.81	3.72	0.52	0.89	7.94	0.99	6.09	15.03
Chisel Plow-Rigid	15'	2WD 130	14,700	150	12	0.123	1.87	1.89	0.65	0.42	4.85	1.24	2.76	8.86
Chisel Plow-Rigid	20'	MFWD 225	12,000	150	12	0.102	1.56	2.73	0.44	0.72	5.47	0.84	4.95	11.28
Cultivate	4R-30	2WD 105	14,600	150	10	0.206	3.13	2.56	0.80	0.44	6.95	2.30	2.92	12.18
Cultivate	4R-38	2WD 105	14,200	150	10	0.162	2.47	2.01	0.61	0.31	5.42	1.76	2.06	9.25
Cultivate	6R-30	MFWD 150	18,500	150	10	0.137	2.09	2.44	0.67	0.60	5.81	1.94	3.93	11.69
Cultivate	6R-38	MFWD 150	19,300	150	10	0.108	1.65	1.92	0.55	0.47	4.61	1.60	3.10	9.32
Cultivate	8R-30	MFWD 190	24,200	150	10	0.103	1.56	2.31	0.66	0.60	5.16	1.91	4.14	11.22
Cultivate	8R-38	MFWD 190	27,300	150	10	0.073	1.12	1.65	0.53	0.43	3.74	1.54	2.96	8.25
Cultivate	8R-38 2x1	MFWD 190	39,300	150	10	0.054	0.82	1.22	0.56	0.32	2.93	1.63	2.18	6.75
Cultivate	12R-30	MFWD 225	45,600	150	10	0.068	1.04	1.83	0.83	0.48	4.20	2.40	3.31	9.92
Cultivate	12R-38	MFWD 225	44,600	150	10	0.054	0.82	1.44	0.64	0.38	3.30	1.85	2.62	7.77
Cultivate	16R-30	MFWD 225	58,400	150	10	0.051	0.78	1.37	0.80	0.36	3.32	2.30	2.48	8.12
Cultivate & Post	4R-30	2WD 105	21,900	150	10	0.220	4.34	2.73	1.28	0.42	8.79	3.69	2.80	15.28
Cultivate & Post	4R-38	2WD 105	21,600	150	10	0.173	3.42	2.15	0.99	0.33	6.90	2.86	2.20	11.98
Cultivate & Post	6R-30	MFWD 150	25,900	150	10	0.146	2.89	2.60	1.01	0.64	7.15	2.91	4.19	14.26
Cultivate & Post	6R-38	MFWD 150	26,600	150	10	0.115	2.28	2.05	0.82	0.50	5.67	2.36	3.31	11.34
Cultivate & Post	8R-30	MFWD 190	31,500	150	10	0.110	2.17	2.47	0.92	0.64	6.22	2.65	4.42	13.29
Cultivate & Post	8R-38	MFWD 190	34,700	150	10	0.086	1.71	1.95	0.80	0.51	4.99	2.31	3.49	10.79
Cultivate & Post	8R-38 2x1	MFWD 190	47,900	150	10	0.057	1.14	1.30	0.73	0.34	3.52	2.12	2.32	7.97
Cultivate & Post	12R-30	MFWD 225	52,900	150	10	0.073	1.44	1.95	1.03	0.52	4.95	2.97	3.53	11.46
Cultivate & Post	12R-38	MFWD 225	53,200	150	10	0.057	1.14	1.54	0.82	0.41	3.91	2.36	2.79	9.07
Cultivate & Post	16R-30	MFWD 225	61,700	150	10	0.055	1.08	1.46	0.90	0.39	3.84	2.60	2.65	9.10
Disk & Incorporate	14'	2WD 130	33,200	200	10	0.149	2.95	2.30	1.49	0.51	7.26	2.85	3.36	13.48
Disk & Incorporate	20'	MFWD 190	75,700	200	10	0.092	1.40	2.07	2.09	0.54	6.13	4.02	3.71	13.86
Disk & Incorporate	24'	MFWD 190	51,800	200	10	0.087	1.72	1.96	1.35	0.51	5.56	2.59	3.50	11.66
Disk & Incorporate	28'	MFWD 225	61,200	200	10	0.074	1.47	1.99	1.37	0.53	5.37	2.63	3.61	11.62
Disk & Incorporate	32'	MFWD 225	66,900	200	10	0.065	1.29	1.74	1.31	0.46	4.81	2.51	3.16	10.49
Disk Harrow	14'	2WD 130	25,900	180	10	0.140	2.13	2.15	1.00	0.48	5.78	2.32	3.15	11.26
Disk Harrow	20'	MFWD 190	45,000	180	10	0.098	1.49	2.20	1.22	0.58	5.51	2.82	3.94	12.28
Disk Harrow	24'	MFWD 190	44,400	180	10	0.081	1.24	1.84	1.00	0.48	4.57	2.32	3.28	10.19
Disk Harrow	28'	MFWD 225	53,800	180	10	0.070	1.06	1.86	1.04	0.49	4.48	2.41	3.38	10.27
Disk Harrow	32'	MFWD 225	59,500	180	10	0.061	0.93	1.63	1.01	0.43	4.01	2.33	2.96	9.31

(continued)

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

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

(continued)

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

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

(continued)

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

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

(continued)

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

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

Notes:
Labor: Includes labor from Power unit plus additional labor from the implement.
Total Direct: Does not include interest on operating capital.

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

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

(continued)

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

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Accent Q	oz	17.67	Halomax	oz	19.90
Acuron	oz	2.22	Harmony Extra SG	oz	13.81
Aim	oz	5.68	Helmet	oz	4.15
Anthem Flex	oz	2.67	Hero	pt	25.77
Anthem Maxx	oz	4.90	Huskie	oz	0.84
Armezon Pro	oz	1.16	Impact	oz	1.24
Atrazine 4L	pt	2.09	Intimidator	oz	0.59
Atrazine 90DF	lb	7.52	Leadoff	oz	5.15
Authority First	oz	4.50	League	oz	4.51
Authority Elite	pt	14.03	Lexar	pt	7.67
Authority Maxx	lb	49.72	Liberty 280	oz	0.49
Authority MTZ	lb	32.08	Loyant	oz	2.21
Avatar	pt	7.87	Makaze	oz	0.14
Avenger	pt	9.89	Metolachlor	pt	4.87
Axial XL	oz	1.21	Metribuzin 4L	pt	9.30
Axiom	oz	1.84	Metribuzin 75	lb	18.75
Banvel	pt	15.04	MSMA	pt	3.97
Barrage	pt	5.43	Newpath	oz	3.73
Basagran	pt	5.43	Oberon	oz	3.75
Boundary	pt	8.84	Obey	oz	0.91
Brake	oz	1.72	Osprey	oz	3.24
Broadaxe	pt	16.41	Outlook	pt	16.38
Broadhead	lb	58.21	Panther Pro	oz	3.35
Bucaneer Plus	pt	2.37	Parallel	pt	4.64
Buctril	pt	4.28	Paraquat	oz	0.19
Butyrac 200 (2,4-DB)	pt	3.49	Parazone 3SL	oz	0.19
Cadre	oz	3.10	Permit	oz	21.22
Canopy	oz	2.13	Permit Plus	oz	20.60
Caparol	pt	4.59	PowerFlex	oz	6.71
Capreno	oz	4.75	Prefix	pt	5.69
Cinch	pt	16.06	Provisia	oz	0.83
Cinch ATZ	pt	5.20	Prowl 3.3 EC	pt	5.30
Clarity	pt	11.60	Python WDG	oz	15.10
Classic	oz	14.02	Quelex	oz	7.00
Clearpath	lb	57.57	RealmQ	oz	4.66
Clethomine 2E	oz	0.50	RebelEx	oz	2.68
Clincher SF	oz	2.32	Reflex	pt	5.87
Cobra	oz	1.71	Regiment	oz	42.66
Command 3ME	pt	16.09	Resicore	oz	0.55
Corvus	oz	6.65	Resource	oz	1.72
Cotoran	pt	5.85	RiceBeaux	pt	5.79
Cotton Pro	pt	3.75	Riceshot	pt	3.92
Declare	oz	1.64	Ricestar HT	pt	24.04
Dicamba	pt	5.66	Ringside	pt	4.17
Direx	pt	3.01	Roundup Power Max	oz	0.20
Diuron	pt	3.53	Roundup PowerMax	pt	3.20
Dual II Magnum	pt	12.63	Roundup PowerMax ii	oz	0.20
Dual Magnum	pt	10.26	Roundup Pro	pt	0.20
Duet	pt	5.39	Scepter 70 DG	oz	4.50
Endigo	oz	1.80	Select Max	pt	10.87
Engenia	oz	0.83	Sencor/Tricor.Metrib	oz	5.45
Envive	pt	0.53	Sequence	pt	5.16
Envoke	oz	106.65	Sharpen	oz	5.66
Facet L	pt	13.61	Sinister	pt	14.61
Fierce	oz	7.44	Sonic	oz	4.63
Fierce XLT	oz	6.66	Stalwart	pt	3.95
Finesse	oz	14.38	Stam 80 EDF	lb	9.32
Firestorm	pt	5.97	Stam M4	qt	7.91
First Rate	oz	40.12	Staple LX	oz	1.95
Flexstar	pt	9.11	Storm	pt	11.58
Flexstar GT	pt	4.44	Strada	oz	6.65
Fusilade DX	oz	1.06	Strada Pro	oz	6.86
Gambit	oz	16.96	Strada XT2	pt	3.20
Glyphosate 3lbs a.e	pt	2.16	Superwham	qt	9.27
Glyphosate 3lbs a.e	oz	0.14	Suprend	lb	10.14
Goal 2XL	pt	7.77	SureStart II	oz	0.67
Gramoxone SL 2.0	oz	0.17	Surveil	oz	0.72
Grandstand R	pt	18.26	Synchrony XP	oz	11.72
Grasp	oz	12.03	Tempest	oz	1.84
Grasp Xtra	oz	1.68	Touchdown Total	qt	1.31
Halex GT	pt	6.24			

(continued)

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

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

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

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

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

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	15.22
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06

CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)
Corn	90
Cotton	80
Grain Sorghum	90
Peanuts	80
Rice	90
Soybeans	90
Wheat	80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2020

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

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

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

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

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

[e] Price used in MSU Extension Service Planning Budgets.

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

Appendix Table 8. Estimated costs for field operations, per acre
Cotton irrigated with roll-out pipe
160-acre roll-out pipe system, 10.5 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Land Plane	50'x16'		0.85	0.30	0.58		0.01	1.74	1.76	3.50
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.34	0.75
Roll-Out Pipe	ft	7.92					0.17	8.09		8.09
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.10	0.42		0.02	0.79	0.88	1.67
IRRIGATE LABOR	hour				1.81		0.04	1.85		1.85
Apply Water										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.38	0.15	0.63		0.01	1.17	1.32	2.49
Land Forming ($450)	each								36.04	36.04
Well & Pump, Furrow	each			2.96			0.06	3.02	9.86	12.88
Main Line Pipe	each								5.45	5.45
Engine, RPF, 75	each								9.34	9.34
June Irrigation	ac-in		6.56	1.31			0.17	8.04		8.04
July Irrigation	ac-in		6.56	1.31			0.14	8.01		8.01
August Irrigation	ac-in		6.56	1.31			0.10	7.97		7.97
TOTALS		7.92	21.35	7.51	4.50	0.00	0.75	42.03	64.99	107.02

Note: Cost of production estimates are based on 2019 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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Maintenance										
IRRIGATE LABOR	hour				1.07		0.03	1.10		1.10
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Pivot, 1/4 CP	each			13.48			0.29	13.77	59.97	73.74
Well & Pump, 1/4 CP	each			3.50			0.08	3.58	11.69	15.27
Engine, 1/4 CP, 65	each								11.07	11.07
June Irr. 3app@.75"	ac-in		7.73	1.40			0.20	9.33		9.33
July Irr. 4app@.75"	ac-in		10.31	1.87			0.21	12.39		12.39
Aug Irr. 3app@.75"	ac-in		7.73	1.40			0.12	9.25		9.25
TOTALS		0.00	25.77	21.65	1.84	0.00	0.94	50.20	82.73	132.93

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

Appendix Table 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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Land Plane	50'x16'		0.85	0.30	0.58		0.09	1.82	1.76	3.58
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.34	0.75
Roll-Out Pipe	ft	7.92					0.14	8.06		8.06
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.10	0.42		0.01	0.78	0.88	1.66
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		0.38	0.15	0.63		0.01	1.17	1.32	2.49
Land Forming ($450)	each								36.04	36.04
Well & Pump, Furrow	each			2.96			0.05	3.01	9.86	12.87
Main Line Pipe	each								5.45	5.45
Engine, RPF, ESB	each								9.34	9.34
1st June Irrigation	ac-in		5.62	1.31			0.12	7.05		7.05
2nd June Irrigation	ac-in		5.62	1.31			0.12	7.05		7.05
July Irrigation	ac-in		5.62	1.31			0.09	7.02		7.02
TOTALS		7.92	18.53	7.51	4.50	0.00	0.68	39.14	64.99	104.13

Note: Cost of production estimates are based on 2019 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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.32	0.11	0.24		0.01	0.68	0.68	1.36
Survey & Mark Levees	acre	2.25					0.05	2.30		2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.43	0.13	0.33		0.02	0.91	0.91	1.82
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30		0.02	0.84	0.67	1.51
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	0.11	0.25		0.02	0.72	0.71	1.43
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.43	0.13	0.33		0.02	0.91	0.91	1.82
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30		0.01	0.83	0.67	1.50
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	0.11	0.25		0.01	0.71	0.71	1.42
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.43	0.13	0.33		0.01	0.90	0.91	1.81
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30		0.01	0.83	0.67	1.50
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	0.11	0.25		0.01	0.71	0.71	1.42
Tear Down Levees										
Levee Splitter (1/80	32"		0.25	0.08	0.19			0.52	0.53	1.05
Land Forming ($113)	each								9.05	9.05
Well & Pump, Flood	each			5.91			0.13	6.04	19.72	25.76
Engine, CF, 75	each								18.68	18.68
June Irrigation	ac-in		8.43	2.63			0.24	11.30		11.30
July Irrigation	ac-in		8.43	2.63			0.19	11.25		11.25
August Irrigation	ac-in		8.43	2.63			0.15	11.21		11.21
TOTALS		2.25	29.37	15.07	5.89	0.00	0.94	53.52	55.53	109.05

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

Appendix Table 12. Estimated costs for field operations, per acre
Irrigation with a 1/2-mile center pivot system
530-acre system, 7.5 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.07			0.07		0.07
Maintenance										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Apply Water										
IRRIGATE LABOR	hour				0.04			0.04		0.04
Apply Water										
IRRIGATE LABOR	hour				0.05			0.05		0.05
Apply Water										
IRRIGATE LABOR	hour				0.04			0.04		0.04
Pivot, 1/2 CP	each			8.60			0.19	8.79	38.27	47.06
Well & Pump, 1/2 CP	each			1.13			0.02	1.15	3.78	4.93
Engine, 1/2 CP, 174	each								4.87	4.87
June Irr. 3app@.75"	ac-in		11.32	0.62			0.26	12.20		12.20
July Irr. 4app@.75"	ac-in		15.09	0.82			0.28	16.19		16.19
Aug Irr. 3app@.75"	ac-in		11.32	0.62			0.16	12.10		12.10
TOTALS		0.00	37.73	11.79	0.47	0.00	0.92	50.91	46.92	97.83

Note: Cost of production estimates are based on 2019 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, 2020

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'		0.85	0.30	0.58		0.09	1.82	1.76	3.58
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.34	0.75
Roll-Out Pipe	ft	7.92					0.14	8.06		8.06
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.10	0.42		0.01	0.78	0.88	1.66
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		0.38	0.15	0.63		0.01	1.17	1.32	2.49
Land Forming ($450)	each								36.04	36.04
Well & Pump, Furrow	each			2.96			0.05	3.01	9.86	12.87
Main Line Pipe	each								5.45	5.45
Engine, RPF, Corn	each								9.34	9.34
1st June Irrigation	ac-in		6.09	0.98			0.12	7.19		7.19
2nd June Irrigation	ac-in		6.09	0.98			0.12	7.19		7.19
3rd June Irrigation	ac-in		6.09	0.98			0.12	7.19		7.19
July Irrigation	ac-in		6.09	0.98			0.09	7.16		7.16
TOTALS		7.92	26.03	7.50	4.73	0.00	0.80	46.98	64.99	111.97

Note: Cost of production estimates are based on 2019 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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.32	0.11	0.24		0.02	0.69	0.68	1.37
Survey & Mark Levees	acre	4.50					0.12	4.62		4.62
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.86	0.28	0.65		0.05	1.84	1.81	3.65
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30		0.02	0.84	0.67	1.51
IRRIGATE LABOR	hour				0.68		0.02	0.70		0.70
Install Gates										
IRRIGATE LABOR	hour				2.72		0.07	2.79		2.79
Apply Water										
IRRIGATE LABOR	hour				6.80		0.18	6.98		6.98
Apply Water										
IRRIGATE LABOR	hour				6.80		0.15	6.95		6.95
Apply Water										
IRRIGATE LABOR	hour				6.80		0.12	6.92		6.92
Apply Water										
IRRIGATE LABOR	hour				6.80		0.09	6.89		6.89
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.67	0.21	0.51		0.01	1.40	1.41	2.81
Tear Down Levees										
Levee Splitter (1/80	32"		0.25	0.08	0.19			0.52	0.53	1.05
Land Forming ($113)	each								9.05	9.05
Levee Gates	each								0.67	0.67
Well & Pump, Flood	each			5.91			0.13	6.04	19.72	25.76
Engine, Rice CL, 75	each								18.68	18.68
May Irrigation	ac-in		11.24	1.43			0.33	13.00		13.00
June Irrigation	ac-in		16.86	2.15			0.42	19.43		19.43
July Irrigation	ac-in		16.86	2.15			0.33	19.34		19.34
August Irrigation	ac-in		16.86	2.15			0.25	19.26		19.26
TOTALS		4.50	64.32	14.59	33.85	0.00	2.33	119.59	53.22	172.81

Note: Cost of production estimates are based on 2019 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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Survey & Mark Levees	acre	2.25					0.06	2.31		2.31
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.65	0.21	0.49		0.04	1.39	1.36	2.75
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30		0.02	0.84	0.67	1.51
IRRIGATE LABOR	hour				0.68		0.02	0.70		0.70
Install Gates										
IRRIGATE LABOR	hour				1.36		0.04	1.40		1.40
Apply Water										
IRRIGATE LABOR	hour				4.53		0.12	4.65		4.65
Apply Water										
IRRIGATE LABOR	hour				4.53		0.10	4.63		4.63
Apply Water										
IRRIGATE LABOR	hour				4.53		0.08	4.61		4.61
Apply Water										
IRRIGATE LABOR	hour				4.53		0.06	4.59		4.59
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.50	0.16	0.38		0.01	1.05	1.05	2.10
Land Forming ($450)	each								36.04	36.04
Levee Gates	each								0.67	0.67
Well & Pump, Flood	each			5.91			0.13	6.04	19.72	25.76
Engine, Rice SL, 75	each								18.68	18.68
May Irrigation	ac-in		11.24	1.75			0.34	13.33		13.33
June Irrigation	ac-in		13.12	2.04			0.33	15.49		15.49
July Irrigation	ac-in		13.12	2.04			0.27	15.43		15.43
August Irrigation	ac-in		13.12	2.04			0.20	15.36		15.36
TOTALS		2.25	52.15	14.27	22.69	0.00	1.84	93.20	78.19	171.39

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

Table 16. Estimated costs for field operations, per acre
Straight levee rice multi inlet flood irrigation system
80-acre system, 23 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Survey & Mark Levees	acre	2.25					0.06	2.31		2.31
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.65	0.21	0.49		0.04	1.39	1.36	2.75
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30		0.02	0.84	0.67	1.51
IRRIGATE LABOR	hour				0.68		0.02	0.70		0.70
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.34	0.75
Roll-Out Pipe	ft	7.92					0.21	8.13		8.13
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.10	0.42		0.02	0.79	0.88	1.67
Install Gates										
IRRIGATE LABOR	hour				1.36		0.04	1.40		1.40
Apply Water										
IRRIGATE LABOR	hour				1.81		0.05	1.86		1.86
Apply Water										
IRRIGATE LABOR	hour				1.81		0.04	1.85		1.85
Apply Water										
IRRIGATE LABOR	hour				1.81		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				1.81		0.02	1.83		1.83
Remove Gates										
IRRIGATE LABOR	hour				0.45			0.45		0.45
Tear Down Levees										
Levee Splitter (1/80	32"		0.50	0.16	0.38		0.01	1.05	1.05	2.10
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.13	0.05	0.21			0.39	0.44	0.83
Land Forming ($450)	each								36.04	36.04
Levee Gates	each								0.34	0.34
Well & Pump, Flood	each			5.91			0.13	6.04	19.72	25.76
Engine, Mult In Rice	each								18.68	18.68
May Irrigation	ac-in		9.37	1.64			0.29	11.30		11.30
June Irrigation	ac-in		11.24	1.97			0.29	13.50		13.50
July Irrigation	ac-in		11.24	1.97			0.23	13.44		13.44
August Irrigation	ac-in		11.24	1.97			0.17	13.38		13.38
TOTALS		10.17	45.21	14.17	12.12	0.00	1.69	83.36	79.52	162.88

Note: Cost of production estimates are based on 2019 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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Apply Water										
IRRIGATE LABOR	hour				2.27		0.06	2.33		2.33
Apply Water										
IRRIGATE LABOR	hour				2.27		0.05	2.32		2.32
Apply Water										
IRRIGATE LABOR	hour				2.27		0.04	2.31		2.31
Apply Water										
IRRIGATE LABOR	hour				2.27		0.03	2.30		2.30
Land Forming ($450)	each								36.04	36.04
Well & Pump, Flood	each			5.91			0.13	6.04	19.72	25.76
Engine, Rice SL, 75	each								18.68	18.68
May Irrigation	ac-in		7.49	1.17			0.23	8.89		8.89
June Irrigation	ac-in		9.37	1.46			0.24	11.07		11.07
July Irrigation	ac-in		9.37	1.46			0.19	11.02		11.02
August Irrigation	ac-in		9.37	1.46			0.14	10.97		10.97
TOTALS		0.00	35.60	11.46	9.53	0.00	1.12	57.71	74.44	132.15

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

Appendix Table 18. Estimated costs for field operations, per acre
Peanuts irrigatied with a roll-out pipe
160-acre system, 12 ac-in., Delta Area, Mississippi, 2020

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

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

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