

**RICE
2022
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2021-04**

November 2021

Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses.**" Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2022 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

Acknowledgments

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

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

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

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

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2022 Planning Budgets

Budgets for Agricultural Enterprises

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

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

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

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

Methods and Procedures

Production Practices

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

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

Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2021. (Appendix Tables 1, 2, and 3).

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

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

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

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

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

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

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2021 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8, 9, 10, and 11.

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
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.32	75.0000	24.00	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.32	13.6000	4.35	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	4.38	1.5000	6.57	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.2030	3.10	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	15.24	0.5633	8.59	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	3.3975	8.02	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.64	1.0000	9.64	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	8.75	1.0000	8.75	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	10.17	1.0000	10.17	_____
TOTAL DIRECT EXPENSES				815.51	_____
FIXED EXPENSES					
Implements	acre	18.85	1.0000	18.85	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	32.48	1.0000	32.48	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____
TOTAL FIXED EXPENSES				114.50	_____
TOTAL SPECIFIED EXPENSES				930.01	_____

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

Table 1.B Summary of estimated costs and returns per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	12.49	1.0000	12.49	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.27	0.7506	11.46	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.24	0.5633	8.59	_____
DIESEL FUEL	gal	2.36	36.2688	85.59	_____
REPAIR & MAINTENANCE	acre	36.61	1.0000	36.61	_____
INTEREST ON OP. CAP.	acre	10.17	1.0000	10.17	_____

TOTAL DIRECT EXPENSES				815.51	_____
RETURNS ABOVE DIRECT EXPENSES				112.49	_____
TOTAL FIXED EXPENSES				114.50	_____

TOTAL SPECIFIED EXPENSES				930.01	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-2.01	_____

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

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

Table 1.C Estimated resource use for field operations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Sep	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Table 1.D Estimated costs for field operations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

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

Table 1.E Estimated monthly income and expense flows per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.29	9.52	11.33	11.33	11.90	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	9.27	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	12.69	3.56
INTEREST ON OP. CAP.	0.35	0.00	0.00	0.00	0.40	0.00	2.49	4.00	1.30	0.69	0.89	0.05
TOTAL DIRECT EXPENSES	10.13	0.00	0.00	0.00	17.96	0.00	144.29	278.75	113.50	80.66	154.75	15.47
NET INCOME	-10.13	0.00	0.00	0.00	-17.96	0.00	-144.29	-278.75	-113.50	-80.66	773.25	-15.47
NET INCOME TO DATE	-10.13	-10.13	-10.13	-10.13	-28.09	-28.09	-172.38	-451.13	-564.63	-645.29	127.96	112.49

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

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs

Table 1.F Estimated returns for various price/yield combinations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-407 -521	-383 -498	-360 -475	-337 -452	-314 -428	-291 -405	-267 -382	-244 -359	-221 -336	-198 -312	-175 -289
60	96.00	bu	-349 -464	-321 -436	-293 -408	-266 -380	-238 -352	-210 -324	-182 -297	-154 -269	-126 -241	-99 -213	-71 -185
70	112.00	bu	-292 -406	-259 -374	-227 -341	-194 -309	-162 -276	-129 -244	-97 -211	-64 -179	-32 -146	0 -114	32 -81
80	128.00	bu	-234 -349	-197 -311	-160 -274	-123 -237	-86 -200	-48 -163	-11 -126	25 -89	62 -52	99 -14	136 22
90	144.00	bu	-177 -291	-135 -249	-93 -208	-51 -166	-10 -124	31 -82	73 -40	115 0	157 42	198 84	240 126
100	160.00	bu	-119 -234	-73 -187	-26 -141	19 -94	66 -48	112 -2	158 44	205 90	251 137	298 183	344 229
110	176.00	bu	-61 -176	-10 -125	40 -74	91 -23	142 27	193 78	244 129	295 180	346 231	397 282	448 333
120	192.00	bu	-4 -118	51 -63	106 -7	162 48	218 103	273 159	329 215	385 270	440 326	496 382	552 437
130	208.00	bu	53 -61	113 -1	173 59	234 119	294 179	354 240	415 300	475 360	535 421	595 481	656 541
140	224.00	bu	110 -3	175 61	240 126	305 190	370 255	435 320	500 385	565 450	630 515	695 580	760 645
150	240.00	bu	168 53	237 123	307 192	376 262	446 332	516 401	585 471	655 540	724 610	794 680	864 749

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

Table 2.A Estimated costs per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.32	75.0000	24.00	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv (Levees)	lb	0.32	13.6000	4.35	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	9.83	1.0000	9.83	_____
TOTAL DIRECT EXPENSES				778.21	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____
TOTAL FIXED EXPENSES				129.32	_____
TOTAL SPECIFIED EXPENSES				907.53	_____

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

Table 2.B Summary of estimated costs and returns per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2022

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

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	12.49	1.0000	12.49	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	9.83	1.0000	9.83	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 2.C Estimated resource use for field operations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 2.D Estimated costs for field operations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2022

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

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

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

Table 2.E Estimated monthly income and expense flows per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	2.36	3.88	1.19	0.62	0.87	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	137.46	270.60	104.45	71.65	150.38	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-137.46	-270.60	-104.45	-71.65	777.62	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-169.00	-439.60	-544.05	-615.70	161.92	149.79

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 2.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2022

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

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

Table 3.A Estimated costs per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.32	75.0000	24.00	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv (Levees)	lb	0.32	13.6000	4.35	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	4.38	1.5000	6.57	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
Crop Oil Conc. (Pet.)	pt	2.86	0.5000	1.43	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	9.74	1.0000	9.74	_____
TOTAL DIRECT EXPENSES				768.53	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____
TOTAL FIXED EXPENSES				130.58	_____
TOTAL SPECIFIED EXPENSES				899.11	_____

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

Table 3.B Summary of estimated costs and returns per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

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

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	54.04	1.0000	54.04	_____
ADJUVANTS	acre	12.78	1.0000	12.78	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	9.74	1.0000	9.74	_____

TOTAL DIRECT EXPENSES				768.53	_____
RETURNS ABOVE DIRECT EXPENSES				159.47	_____
TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				899.11	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				28.89	_____

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

Fertilization decisions should be based on soil tests.

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

Table 3.C Estimated resource use for field operations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.5000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 3.D Estimated costs for field operations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 3.E Estimated monthly income and expense flows per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.04	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.50	4.38	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	2.44	3.81	1.14	0.58	0.86	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	141.89	266.10	99.68	66.89	150.30	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-141.89	-266.10	-99.68	-66.89	777.70	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-173.43	-439.53	-539.21	-606.10	171.60	159.47

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 3.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2022

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

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

Table 4.A Estimated costs per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.32	75.0000	24.00	_____
Rice Seed Trt/Insect	lbseed	0.29	75.0000	21.75	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	4.38	1.5000	6.57	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
Crop Oil Conc. (Pet.)	pt	2.86	0.5000	1.43	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	9.21	1.0000	9.21	_____
TOTAL DIRECT EXPENSES				734.19	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				860.16	_____

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

Fertilization decisions should be based on soil tests.

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

Table 4.B Summary of estimated costs and returns per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.90	1.0000	46.90	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	45.75	1.0000	45.75	_____
ADJUVANTS	acre	12.78	1.0000	12.78	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	9.21	1.0000	9.21	_____

TOTAL DIRECT EXPENSES				734.19	_____
RETURNS ABOVE DIRECT EXPENSES				193.81	_____
TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				860.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				67.84	_____

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

Fertilization decisions should be based on soil tests.

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

Table 4.C Estimated resource use for field operations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.5000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000				1.05
TOTALS							0.59	0.59	2.67	0.53

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

Fertilization decisions should be based on soil tests.

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

Table 4.D Estimated costs for field operations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

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

Table 4.E Estimated monthly income and expense flows per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	45.75	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.50	4.38	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	2.00	3.77	1.12	0.56	0.85	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	115.59	264.04	97.64	64.85	148.40	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-115.59	-264.04	-97.64	-64.85	779.60	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-147.13	-411.17	-508.81	-573.66	205.94	193.81

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

Table 5.A Estimated costs per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.60	23.0000	151.80	_____
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.18	1.0000	9.18	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	11.61	1.0000	11.61	_____
TOTAL DIRECT EXPENSES				872.11	_____
FIXED EXPENSES					
Implements	acre	18.18	1.0000	18.18	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____
TOTAL FIXED EXPENSES				109.50	_____
TOTAL SPECIFIED EXPENSES				981.61	_____

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

Table 5.B Summary of estimated costs and returns per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.90	1.0000	39.90	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	161.23	1.0000	161.23	_____
ADJUVANTS	acre	12.16	1.0000	12.16	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.27	0.7235	11.05	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	35.8158	84.52	_____
REPAIR & MAINTENANCE	acre	34.98	1.0000	34.98	_____
INTEREST ON OP. CAP.	acre	11.61	1.0000	11.61	_____

TOTAL DIRECT EXPENSES				872.11	_____
RETURNS ABOVE DIRECT EXPENSES				171.89	_____
TOTAL FIXED EXPENSES				109.50	_____

TOTAL SPECIFIED EXPENSES				981.61	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				62.39	_____

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

Fertilization decisions should be based on soil tests.

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

Table 5.C Estimated resource use for field operations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 5.D Estimated costs for field operations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 5.E Estimated monthly income and expense flows per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	161.23	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.29	7.71	8.61	8.61	11.12	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	8.20	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	11.06	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.36	4.07	0.92	0.39	0.96	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	253.35	283.78	79.76	45.21	166.34	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-253.35	-283.78	-79.76	-45.21	877.66	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-284.89	-568.67	-648.43	-693.64	184.02	171.89

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 5.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

Table 6.A Estimated costs per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.60	23.0000	151.80	_____
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	11.26	1.0000	11.26	_____
TOTAL DIRECT EXPENSES				845.53	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____
TOTAL FIXED EXPENSES				129.32	_____
TOTAL SPECIFIED EXPENSES				974.85	_____

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

Table 6.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.90	1.0000	39.90	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	161.23	1.0000	161.23	_____
ADJUVANTS	acre	12.16	1.0000	12.16	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	11.26	1.0000	11.26	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 6.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

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

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

Table 6.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

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

Table 6.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	161.23	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.23	3.98	0.84	0.34	0.96	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	246.52	277.47	73.46	38.94	165.47	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-246.52	-277.47	-73.46	-38.94	878.53	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-278.06	-555.53	-628.99	-667.93	210.60	198.47

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

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

Table 7.A Estimated costs per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.60	23.0000	151.80	_____
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	11.17	1.0000	11.17	_____
TOTAL DIRECT EXPENSES				835.56	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____
TOTAL FIXED EXPENSES				130.58	_____
TOTAL SPECIFIED EXPENSES				966.14	_____

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

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

Table 7.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.90	1.0000	39.90	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	161.23	1.0000	161.23	_____
ADJUVANTS	acre	12.16	1.0000	12.16	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	11.17	1.0000	11.17	_____

TOTAL DIRECT EXPENSES				835.56	_____
RETURNS ABOVE DIRECT EXPENSES				208.44	_____

TOTAL FIXED EXPENSES				130.58	_____

TOTAL SPECIFIED EXPENSES				966.14	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				77.86	_____

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

Fertilization decisions should be based on soil tests.

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

Table 7.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

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

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

Table 7.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

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

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

Table 7.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	161.23	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.31	3.91	0.79	0.30	0.95	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	250.95	272.68	68.69	34.18	165.39	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-250.95	-272.68	-68.69	-34.18	878.61	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-282.49	-555.17	-623.86	-658.04	220.57	208.44

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

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

Table 8.A Estimated costs per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Regiment	oz	45.50	0.5000	22.75	_____
Facet L	pt	14.83	2.6900	39.89	_____
Permit	oz	21.96	0.7500	16.47	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.60	23.0000	151.80	_____
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	4.13	0.5000	2.07	_____
Crop Oil Conc. (Pet.)	pt	2.86	0.4000	1.14	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	10.79	1.0000	10.79	_____
TOTAL DIRECT EXPENSES				809.66	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				935.63	_____

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

Table 8.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.90	1.0000	39.90	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	142.37	1.0000	142.37	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	161.23	1.0000	161.23	_____
ADJUVANTS	acre	12.16	1.0000	12.16	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	10.79	1.0000	10.79	_____

TOTAL DIRECT EXPENSES				809.66	_____
RETURNS ABOVE DIRECT EXPENSES				234.34	_____
TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				935.63	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				108.37	_____

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

Fertilization decisions should be based on soil tests.

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

Table 8.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

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

Table 8.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

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

Table 8.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	33.50	79.11	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	161.23	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	4.57	3.21	4.38	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.02	3.87	0.77	0.28	0.94	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	233.09	270.62	66.65	32.14	163.49	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-233.09	-270.62	-66.65	-32.14	880.51	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-264.63	-535.25	-601.90	-634.04	246.47	234.34

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

Table 9.A Estimated costs per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Clearpath	oz	4.06	9.6000	38.98	_____
Newpath	oz	3.84	6.0000	23.04	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.03	65.0000	66.95	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.03	12.0000	12.36	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	4.38	1.5000	6.57	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.2030	3.10	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	15.24	0.5633	8.59	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	3.3975	8.02	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.64	1.0000	9.64	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	8.75	1.0000	8.75	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	11.30	1.0000	11.30	_____
TOTAL DIRECT EXPENSES				866.37	_____
FIXED EXPENSES					
Implements	acre	18.85	1.0000	18.85	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	32.48	1.0000	32.48	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____
TOTAL FIXED EXPENSES				114.50	_____
TOTAL SPECIFIED EXPENSES				980.87	_____

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

Table 9.B Summary of estimated costs and returns per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	133.97	1.0000	133.97	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
ADJUVANTS	acre	20.72	1.0000	20.72	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.27	0.7506	11.46	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.24	0.5633	8.59	_____
DIESEL FUEL	gal	2.36	36.2688	85.59	_____
REPAIR & MAINTENANCE	acre	36.61	1.0000	36.61	_____
INTEREST ON OP. CAP.	acre	11.30	1.0000	11.30	_____

TOTAL DIRECT EXPENSES				866.37	_____
RETURNS ABOVE DIRECT EXPENSES				61.63	_____
TOTAL FIXED EXPENSES				114.50	_____

TOTAL SPECIFIED EXPENSES				980.87	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-52.87	_____

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

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

Table 9.C Estimated resource use for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	oz					9.6000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Fertilization decisions should be based on soil tests.

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

Table 9.D Estimated costs for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 9.E Estimated monthly income and expense flows per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	72.48	31.73	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	101.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.29	9.52	11.33	11.33	11.90	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	9.27	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	12.69	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.22	3.29	1.30	0.69	0.89	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	245.32	228.47	113.50	80.66	154.75	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-245.32	-228.47	-113.50	-80.66	773.25	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-276.86	-505.33	-618.83	-699.49	73.76	61.63

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

Table 10.A Estimated costs per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Clearpath	oz	4.06	9.6000	38.98	_____
Newpath	oz	3.84	6.0000	23.04	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.03	65.0000	66.95	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.03	12.0000	12.36	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	10.85	1.0000	10.85	_____
TOTAL DIRECT EXPENSES				828.96	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____
TOTAL FIXED EXPENSES				129.32	_____
TOTAL SPECIFIED EXPENSES				958.28	_____

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

Table 10.B Summary of estimated costs and returns per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	133.97	1.0000	133.97	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
ADJUVANTS	acre	20.72	1.0000	20.72	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	10.85	1.0000	10.85	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 10.C Estimated resource use for field operations, per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	oz					9.6000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 10.D Estimated costs for field operations, per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 10.E Estimated monthly income and expense flows per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	72.48	31.73	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	101.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.09	3.17	1.19	0.62	0.87	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	238.49	220.32	104.45	71.65	150.38	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-238.49	-220.32	-104.45	-71.65	777.62	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-270.03	-490.35	-594.80	-666.45	111.17	99.04

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 10.F Estimated returns for various price/yield combinations, per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-420 -549	-397 -526	-374 -503	-351 -480	-327 -457	-304 -433	-281 -410	-258 -387	-235 -364	-211 -341	-188 -317
60	96.00	bu	-363 -492	-335 -464	-307 -436	-279 -408	-251 -381	-223 -353	-196 -325	-168 -297	-140 -269	-112 -241	-84 -214
70	112.00	bu	-305 -434	-273 -402	-240 -369	-208 -337	-175 -304	-143 -272	-110 -239	-78 -207	-45 -175	-13 -142	19 -110
80	128.00	bu	-248 -377	-210 -340	-173 -303	-136 -265	-99 -228	-62 -191	-25 -154	11 -117	48 -80	86 -43	123 -6
90	144.00	bu	-190 -319	-148 -278	-106 -236	-65 -194	-23 -152	18 -111	60 -69	101 -27	143 14	185 56	227 97
100	160.00	bu	-132 -262	-86 -215	-40 -169	6 -123	52 -76	99 -30	145 16	191 62	238 108	284 155	331 201
110	176.00	bu	-75 -204	-24 -153	26 -102	77 -51	128 -0	179 50	230 101	281 152	332 203	383 254	434 305
120	192.00	bu	-17 -147	37 -91	93 -35	149 19	204 75	260 131	316 186	371 242	427 298	483 353	538 409
130	208.00	bu	39 -89	99 -29	160 30	220 91	280 151	341 211	401 272	461 332	522 392	582 453	642 513
140	224.00	bu	97 -32	162 32	227 97	292 162	357 227	421 292	486 357	551 422	616 487	681 552	746 617
150	240.00	bu	154 25	224 94	293 164	363 234	433 303	502 373	572 442	641 512	711 582	781 651	850 721

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

Table 11.A Estimated costs per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Clearpath	oz	4.06	9.6000	38.98	_____
Newpath	oz	3.84	6.0000	23.04	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.03	65.0000	66.95	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.03	12.0000	12.36	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	10.76	1.0000	10.76	_____
TOTAL DIRECT EXPENSES				818.99	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____
TOTAL FIXED EXPENSES				130.58	_____
TOTAL SPECIFIED EXPENSES				949.57	_____

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

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

Table 11.B Summary of estimated costs and returns per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	133.97	1.0000	133.97	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
ADJUVANTS	acre	20.72	1.0000	20.72	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	10.76	1.0000	10.76	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 11.C Estimated resource use for field operations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	oz					9.6000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 11.D Estimated costs for field operations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 11.E Estimated monthly income and expense flows per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	72.48	31.73	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	101.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.17	3.10	1.14	0.58	0.86	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	242.92	215.53	99.68	66.89	150.30	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-242.92	-215.53	-99.68	-66.89	777.70	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-274.46	-489.99	-589.67	-656.56	121.14	109.01

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT			dollars										
YIELD	UNIT												
50	80.00	bu	-410 -541	-387 -518	-364 -494	-341 -471	-317 -448	-294 -425	-271 -402	-248 -378	-225 -355	-201 -332	-178 -309
60	96.00	bu	-353 -483	-325 -455	-297 -428	-269 -400	-241 -372	-213 -344	-186 -316	-158 -288	-130 -260	-102 -233	-74 -205
70	112.00	bu	-295 -426	-263 -393	-230 -361	-198 -328	-165 -296	-133 -263	-100 -231	-68 -198	-35 -166	-3 -133	29 -101
80	128.00	bu	-238 -368	-200 -331	-163 -294	-126 -257	-89 -220	-52 -183	-15 -145	21 -108	58 -71	96 -34	133 2
90	144.00	bu	-180 -311	-138 -269	-97 -227	-55 -185	-13 -144	28 -102	70 -60	111 -18	153 22	195 64	237 106
100	160.00	bu	-122 -253	-76 -207	-30 -160	16 -114	62 -67	109 -21	155 24	201 71	248 117	294 164	341 210
110	176.00	bu	-65 -196	-14 -145	36 -93	87 -42	138 8	189 59	240 110	291 161	342 212	393 263	444 314
120	192.00	bu	-7 -138	47 -82	103 -27	159 28	214 84	270 139	326 195	381 251	437 306	493 362	548 418
130	208.00	bu	49 -80	109 -20	170 39	230 99	290 160	351 220	411 280	471 341	532 401	592 461	652 522
140	224.00	bu	107 -23	172 41	237 106	302 171	366 236	431 301	496 366	561 431	626 496	691 561	756 626
150	240.00	bu	164 34	234 103	303 173	373 242	443 312	512 382	582 451	651 521	721 590	791 660	860 730

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

Table 12.A Estimated costs per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Clearpath	oz	4.06	9.6000	38.98	_____
Newpath	oz	3.84	6.0000	23.04	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.03	65.0000	66.95	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.03	12.0000	12.36	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.					
	acre	10.38	1.0000	10.38	_____
TOTAL DIRECT EXPENSES				793.09	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				919.06	_____

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

Table 12.B Summary of estimated costs and returns per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

TOTAL INCOME				928.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	133.97	1.0000	133.97	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	101.64	1.0000	101.64	_____
ADJUVANTS	acre	20.72	1.0000	20.72	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	10.38	1.0000	10.38	_____

TOTAL DIRECT EXPENSES				793.09	_____
RETURNS ABOVE DIRECT EXPENSES				134.91	_____
TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				919.06	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				8.94	_____

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

Fertilization decisions should be based on soil tests.

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

Table 12.C Estimated resource use for field operations, per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	oz					9.6000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

Table 12.D Estimated costs for field operations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

Table 12.E Estimated monthly income and expense flows per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	928.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	72.48	31.73	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	101.64	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	3.88	3.06	1.12	0.56	0.85	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	225.06	213.47	97.64	64.85	148.40	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-225.06	-213.47	-97.64	-64.85	779.60	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-256.60	-470.07	-567.71	-632.56	147.04	134.91

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 12.F Estimated returns for various price/yield combinations, per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

Table 13.A Estimated costs per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	14.83	2.0000	29.66	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.37	23.0000	169.51	_____
Rice Seed FPH (Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.18	1.0000	9.18	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	12.55	1.0000	12.55	_____
TOTAL DIRECT EXPENSES				918.57	_____
FIXED EXPENSES					
Implements	acre	18.18	1.0000	18.18	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____
TOTAL FIXED EXPENSES				109.50	_____
TOTAL SPECIFIED EXPENSES				1028.07	_____

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

Table 13.B Summary of estimated costs and returns per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.20	1.0000	42.20	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	156.50	1.0000	156.50	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	182.09	1.0000	182.09	_____
ADJUVANTS	acre	20.39	1.0000	20.39	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.27	0.7235	11.05	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	35.8158	84.52	_____
REPAIR & MAINTENANCE	acre	34.98	1.0000	34.98	_____
INTEREST ON OP. CAP.	acre	12.55	1.0000	12.55	_____

TOTAL DIRECT EXPENSES				918.57	_____
RETURNS ABOVE DIRECT EXPENSES				125.43	_____
TOTAL FIXED EXPENSES				109.50	_____

TOTAL SPECIFIED EXPENSES				1028.07	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				15.93	_____

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

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

Table 13.C Estimated resource use for field operations, per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed FPH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Preface	oz					5.0000				
Facet L	pt					2.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Preface	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.72	0.72	5.27	0.53

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

Table 13.D Estimated costs for field operations, per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

Table 13.E Estimated monthly income and expense flows per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	88.11	38.63	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	182.09	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.29	7.71	8.61	8.61	11.12	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	8.20	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	11.06	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	5.91	3.46	0.92	0.39	0.96	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	343.09	240.50	79.76	45.21	166.34	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-343.09	-240.50	-79.76	-45.21	877.66	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-374.63	-615.13	-694.89	-740.10	137.56	125.43

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre
 Fullpage hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

Table 14.A Estimated costs per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	14.83	2.0000	29.66	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.37	23.0000	169.51	_____
Rice Seed FPH (Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	12.20	1.0000	12.20	_____
TOTAL DIRECT EXPENSES				891.99	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____
TOTAL FIXED EXPENSES				129.32	_____
TOTAL SPECIFIED EXPENSES				1021.31	_____

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

Table 14.B Summary of estimated costs and returns per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.20	1.0000	42.20	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	156.50	1.0000	156.50	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	182.09	1.0000	182.09	_____
ADJUVANTS	acre	20.39	1.0000	20.39	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	12.20	1.0000	12.20	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 14.C Estimated resource use for field operations, per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed FPH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Preface	oz					5.0000				
Facet L	pt					2.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Preface	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

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

Table 14.D Estimated costs for field operations, per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 14.E Estimated monthly income and expense flows per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	88.11	38.63	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	182.09	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	5.78	3.37	0.84	0.34	0.96	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	336.26	234.19	73.46	38.94	165.47	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-336.26	-234.19	-73.46	-38.94	878.53	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-367.80	-601.99	-675.45	-714.39	164.14	152.01

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 14.F Estimated returns for various price/yield combinations, per acre
 Fullpage hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

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

Table 15.A Estimated costs per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	14.83	2.0000	29.66	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.37	23.0000	169.51	_____
Rice Seed FPH (Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	12.11	1.0000	12.11	_____
TOTAL DIRECT EXPENSES				882.02	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____
TOTAL FIXED EXPENSES				130.58	_____
TOTAL SPECIFIED EXPENSES				1012.60	_____

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

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

Table 15.B Summary of estimated costs and returns per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.20	1.0000	42.20	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	156.50	1.0000	156.50	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	182.09	1.0000	182.09	_____
ADJUVANTS	acre	20.39	1.0000	20.39	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	12.11	1.0000	12.11	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 15.C Estimated resource use for field operations, per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed FPH(Levee)	lb					4.2500				
Rice Seed Trt/Insect	lbseed					4.2500				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Preface	oz					5.0000				
Facet L	pt					2.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Preface	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt					0.6520				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	180.0000				
Dry Rice	bu			1.00	Aug	180.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 15.D Estimated costs for field operations, per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

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

Table 15.E Estimated monthly income and expense flows per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	88.11	38.63	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	182.09	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	5.86	3.30	0.79	0.30	0.95	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	340.69	229.40	68.69	34.18	165.39	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-340.69	-229.40	-68.69	-34.18	878.61	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-372.23	-601.63	-670.32	-704.50	174.11	161.98

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
 Fullpage hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

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

Table 16.A Estimated costs per acre
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	3.3220	95.11	_____
NBPT	pt	12.93	0.8000	10.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	14.83	2.0000	29.66	_____
Aim	oz	5.79	1.5000	8.69	_____
Clincher SF	oz	2.56	7.5000	19.20	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.37	23.0000	169.51	_____
Rice Seed FPH (Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	4.38	1.5000	6.57	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	11.73	1.0000	11.73	_____
TOTAL DIRECT EXPENSES				856.12	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				982.09	_____

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

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

Table 16.B Summary of estimated costs and returns per acre
Fullpage hybrid straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2022

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

TOTAL INCOME				1044.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.20	1.0000	42.20	_____
FERTILIZERS	acre	133.33	1.0000	133.33	_____
HERBICIDES	acre	156.50	1.0000	156.50	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	182.09	1.0000	182.09	_____
ADJUVANTS	acre	20.39	1.0000	20.39	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	11.73	1.0000	11.73	_____

TOTAL DIRECT EXPENSES				856.12	_____
RETURNS ABOVE DIRECT EXPENSES				187.88	_____
TOTAL FIXED EXPENSES				125.97	_____

TOTAL SPECIFIED EXPENSES				982.09	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				61.91	_____

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

Table 16.C Estimated resource use for field operations, per acre
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR	hours	
Soil Test	acre			0.33	Oct	0.3330						
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08		
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03		
App by Air (5 gal)	appl			1.00	Feb	1.0000						
Glyphosate 3lbs a.e	oz					48.0000						
2,4-D Amine 4	pt					2.0000						
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07		
Rice Fullpage Hyb Tr	lb					23.0000						
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04		
App by Air (5 gal)	appl			1.00	Apr	1.0000						
Glyphosate 3lbs a.e	oz					32.0000						
Command 3ME	pt					1.0000						
Sharpen	oz					2.0000						
MSO	pt					0.5000						
Class Act NG	pt					0.5000						
Seed Levees				1.00	Apr							
Rice Seed FPH(Levee)	lb					4.2500						
Rice Seed Trt/Insect	lbseed					4.2500						
App by Air (5 gal)	appl			1.00	Apr	1.0000						
Preface	oz					5.0000						
Facet L	pt					2.0000						
Crop Oil Conc.(Pet.)	pt					2.0000						
App Fert by Air	cwt			1.00	May	1.0000						
Amm Sulfate (21% N)	cwt					0.5000						
DAP	cwt					0.5000						
Rice Consultant	acre			1.00	May	1.0000						
App Fert by Air	cwt			1.00	May	2.6700						
Urea, Solid (46% N)	cwt					2.6700						
NBPT	pt					0.8000						
App by Air (10 gal)	appl			1.00	May	1.0000						
Preface	oz					6.0000						
Crop Oil Conc.(Pet.)	pt					2.0000						
Aim	oz					1.5000						
Rice Management				1.00	May							
RICE MGT. LABOR	hour								0.10			
App by Air (5 gal)	appl			0.50	Jun	0.5000						
Clincher SF	oz					7.5000						
MSO	pt					1.0000						
Rice Management				1.00	Jun							
RICE MGT. LABOR	hour								0.20			
App Fert by Air	cwt			1.00	Jun	0.6520						
Urea, Solid (46% N)	cwt					0.6520						
Rice Management				1.00	Jul							
RICE MGT. LABOR	hour								0.20			
App by Air (3 gal)	appl			1.50	Jul	1.5000						
Warrior ZT	oz					3.0000						
Rice Management				1.00	Aug							
RICE MGT. LABOR	hour								0.20			
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15		
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00		
Handling & Storage				1.00	Aug							
HAND LABOR	hour								0.25			
Haul Rice	bu			1.00	Aug	180.0000						
Dry Rice	bu			1.00	Aug	180.0000						
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13		
Flood Irr.	acre				Jan	1.0000				1.05		
TOTALS							0.59	0.59	2.67	0.53		

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

Table 16.D Estimated costs for field operations, per acre
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

Table 16.E Estimated monthly income and expense flows per acre
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1044.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	8.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	114.66	18.67	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	88.11	38.63	19.20	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	182.09	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	4.38	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	5.57	3.26	0.77	0.28	0.94	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	322.83	227.34	66.65	32.14	163.49	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-322.83	-227.34	-66.65	-32.14	880.51	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-354.37	-581.71	-648.36	-680.50	200.01	187.88

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre
 Fullpage hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

Table 17.A Estimated costs per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Provisia	oz	0.76	31.0000	23.56	_____
Aim	oz	5.79	1.0000	5.79	_____
Permit	oz	21.96	0.7500	16.47	_____
Regiment	oz	45.50	0.2500	11.38	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.25	77.0000	96.25	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	4.38	0.5000	2.19	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	4.13	0.2500	1.03	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5475	8.36	_____
Harvesters	hour	15.27	0.2030	3.10	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	15.24	0.5633	8.59	_____
DIESEL FUEL					
Tractors	gal	2.36	5.9886	14.13	_____
Harvesters	gal	2.36	3.3975	8.02	_____
Flood Irr.	gal	2.36	26.8827	63.44	_____
REPAIR & MAINTENANCE					
Implements	acre	9.64	1.0000	9.64	_____
Tractors	acre	3.91	1.0000	3.91	_____
Harvesters	acre	8.75	1.0000	8.75	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	11.06	1.0000	11.06	_____
TOTAL DIRECT EXPENSES				844.01	_____
FIXED EXPENSES					
Implements	acre	18.85	1.0000	18.85	_____
Tractors	acre	23.08	1.0000	23.08	_____
Harvesters	acre	32.48	1.0000	32.48	_____
Flood Irr.	acre	40.09	1.0000	40.09	_____
TOTAL FIXED EXPENSES				114.50	_____
TOTAL SPECIFIED EXPENSES				958.51	_____

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

Table 17.B Summary of estimated costs and returns per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

TOTAL INCOME				904.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	101.26	1.0000	101.26	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	118.58	1.0000	118.58	_____
ADJUVANTS	acre	17.37	1.0000	17.37	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.27	0.7506	11.46	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.24	0.5633	8.59	_____
DIESEL FUEL	gal	2.36	36.2688	85.59	_____
REPAIR & MAINTENANCE	acre	36.61	1.0000	36.61	_____
INTEREST ON OP. CAP.	acre	11.06	1.0000	11.06	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 17.C Estimated resource use for field operations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Fertilization decisions should be based on soil tests.

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

Table 17.D Estimated costs for field operations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 17.E Estimated monthly income and expense flows per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	904.80	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	67.54	11.78	11.38	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	118.58	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	1.03	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.29	9.52	11.33	11.33	11.90	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.67	17.30	17.30	17.30	9.27	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.23	8.20	2.29	2.29	12.69	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.43	2.99	1.17	0.69	0.87	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	257.53	208.22	102.20	80.66	151.73	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-257.53	-208.22	-102.20	-80.66	753.07	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-289.07	-497.29	-599.49	-680.15	72.92	60.79

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2022

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	-----dollars-----										
50	78.00	bu	-445 -560	-423 -537	-400 -515	-378 -492	-355 -469	-332 -447	-310 -424	-287 -402	-264 -379	-242 -356	-219 -334
60	93.60	bu	-389 -504	-362 -477	-335 -449	-308 -422	-281 -395	-254 -368	-226 -341	-199 -314	-172 -287	-145 -259	-118 -232
70	109.20	bu	-333 -448	-302 -416	-270 -384	-238 -353	-207 -321	-175 -289	-143 -258	-112 -226	-80 -194	-48 -163	-17 -131
80	124.80	bu	-277 -392	-241 -355	-205 -319	-169 -283	-132 -247	-96 -211	-60 -174	-24 -138	11 -102	48 -66	84 -30
90	140.40	bu	-221 -336	-180 -295	-140 -254	-99 -213	-58 -173	-17 -132	22 -91	63 -50	104 -10	144 30	185 71
100	156.00	bu	-165 -279	-120 -234	-74 -189	-29 -144	15 -98	60 -53	106 -8	151 36	196 82	241 127	286 172
110	171.60	bu	-109 -223	-59 -174	-9 -124	39 -74	89 -24	139 25	189 74	239 124	288 174	338 224	388 273
120	187.20	bu	-53 -167	1 -113	55 -59	109 -4	163 49	218 103	272 158	326 212	381 266	435 320	489 375
130	202.80	bu	2 -111	61 -52	120 5	179 64	238 123	296 182	355 241	414 300	473 358	532 417	590 476
140	218.40	bu	58 -55	122 7	185 71	248 134	312 197	375 261	438 324	502 387	565 451	628 514	692 577
150	234.00	bu	115 0	182 68	250 136	318 204	386 271	454 339	522 407	590 475	657 543	725 611	793 679

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

Table 18.A Estimated costs per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Provisia	oz	0.76	31.0000	23.56	_____
Aim	oz	5.79	1.0000	5.79	_____
Permit	oz	21.96	0.7500	16.47	_____
Regiment	oz	45.50	0.2500	11.38	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.25	77.0000	96.25	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	4.38	0.5000	2.19	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	4.13	0.2500	1.03	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4999	7.63	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.5719	13.15	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	21.9949	51.92	_____
REPAIR & MAINTENANCE					
Implements	acre	9.11	1.0000	9.11	_____
Tractors	acre	3.67	1.0000	3.67	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	10.61	1.0000	10.61	_____
TOTAL DIRECT EXPENSES				806.60	_____
FIXED EXPENSES					
Implements	acre	17.86	1.0000	17.86	_____
Tractors	acre	21.64	1.0000	21.64	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.67	1.0000	61.67	_____
TOTAL FIXED EXPENSES				129.32	_____
TOTAL SPECIFIED EXPENSES				935.92	_____

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

Table 18.B Summary of estimated costs and returns per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

TOTAL INCOME				904.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	101.26	1.0000	101.26	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	118.58	1.0000	118.58	_____
ADJUVANTS	acre	17.37	1.0000	17.37	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.27	0.6759	10.32	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	30.5114	72.02	_____
REPAIR & MAINTENANCE	acre	34.67	1.0000	34.67	_____
INTEREST ON OP. CAP.	acre	10.61	1.0000	10.61	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 18.C Estimated resource use for field operations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

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

Table 18.D Estimated costs for field operations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 18.E Estimated monthly income and expense flows per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	904.80	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	67.54	11.78	11.38	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	118.58	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	1.03	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.25	5.44	6.34	6.34	10.80	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	16.12	13.46	13.46	13.46	7.77	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.37	8.09	2.18	2.18	10.94	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.30	2.87	1.06	0.62	0.85	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	250.70	200.07	93.15	71.65	147.36	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-250.70	-200.07	-93.15	-71.65	757.44	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-282.24	-482.31	-575.46	-647.11	110.33	98.20

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 18.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2022

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

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

Table 19.A Estimated costs per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Provisia	oz	0.76	31.0000	23.56	_____
Aim	oz	5.79	1.0000	5.79	_____
Permit	oz	21.96	0.7500	16.47	_____
Regiment	oz	45.50	0.2500	11.38	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.25	77.0000	96.25	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	4.38	0.5000	2.19	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	4.13	0.2500	1.03	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.5281	8.06	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	5.8180	13.73	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	18.7364	44.23	_____
REPAIR & MAINTENANCE					
Implements	acre	9.20	1.0000	9.20	_____
Tractors	acre	3.81	1.0000	3.81	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	10.52	1.0000	10.52	_____
TOTAL DIRECT EXPENSES				796.63	_____
FIXED EXPENSES					
Implements	acre	18.59	1.0000	18.59	_____
Tractors	acre	22.49	1.0000	22.49	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.35	1.0000	61.35	_____
TOTAL FIXED EXPENSES				130.58	_____
TOTAL SPECIFIED EXPENSES				927.21	_____

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

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

Table 19.B Summary of estimated costs and returns per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

TOTAL INCOME				904.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	101.26	1.0000	101.26	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	118.58	1.0000	118.58	_____
ADJUVANTS	acre	17.37	1.0000	17.37	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.27	0.7041	10.75	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	27.4990	64.91	_____
REPAIR & MAINTENANCE	acre	34.55	1.0000	34.55	_____
INTEREST ON OP. CAP.	acre	10.52	1.0000	10.52	_____

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

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

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

Table 19.C Estimated resource use for field operations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR	hours	
Soil Test	acre			0.33	Oct	0.3330						
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08		
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03		
App by Air (5 gal)	appl			1.00	Feb	1.0000						
Glyphosate 3lbs a.e	oz					48.0000						
2,4-D Amine 4	pt					2.0000						
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07		
Rice Seed Provisia	lb					65.0000						
Rice Seed Trt/Insect	lbseed					65.0000						
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04		
App by Air (5 gal)	appl			1.00	Apr	1.0000						
Glyphosate 3lbs a.e	oz					32.0000						
Command 3ME	pt					1.0000						
Sharpen	oz					2.0000						
MSO	pt					0.5000						
Class Act NG	pt					0.5000						
Seed Levees				1.00	Apr							
Rice Seed Provisia	lb					12.0000						
Rice Seed Trt/Insect	lbseed					12.0000						
App by Air (5 gal)	appl			1.00	Apr	1.0000						
Provisia	oz					15.5000						
Aim	oz					1.0000						
Permit	oz					0.7500						
Crop Oil Conc. (Pet.)	pt					2.0000						
App Fert by Air	cwt			1.00	May	1.0000						
Amm Sulfate (21% N)	cwt					0.5000						
DAP	cwt					0.5000						
Rice Consultant	acre			1.00	May	1.0000						
App Fert by Air	cwt			1.00	May	2.5000						
Urea, Solid (46% N)	cwt					2.5000						
NBPT	pt					0.7500						
App by Air (10 gal)	appl			1.00	May	1.0000						
Provisia	oz					15.5000						
Crop Oil Conc. (Pet.)	pt					2.0000						
Rice Management				1.00	May							
RICE MGT. LABOR	hour								0.10			
App by Air (5 gal)	appl			0.50	Jun	0.5000						
Regiment	oz					0.2500						
Dyne-A-Pak	pt					0.2500						
Rice Management				1.00	Jun							
RICE MGT. LABOR	hour								0.20			
App Fert by Air	cwt			1.00	Jun	1.5000						
Urea, Solid (46% N)	cwt					1.5000						
Rice Management				1.00	Jul							
RICE MGT. LABOR	hour								0.20			
App by Air (5 gal)	appl			1.00	Jul	1.0000						
Ameristar Top	oz					10.0000						
Surfactant	pt					0.1000						
App by Air (3 gal)	appl			1.50	Jul	1.5000						
Warrior ZT	oz					3.0000						
Rice Management				1.00	Aug							
RICE MGT. LABOR	hour								0.20			
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15		
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00		
Handling & Storage				1.00	Aug							
HAND LABOR	hour								0.25			
Haul Rice	bu			1.00	Aug	156.0000						
Dry Rice	bu			1.00	Aug	156.0000						
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13		
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26			
TOTALS							0.70	0.70	2.89	0.53		

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

Fertilization decisions should be based on soil tests.

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

Table 19.D Estimated costs for field operations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 19.E Estimated monthly income and expense flows per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	904.80	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	67.54	11.78	11.38	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	118.58	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	1.03	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.09	2.72	3.62	3.62	10.55	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	14.64	11.54	11.54	11.54	7.90	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	5.44	8.01	2.10	2.10	10.99	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.38	2.80	1.01	0.58	0.84	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	255.13	195.28	88.38	66.89	147.28	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-255.13	-195.28	-88.38	-66.89	757.52	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-286.67	-481.95	-570.33	-637.22	120.30	108.17

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 19.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2022

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.35	4.64	4.93	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-398 -529	-375 -506	-353 -483	-330 -461	-308 -438	-285 -415	-262 -393	-240 -370	-217 -348	-194 -325	-172 -302
60	93.60	bu	-342 -472	-315 -445	-288 -418	-260 -391	-233 -364	-206 -337	-179 -310	-152 -282	-125 -255	-98 -228	-70 -201
70	109.20	bu	-286 -416	-254 -385	-222 -353	-191 -321	-159 -290	-127 -258	-96 -226	-64 -195	-32 -163	-1 -131	30 -100
80	124.80	bu	-230 -360	-194 -324	-157 -288	-121 -252	-85 -216	-49 -179	-13 -143	23 -107	59 -71	95 -35	131 1
90	140.40	bu	-174 -304	-133 -263	-92 -223	-51 -182	-11 -141	29 -101	70 -60	110 -19	151 21	192 61	233 102
100	156.00	bu	-118 -248	-72 -203	-27 -158	17 -112	62 -67	108 -22	153 22	198 68	243 113	289 158	334 203
110	171.60	bu	-61 -192	-12 -142	37 -92	87 -43	137 6	186 56	236 106	286 155	336 205	385 255	435 305
120	187.20	bu	-5 -136	48 -82	102 -27	157 26	211 80	265 135	319 189	374 243	428 297	482 352	537 406
130	202.80	bu	50 -80	109 -21	167 37	226 96	285 154	344 213	403 272	461 331	520 390	579 448	638 507
140	218.40	bu	106 -24	169 39	233 102	296 165	359 229	423 292	486 355	549 419	613 482	676 545	739 609
150	234.00	bu	162 31	230 99	298 167	366 235	433 303	501 371	569 439	637 506	705 574	773 642	841 710

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

Table 20.A Estimated costs per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.30	1.0000	9.30	_____
App by Air (3 gal)	appl	5.60	1.5000	8.40	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	19.88	0.5000	9.94	_____
DAP	cwt	35.88	0.5000	17.94	_____
Urea, Solid (46% N)	cwt	28.63	4.0000	114.52	_____
NBPT	pt	12.93	0.7500	9.70	_____
FUNGICIDES					
Ameristar Top	oz	2.51	10.0000	25.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	80.0000	8.80	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Command 3ME	pt	18.00	1.0000	18.00	_____
Sharpen	oz	5.99	2.0000	11.98	_____
Provisia	oz	0.76	31.0000	23.56	_____
Aim	oz	5.79	1.0000	5.79	_____
Permit	oz	21.96	0.7500	16.47	_____
Regiment	oz	45.50	0.2500	11.38	_____
INSECTICIDES					
Warrior ZT	oz	2.74	3.0000	8.22	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.25	77.0000	96.25	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	4.38	0.5000	2.19	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc. (Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	4.13	0.2500	1.03	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4228	6.45	_____
Harvesters	hour	15.27	0.1760	2.69	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL					
Tractors	gal	2.36	4.8970	11.56	_____
Harvesters	gal	2.36	2.9444	6.95	_____
Flood Irr.	gal	2.36	15.4779	36.52	_____
REPAIR & MAINTENANCE					
Implements	acre	9.02	1.0000	9.02	_____
Tractors	acre	3.28	1.0000	3.28	_____
Harvesters	acre	7.58	1.0000	7.58	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	10.14	1.0000	10.14	_____
TOTAL DIRECT EXPENSES				770.73	_____
FIXED EXPENSES					
Implements	acre	17.48	1.0000	17.48	_____
Tractors	acre	19.31	1.0000	19.31	_____
Harvesters	acre	28.15	1.0000	28.15	_____
Flood Irr.	acre	61.03	1.0000	61.03	_____
TOTAL FIXED EXPENSES				125.97	_____
TOTAL SPECIFIED EXPENSES				896.70	_____

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

Table 20.B Summary of estimated costs and returns per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

TOTAL INCOME				904.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.20	1.0000	49.20	_____
FERTILIZERS	acre	152.11	1.0000	152.11	_____
FUNGICIDES	acre	25.10	1.0000	25.10	_____
HERBICIDES	acre	101.26	1.0000	101.26	_____
INSECTICIDES	acre	8.22	1.0000	8.22	_____
SEED/PLANTS	acre	118.58	1.0000	118.58	_____
ADJUVANTS	acre	17.37	1.0000	17.37	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.27	0.5988	9.14	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.25	0.5389	8.22	_____
DIESEL FUEL	gal	2.36	23.3194	55.03	_____
REPAIR & MAINTENANCE	acre	31.68	1.0000	31.68	_____
INTEREST ON OP. CAP.	acre	10.14	1.0000	10.14	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 20.C Estimated resource use for field operations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

Fertilization decisions should be based on soil tests.

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

Table 20.D Estimated costs for field operations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

Fertilization decisions should be based on soil tests.

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

Table 20.E Estimated monthly income and expense flows per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	904.80	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.30	3.50	15.40	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	109.16	42.95	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.56	0.00	67.54	11.78	11.38	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.22	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	118.58	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	10.29	5.72	1.03	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.51	4.39
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.61	0.00	0.00	0.00	0.00	0.00	11.20	9.61	9.61	9.61	7.25	4.14
REPAIR & MAINTENANCE	2.35	0.00	0.00	0.00	0.00	0.00	4.42	7.46	1.55	1.55	10.79	3.56
INTEREST ON OP. CAP.	0.47	0.00	0.00	0.00	0.40	0.00	4.09	2.76	0.99	0.56	0.83	0.04
TOTAL DIRECT EXPENSES	13.58	0.00	0.00	0.00	17.96	0.00	237.27	193.22	86.34	64.85	145.38	12.13
NET INCOME	-13.58	0.00	0.00	0.00	-17.96	0.00	-237.27	-193.22	-86.34	-64.85	759.42	-12.13
NET INCOME TO DATE	-13.58	-13.58	-13.58	-13.58	-31.54	-31.54	-268.81	-462.03	-548.37	-613.22	146.20	134.07

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 20.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2022

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

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

APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2022

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (250-299 hp)	265 hp	391,000	300	8	13.64	15.27	32.19	40.72	88.18	151.14	239.33
Combine (300-349 hp)	325 hp	413,700	300	8	16.73	15.27	39.48	43.09	97.84	159.92	257.76
Combine (350-399 hp)	355 hp	437,900	300	8	18.27	15.27	43.11	45.61	104.00	169.27	273.27
Combine (400-449 hp)	425 hp	474,800	300	8	21.87	15.27	51.62	49.45	116.35	183.54	299.89
Combine (450-499hp)	475 hp	489,900	300	8	24.44	15.27	57.69	51.03	124.00	189.37	313.37
Tractor(20-39hp)CB	MFWD 30	28,600	600	8	1.54	15.27	3.64	0.89	19.80	5.01	24.81
Tractor(20-39hp)RB	MFWD 30	21,400	600	8	1.54	15.27	3.64	0.66	19.58	3.74	23.33
Tractor(40-59hp)CB	2WD 50	32,100	600	8	2.57	15.27	6.07	1.00	22.34	5.62	27.97
Tractor(40-59hp)CB	MFWD 50	42,600	600	8	2.57	15.27	6.07	1.33	22.67	7.46	30.13
Tractor(40-59hp)RB	2WD 50	23,300	600	8	2.57	15.27	6.07	0.72	22.07	4.08	26.15
Tractor(40-59hp)RB	MFWD 50	30,500	600	8	2.57	15.27	6.07	0.95	22.29	5.34	27.64
Tractor(60-89hp)CB	2WD 75	56,700	600	8	3.86	15.27	9.11	1.77	26.15	9.93	36.08
Tractor(60-89hp)CB	MFWD 75	60,500	600	8	3.86	15.27	9.11	1.89	26.27	10.59	36.87
Tractor(60-89hp)RB	2WD 75	43,100	600	8	3.86	15.27	9.11	1.34	25.72	7.55	33.27
Tractor(60-89hp)RB	MFWD 75	43,800	600	8	3.86	15.27	9.11	1.36	25.74	7.67	33.42
Tractor(90-119hp)CB	2WD 105	74,700	600	8	5.40	15.27	12.75	2.33	30.35	13.08	43.44
Tractor(90-119hp)CB	MFWD 105	94,500	600	8	5.40	15.27	12.75	2.95	30.97	16.55	47.53
Tractor(90-119hp)RB	2WD 105	67,100	600	8	5.40	15.27	12.75	2.09	30.12	11.75	41.87
Tractor(90-119hp)RB	MFWD 105	75,300	600	8	5.40	15.27	12.75	2.35	30.37	13.19	43.57
Tractor(120-139hp)CB	2WD 130	117,400	600	8	6.69	15.27	15.79	3.66	34.73	20.56	55.29
Tractor(120-139hp)CB	MFWD 130	131,100	600	8	6.69	15.27	15.79	4.09	35.15	22.96	58.12
Tractor(140-159hp)	2WD 150	116,100	600	8	7.72	15.27	18.22	3.62	37.11	20.34	57.45
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	15.27	18.22	4.46	37.96	25.05	63.01
Tractor(160-179hp)CB	MFWD 170	164,000	600	8	8.75	15.27	20.65	5.12	41.04	30.21	71.26
Tractor(180-199hp)CB	MFWD 190	206,000	600	8	9.77	15.27	23.08	6.43	44.78	37.95	82.74
Tractor(200-249hp)CB	MFWD 225	248,000	600	8	11.58	15.27	27.33	7.75	50.35	45.69	96.04
Tractor(250-349hp)CB	4WD 300	343,000	600	8	15.44	15.27	36.44	10.71	62.43	63.19	125.62
Tractor(250-349hp)CB	MFWD 300	324,000	600	8	15.44	15.27	36.44	10.12	61.83	59.69	121.53
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	15.27	36.44	10.28	61.99	60.61	122.60
Tractor(350-449hp)	Track 400	492,000	600	8	20.58	15.27	48.59	15.37	79.23	90.64	169.88
Tractor(350-449hp)CB	4WD 400	406,000	600	8	20.58	15.27	48.59	12.68	76.54	74.80	151.34
Tractor(450-550hp)CB	4WD 500	430,000	600	8	25.73	15.27	60.73	13.43	89.44	79.22	168.66
Tractor(450-550hp)CB	Track 500	496,000	600	8	25.73	15.27	60.73	15.50	91.50	91.38	182.88
Utility Vehicle	800 CC	12,200	200	8	0.70	15.27	1.96	1.90	19.14	7.07	26.21
Utility Vehicle	900 CC	15,800	200	8	1.00	15.27	2.81	2.46	20.54	9.16	29.71

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2022

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	6.27	7.82	10.79	24.89	40.05	64.95
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.27	10.95	14.13	31.36	52.46	83.83
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	4.19	7.32	9.61	21.12	35.66	56.79
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	5.31	9.41	15.85	30.57	58.84	89.42
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.19	7.43	12.51	24.14	46.45	70.60
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.27	12.52	21.58	40.38	80.11	120.50
Cotton Picker/Module	6R-30 (500)	854,000	200	8	25.73	0.218	5.31	13.25	29.12	47.68	108.07	155.76
Cotton Picker/Module	6R-38 (500)	854,000	200	8	25.73	0.172	4.19	10.46	22.99	37.65	85.32	122.97
Dry Applicator SP	70'300cuft	365,000	350	8	16.98	0.015	0.29	0.60	0.29	1.20	1.82	3.02
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.34	0.37	0.20	0.92	1.26	2.18
Sprayer 600-825gal	80' 175hp	234,000	350	8	11.81	0.013	0.26	0.36	0.16	0.79	1.02	1.82
Sprayer 600-825gal	90' 250hp	328,000	350	8	12.73	0.011	0.23	0.35	0.20	0.79	1.27	2.06
Sprayer 800gal	100' 250hp	333,000	350	8	14.15	0.010	0.20	0.35	0.18	0.75	1.16	1.91
Sprayer 800gal	80' 250hp	300,000	350	8	12.86	0.013	0.26	0.40	0.21	0.87	1.31	2.18
Sprayer 1000-1400gal	90' 275hp	332,000	350	8	14.15	0.010	0.20	0.35	0.18	0.75	1.16	1.91
Sprayer 1000gal	100' 300hp	379,000	350	8	15.44	0.010	0.20	0.38	0.21	0.80	1.32	2.13
Sprayer 1200+gal	120' 300hp	401,000	350	8	15.44	0.008	0.17	0.32	0.18	0.68	1.17	1.85

Notes:

Labor: includes allocated labor plus any additional labor from self-propelled machine.

Direct: Does not include interest on operating capital.

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Bed-Paratill w/ro	4R-30	MFWD 225	18,700	150	12	0.204	3.12	5.58	1.37	1.58	11.66	2.20	9.33	23.20
Bed-Paratill w/ro	4R-38	MFWD 225	18,700	150	12	0.160	2.45	4.39	1.08	1.24	9.18	1.73	7.35	18.27
Bed-Paratill w/ro	6R-38	MFWD 225	25,500	150	12	0.107	1.64	2.93	0.99	0.83	6.40	1.58	4.91	12.90
Bed-Rip/Disk Fold.	8R-38	MFWD 190	49,200	300	20	0.073	1.11	1.68	0.17	0.47	3.45	0.76	2.77	6.98
Bed-Rip/Disk Fold.	12R-30	MFWD 225	69,800	300	20	0.061	0.94	1.68	0.21	0.47	3.31	0.91	2.81	7.04
Bed-Rip/Disk Fold.	12R-38	MFWD 225	69,800	300	20	0.046	0.70	1.26	0.16	0.35	2.48	0.68	2.11	5.28
Bed-Rip/Disk Rigid	4R-30	MFWD 190	22,600	300	20	0.184	2.82	4.26	0.20	1.19	8.48	0.88	7.01	16.38
Bed-Rip/Disk Rigid	4R-38	MFWD 190	22,600	300	20	0.146	2.24	3.38	0.16	0.94	6.73	0.70	5.56	13.00
Bed-Rip/Disk Rigid	6R-30	MFWD 190	31,200	300	20	0.123	1.88	2.84	0.19	0.79	5.71	0.81	4.67	11.20
Bed-Rip/Disk Rigid	6R-38	MFWD 190	31,200	300	20	0.097	1.48	2.24	0.15	0.62	4.50	0.64	3.69	8.84
Bed-Rip/Disk Rigid	8R-30	MFWD 190	41,700	300	20	0.139	2.12	3.20	0.28	0.89	6.51	1.22	5.27	13.01
Bed-Rip/Disk Rigid	8R-38	MFWD 190	41,700	300	20	0.073	1.11	1.68	0.15	0.47	3.42	0.64	2.77	6.84
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	24,800	150	12	0.107	1.64	2.93	0.96	0.83	6.37	1.53	4.91	12.83
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	33,000	150	12	0.080	1.23	2.20	0.96	0.62	5.02	1.53	3.69	10.25
Bed-Subsoil Fold	8R-38	MFWD 225	49,200	150	12	0.080	1.23	2.20	1.43	0.62	5.50	2.29	3.69	11.48
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	69,800	150	12	0.053	0.82	1.46	1.35	0.41	4.06	2.16	2.45	8.68
Bed-Subsoil Fold	12R-38	MFWD 225	69,800	150	12	0.053	0.82	1.46	1.35	0.41	4.06	2.16	2.45	8.68
Bed-Subsoil Rigid	4R-30	MFWD 225	17,500	150	12	0.204	3.12	5.58	1.29	1.58	11.57	2.06	9.33	22.97
Bed-Subsoil Rigid	4R-38	MFWD 225	16,800	150	12	0.160	2.45	4.39	0.97	1.24	9.07	1.56	7.35	17.98
Bed-Subsoil Rigid	6R-30	MFWD 225	24,300	150	12	0.136	2.08	3.72	1.19	1.05	8.05	1.91	6.22	16.18
Bed-Subsoil Rigid	6R-38	MFWD 225	25,300	150	12	0.107	1.64	2.93	0.98	0.83	6.39	1.57	4.91	12.88
Bed-Subsoil Rigid	8R-30	MFWD 225	32,500	150	12	0.102	1.56	2.79	1.19	0.79	6.34	1.91	4.66	12.92
Bed-Subsoil Rigid	8R-38	MFWD 225	33,600	150	12	0.080	1.23	2.20	0.97	0.62	5.04	1.56	3.69	10.30
Bed/Disk (Hipper)	4R-38	MFWD 150	10,500	160	10	0.147	2.25	2.69	0.38	0.65	5.99	0.95	3.69	10.64
Bed/Disk (Hipper)	6R-38	MFWD 170	16,200	160	10	0.098	1.50	2.03	0.39	0.50	4.45	0.98	2.98	8.41
Bed/Disk (Hipper)	8R-30	MFWD 190	20,800	160	10	0.093	1.43	2.16	0.48	0.60	4.68	1.19	3.55	9.44
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	51,400	160	10	0.049	0.75	1.13	0.63	0.31	2.84	1.55	1.87	6.27
Bed/Disk (Hipper)	12R-30	MFWD 225	40,100	160	10	0.062	0.95	1.70	0.62	0.48	3.77	1.53	2.85	8.16
Bed/Disk (Hipper)	12R-38	MFWD 225	51,400	160	10	0.049	0.75	1.34	0.63	0.38	3.11	1.55	2.25	6.93
Bed/Disk (Hipper)	16R40	MFWD 300	60,800	160	10	0.035	0.54	1.28	0.53	0.35	2.72	1.32	2.11	6.15
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	22,000	160	10	0.074	1.13	1.71	0.40	0.47	3.72	1.00	2.81	7.54
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	22,700	160	10	0.074	1.13	1.71	0.42	0.47	3.73	1.03	2.81	7.58
Bed/Disk w/roller	8R-30	MFWD 190	26,900	160	10	0.093	1.43	2.16	0.63	0.60	4.82	1.54	3.55	9.93
Bed/Disk w/roller	8R-38	MFWD 190	30,800	160	10	0.074	1.13	1.71	0.57	0.47	3.88	1.40	2.81	8.10
Bed/Disk w/roller	12R-30/40	MFWD 225	50,900	160	10	0.062	0.95	1.70	0.79	0.48	3.94	1.95	2.85	8.75
Bed/Lister	4R-38	MFWD 150	18,100	160	8	0.228	3.48	4.16	0.96	1.02	9.63	2.85	5.72	18.21
Bed/Lister	6R-38	MFWD 150	20,400	160	8	0.120	1.83	2.19	0.57	0.53	5.13	1.69	3.01	9.84
Bed/Lister	8R-30	MFWD 190	24,900	160	8	0.114	1.74	2.63	0.66	0.73	5.78	1.96	4.33	12.07
Bed/Lister	8R-38	MFWD 190	25,000	160	8	0.090	1.37	2.08	0.52	0.58	4.57	1.55	3.42	9.55
Bed/Lister	8R-38 2x1	MFWD 190	40,400	160	8	0.060	0.91	1.38	0.56	0.38	3.26	1.67	2.28	7.21
Bed/Lister	12R-38	MFWD 225	40,400	160	8	0.060	0.91	1.64	0.56	0.46	3.59	1.67	2.74	8.01
Bed/Lister	16R-30	MFWD 225	54,700	160	8	0.035	0.53	0.96	0.45	0.27	2.21	1.32	1.60	5.15
Bed/Lister	16R40	MFWD 300	56,900	160	8	0.043	0.65	1.57	0.57	0.43	3.23	1.69	2.57	7.50
Bed/Lister-Roll-Fo	8R-38	MFWD 190	28,300	160	10	0.095	1.46	2.21	0.67	0.61	4.97	1.66	3.64	10.28
Bed/Lister-Roll-Fo	12R-30	MFWD 225	37,800	160	10	0.080	1.23	2.21	0.76	0.62	4.83	1.87	3.69	10.41
Bed/Lister-Roll-Fo	12R-38	MFWD 225	38,400	160	10	0.063	0.97	1.74	0.61	0.49	3.82	1.50	2.91	8.25
Bed/Lister-Roll-Fo	16R-30	MFWD 225	48,700	160	10	0.060	0.92	1.65	0.73	0.47	3.79	1.81	2.77	8.37
Bed/Lister-Roll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.46	2.21	0.59	0.61	4.89	1.47	3.64	10.00
Blade-Box	6'-7'	MFWD 105	1,500	200	20	0.020	0.30	0.25	0.01	0.04	0.62	0.01	0.26	0.89
Blade-Box	8'-10'	MFWD 105	3,890	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	12'-16'	MFWD 105	6,190	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'-7'	MFWD 105	1,280	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	8'-10'	MFWD 105	4,010	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	12'-16'	MFWD 105	10,790	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-38 (250)	MFWD 190	30,500	200	10	0.257	3.93	5.94	1.96	1.65	13.51	3.70	9.78	26.99
Boll Buggy	4R-38 (350)	MFWD 190	30,500	200	10	0.257	3.93	5.94	1.96	1.65	13.51	3.70	9.78	26.99
Boll Buggy	4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.63	3.97	1.31	1.10	9.03	2.47	6.53	18.04
Boll Buggy	6R-30 (355)	MFWD 190	30,500	200	10	0.218	3.33	5.03	1.66	1.40	11.43	3.13	8.28	22.85
Boll Buggy	6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.63	3.97	1.31	1.10	9.03	2.47	6.53	18.04
Chisel Plow-Folding	24'	MFWD 190	45,200	150	12	0.076	1.16	1.76	1.24	0.49	4.67	1.99	2.90	9.56
Chisel Plow-Folding	32'	MFWD 225	58,400	150	12	0.057	0.88	1.57	1.21	0.44	4.12	1.94	2.63	8.71
Chisel Plow-Folding	42'	MFWD 225	67,000	150	12	0.044	0.67	1.20	1.06	0.34	3.28	1.70	2.01	6.99
Chisel Plow-Folding	50'	MFWD 225	88,800	150	12	0.036	0.56	1.01	1.18	0.28	3.04	1.89	1.68	6.63
Chisel Plow-Folding	61'	MFWD 225	102,400	150	12	0.030	0.46	0.82	1.12	0.23	2.64	1.79	1.38	5.82
Chisel Plow-Rigid	10'	MFWD 170	7,930	150	12	0.184	2.82	3.81	0.52	0.94	8.11	0.84	5.58	14.54
Chisel Plow-Rigid	15'	2WD 130	13,800	150	12	0.123	1.88	1.94	0.61	0.45	4.89	0.98	2.53	8.41
Chisel Plow-Rigid	20'	MFWD 225	13,400	150	12	0.102	1.56	2.80	0.49	0.79	5.66	0.79	4.69	11.15
Cultivate	4R-30	2WD 105	15,800	150	10	0.206	3.14	2.63	0.86	0.48	7.13	2.13	2.69	11.96
Cultivate	4R-38	2WD 105	16,000	150	10	0.162	2.47	2.07	0.69	0.34	5.58	1.70	1.90	9.19
Cultivate	6R-30	MFWD 150	19,700	150	10	0.137	2.09	2.50	0.72	0.61	5.94	1.77	3.44	11.16
Cultivate	6R-38	MFWD 150	20,600	150	10	0.108	1.65	1.97	0.59	0.48	4.71	1.46	2.71	8.90
Cultivate	8R-30	MFWD 190	25,100	150	10	0.103	1.57	2.38	0.69	0.66	5.30	1.69	3.91	10.91
Cultivate	8R-38	MFWD 190	30,200	150	10	0.073	1.12	1.70	0.59	0.47	3.89	1.45	2.79	8.14
Cultivate	8R-38 2x1	MFWD 190	46,300	150	10	0.054	0.82	1.25	0.67	0.34	3.10	1.64	2.06	6.80
Cultivate	12R-30	MFWD 225	45,300	150	10	0.068	1.04	1.87	0.83	0.53	4.29	2.04	3.14	9.47
Cultivate	12R-38	MFWD 225	46,300	150	10	0.054	0.82	1.48	0.67	0.42	3.40	1.64	2.48	7.53
Cultivate	16R-30	MFWD 225	65,500	150	10	0.051	0.78	1.40	0.90	0.39	3.49	2.21	2.35	8.06
Cultivate & Post	4R-30	2WD 105	21,100	150	10	0.220	4.35	2.80	1.23	0.46	8.86	3.04	2.58	14.48
Cultivate & Post	4R-38	2WD 105	21,300	150	10	0.173	3.42	2.20	0.98	0.36	6.98	2.41	2.03	11.44

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--		Total
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost
			dollars	hours	years	hr/ac	-----\$/acre-----							
Cultivate & Post	6R-30	MFWD 150	25,100	150	10	0.146	2.90	2.67	0.98	0.65	7.21	2.41	3.67	13.30
Cultivate & Post	6R-38	MFWD 150	25,900	150	10	0.115	2.29	2.10	0.79	0.51	5.71	1.96	2.90	10.58
Cultivate & Post	8R-30	MFWD 190	30,400	150	10	0.110	2.17	2.53	0.89	0.70	6.31	2.19	4.17	12.68
Cultivate & Post	8R-38	MFWD 190	35,500	150	10	0.086	1.72	2.00	0.82	0.55	5.11	2.02	3.30	10.43
Cultivate & Post	8R-38 2x1	MFWD 190	51,600	150	10	0.057	1.14	1.33	0.79	0.37	3.65	1.95	2.19	7.80
Cultivate & Post	12R-30	MFWD 225	50,600	150	10	0.073	1.45	2.00	0.98	0.56	5.01	2.43	3.35	10.79
Cultivate & Post	12R-38	MFWD 225	51,600	150	10	0.057	1.14	1.58	0.79	0.44	3.97	1.95	2.64	8.57
Cultivate & Post	16R-30	MFWD 225	70,800	150	10	0.055	1.08	1.50	1.03	0.42	4.05	2.55	2.51	9.12
Disk & Incorporate	14'	2WD 130	32,200	200	10	0.149	2.96	2.36	1.44	0.54	7.32	2.36	3.07	12.76
Disk & Incorporate	20'	MFWD 190	79,300	200	10	0.092	1.83	2.13	2.19	0.59	6.75	3.60	3.50	13.86
Disk & Incorporate	24'	MFWD 190	52,200	200	10	0.087	1.72	2.01	1.36	0.56	5.67	2.23	3.31	11.22
Disk & Incorporate	28'	MFWD 225	62,300	200	10	0.074	1.48	2.04	1.39	0.57	5.50	2.29	3.41	11.21
Disk & Incorporate	32'	MFWD 225	67,900	200	10	0.065	1.29	1.78	1.33	0.50	4.92	2.18	2.99	10.10
Disk Harrow	14'	2WD 130	26,900	180	10	0.140	2.14	2.21	1.04	0.51	5.92	2.06	2.88	10.86
Disk Harrow	20'	MFWD 190	47,100	180	10	0.098	1.49	2.26	1.28	0.63	5.68	2.52	3.72	11.93
Disk Harrow	24'	MFWD 190	46,900	180	10	0.081	1.24	1.88	1.06	0.52	4.73	2.09	3.10	9.93
Disk Harrow	28'	MFWD 225	56,900	180	10	0.070	1.07	1.91	1.10	0.54	4.64	2.17	3.20	10.02
Disk Harrow	32'	MFWD 225	62,600	180	10	0.061	0.93	1.67	1.06	0.47	4.15	2.09	2.80	9.06
Disk Harrow	42'	MFWD 225	110,100	180	10	0.046	0.71	1.27	1.43	0.36	3.78	2.81	2.13	8.73
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.14	1.27	0.65	0.18	4.26	1.27	1.05	6.59
Disk Heavy	14'	MFWD 150	26,900	180	10	0.145	2.22	2.65	1.09	0.65	6.63	2.14	3.65	12.43
Disk Heavy	20'	MFWD 190	73,900	180	10	0.097	1.48	2.24	1.99	0.62	6.35	3.92	3.69	13.97
Disk Heavy	28'	MFWD 225	56,900	180	10	0.075	1.15	2.06	1.19	0.58	5.00	2.35	3.45	10.81
Disk Ripper	15'	MFWD 225	50,800	180	10	0.136	2.08	3.72	1.92	1.05	8.78	3.77	6.22	18.78
Ditcher		2WD 130	6,480	200	10	0.020	0.30	0.31	0.05	0.07	0.74	0.06	0.41	1.22
Ditcher (1m/160a)		2WD 130	6,480	200	10	0.009	0.14	0.14	0.02	0.03	0.34	0.02	0.19	0.57
Fert Appl (Liquid)	4R-38	MFWD 150	19,000	150	8	0.154	3.06	2.81	1.95	0.69	8.53	2.05	3.87	14.46
Fert Appl (Liquid)	6R-30	MFWD 170	19,800	150	8	0.130	2.59	2.70	1.72	0.67	7.69	1.81	3.95	13.47
Fert Appl (Liquid)	6R-38	MFWD 170	19,800	150	8	0.103	2.04	2.13	1.36	0.52	6.07	1.43	3.12	10.63
Fert Appl (Liquid)	8R-30	MFWD 190	20,100	150	8	0.098	1.94	2.26	1.31	0.63	6.15	1.38	3.72	11.27
Fert Appl (Liquid)	8R-38	MFWD 190	22,600	150	8	0.077	1.53	1.79	1.16	0.49	4.99	1.22	2.94	9.17
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	25,200	150	8	0.051	1.02	1.19	0.86	0.33	3.41	0.91	1.96	6.29
Fert Appl (Liquid)	12R-30	MFWD 225	25,900	150	8	0.078	1.55	2.14	1.35	0.60	5.66	1.42	3.58	10.68
Fert Appl (Liquid)	12R-38	MFWD 225	23,700	150	8	0.051	1.02	1.41	0.81	0.40	3.65	0.85	2.36	6.87
Field Cult & Inc	42'	MFWD 225	70,900	100	10	0.037	0.74	1.03	0.66	0.29	2.74	2.63	1.72	7.10
Field Cult & Inc	50'	MFWD 225	76,700	100	10	0.031	0.62	0.86	0.60	0.24	2.34	2.39	1.44	6.19
Field Cult & Inc Fld	24'	MFWD 170	37,200	100	10	0.066	1.30	1.36	0.61	0.33	3.62	2.41	1.99	8.04
Field Cult & Inc Fld	32'	MFWD 190	49,800	100	10	0.049	0.98	1.14	0.61	0.31	3.06	2.42	1.88	7.37
Field Cult & Inc Rdg	12'	2WD 150	18,200	100	10	0.132	2.61	2.40	0.60	0.47	6.10	2.36	2.68	11.16
Field Cultivate Fld	24'	MFWD 170	31,800	100	10	0.062	0.95	1.28	0.49	0.31	3.04	1.94	1.87	6.87
Field Cultivate Fld	32'	MFWD 190	44,400	100	10	0.046	0.71	1.07	0.51	0.30	2.60	2.03	1.77	6.41
Field Cultivate Fld	42'	MFWD 225	60,600	100	10	0.035	0.54	0.97	0.53	0.27	2.32	2.11	1.62	6.07
Field Cultivate Fld	50'	MFWD 225	67,600	100	10	0.029	0.45	0.81	0.50	0.23	2.00	1.98	1.36	5.35
Field Cultivate Rdg	12'	2WD 150	12,900	100	10	0.124	1.90	2.26	0.40	0.45	5.02	1.57	2.53	9.12
Grain Cart Corn	500 bu	MFWD 190	29,100	200	12	0.025	0.38	0.58	0.19	0.16	1.33	0.31	0.96	2.61
Grain Cart Corn	700 bu	MFWD 190	44,900	200	12	0.025	0.38	0.58	0.30	0.16	1.44	0.49	0.96	2.89
Grain Cart Corn	1000 bu	MFWD 225	59,400	200	12	0.025	0.38	0.69	0.40	0.19	1.68	0.65	1.15	3.48
Grain Cart Rice	500 bu	MFWD 190	29,100	200	12	0.062	0.95	1.44	0.49	0.40	3.29	0.78	2.37	6.45
Grain Cart Rice	700 bu	MFWD 190	44,900	200	12	0.055	0.83	1.26	0.66	0.35	3.13	1.06	2.08	6.28
Grain Cart Rice	1000 bu	MFWD 190	59,400	200	12	0.045	0.69	1.05	0.73	0.29	2.79	1.17	1.73	5.70
Grain Cart Soybean	500 bu	MFWD 190	29,100	200	12	0.025	0.38	0.58	0.20	0.16	1.34	0.32	0.96	2.63
Grain Cart Soybean	700 bu	MFWD 190	44,900	200	12	0.021	0.32	0.49	0.25	0.13	1.21	0.41	0.80	2.42
Grain Cart Soybean	1000 bu	MFWD 190	59,400	200	12	0.021	0.32	0.49	0.34	0.13	1.29	0.54	0.80	2.64
Grain Cart Wht/Sor	500 bu	MFWD 190	29,100	200	12	0.025	0.38	0.58	0.20	0.16	1.34	0.32	0.96	2.63
Grain Cart Wht/Sor	700 bu	MFWD 190	44,900	200	12	0.021	0.32	0.49	0.25	0.13	1.21	0.41	0.80	2.42
Grain Cart Wht/Sor	1000 bu	MFWD 190	59,400	200	12	0.021	0.32	0.49	0.34	0.13	1.29	0.54	0.80	2.64
Grain Drill	10'	2WD 130	28,700	150	8	0.188	4.58	2.97	2.02	0.69	10.28	3.59	3.87	17.76
Grain Drill	12'	2WD 130	28,200	150	8	0.157	3.82	2.48	1.66	0.57	8.54	2.94	3.23	14.72
Grain Drill	15'	MFWD 150	34,400	150	8	0.125	3.05	2.29	1.62	0.56	7.53	2.87	3.14	13.55
Grain Drill	20'	MFWD 170	41,900	150	8	0.094	2.29	1.94	1.48	0.48	6.20	2.62	2.84	11.68
Grain Drill	24'	MFWD 190	67,300	150	8	0.078	1.91	1.81	1.98	0.50	6.21	3.51	2.98	12.70
Grain Drill	30'	MFWD 225	68,900	150	8	0.062	1.52	1.71	1.62	0.48	5.35	2.87	2.87	11.10
Grain Drill	35'	MFWD 225	93,600	150	8	0.053	1.31	1.47	1.89	0.41	5.09	3.35	2.46	10.90
Grain Drill & Pre	10'	2WD 130	34,000	150	8	0.203	4.94	3.20	2.58	0.74	11.48	4.58	4.17	20.24
Grain Drill & Pre	12'	2WD 130	33,500	150	8	0.169	4.11	2.67	2.12	0.62	9.53	3.76	3.48	16.78
Grain Drill & Pre	15'	MFWD 150	39,800	150	8	0.135	3.29	2.46	2.02	0.60	8.38	3.58	3.39	15.35
Grain Drill & Pre	20'	MFWD 170	47,200	150	8	0.101	2.47	2.09	1.79	0.52	6.88	3.18	3.06	13.13
Grain Drill & Pre	24'	MFWD 190	72,600	150	8	0.084	2.05	1.95	2.30	0.54	6.86	4.08	3.21	14.15
Grain Drill & Pre	30'	MFWD 225	74,200	150	8	0.067	1.64	1.85	1.88	0.52	5.90	3.33	3.09	12.33
Grain Drill & Pre	35'	MFWD 225	104,000	150	8	0.058	1.41	1.58	2.26	0.44	5.70	4.01	2.65	12.37
Grain Drill & Pre T	8R-38	MFWD 225	57,000	150	8	0.062	1.52	1.71	1.34	0.48	5.07	2.38	2.87	10.33
Harrow - Folding	24'	MFWD 190	13,800	200	10	0.064	0.98	1.49	0.31	0.41	3.21	0.43	2.45	6.10
Harrow - Folding	30'	MFWD 190	15,300	200	10	0.051	0.79	1.19	0.27	0.33	2.59	0.38	1.96	4.94
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.59	0.89	0.28	0.24	2.02	0.40	1.47	3.90
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.49	0.88	0.29	0.25	1.92	0.41	1.47	3.81
Header - Corn	6R-30	265 hp	54,200	300	8	0.170	2.60	5.48	2.30	6.93	17.32	3.23	25.73	46.29
Header - Corn	6R-38	265 hp	53,800	300	8	0.134	2.05	4.32	1.80	5.47	13.66	2.53	20.31	36.51
Header - Corn	8R-30	265 hp	71,200	300	8	0.127	1.95	4.11	2.27	5.20	13.53	3.18	19.30	36.02

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Header - Corn	8R-38	325 hp	72,200	300	8	0.100	1.54	3.98	1.82	4.35	11.70	2.55	16.14	30.40
Header - Corn	12R-20	325 hp	105,000	300	8	0.127	1.95	5.04	3.35	5.50	15.84	4.69	20.42	40.97
Header - Corn	12R-30	325 hp	118,000	300	8	0.085	1.30	3.36	2.51	3.66	10.84	3.52	13.61	27.97
Header - Draper (CL)	25' Rigid	265 hp	74,100	300	8	0.203	3.10	6.53	3.44	8.27	21.35	5.00	30.69	57.05
Header - Draper (CL)	30' Rigid	325 hp	78,600	300	8	0.169	2.58	6.68	3.04	7.29	19.60	4.42	27.06	51.09
Header - Draper (CL)	36' Rigid	355 hp	82,300	300	8	0.141	2.15	6.08	2.65	6.43	17.32	3.85	23.87	45.05
Header - Draper (CL)	40' Rigid	425 hp	86,900	300	8	0.126	1.93	6.55	2.52	6.27	17.29	3.66	23.29	44.25
Header - Draper (SL)	25' Rigid	325 hp	74,100	300	8	0.176	2.68	6.94	2.98	7.58	20.20	4.33	28.14	52.68
Header - Draper (SL)	30' Rigid	325 hp	78,600	300	8	0.146	2.23	5.79	2.64	6.32	16.99	3.83	23.45	44.27
Header - Draper (SL)	36' Rigid	355 hp	82,300	300	8	0.122	1.86	5.26	2.30	5.57	15.01	3.34	20.68	39.04
Header - Draper (SL)	40' Rigid	425 hp	86,900	300	8	0.110	1.67	5.67	2.19	5.44	14.98	3.17	20.18	38.35
Header -RiceStrp(CL)	20'	265 hp	50,600	300	8	0.253	3.87	8.17	3.21	10.33	25.59	4.50	38.36	68.46
Header -RiceStrp(CL)	24'	325 hp	54,000	300	8	0.211	3.23	8.35	2.85	9.11	23.55	4.00	33.82	61.38
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.42	6.26	2.41	6.83	17.93	3.37	25.37	46.68
Header -RiceStrp(SL)	20'	265 hp	50,600	300	8	0.220	3.35	7.08	2.78	8.96	22.18	3.90	33.25	59.33
Header -RiceStrp(SL)	24'	325 hp	54,000	300	8	0.183	2.79	7.23	2.47	7.90	20.41	3.46	29.31	53.20
Header -RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	2.09	5.42	2.09	5.92	15.54	2.92	21.98	40.46
Header -Soybean	22' Flex	265 hp	33,800	300	8	0.116	1.77	3.73	0.98	4.72	11.21	1.37	17.54	30.14
Header -Soybean	25' Flex	325 hp	37,000	300	8	0.102	1.56	4.03	0.94	4.40	10.94	1.32	16.33	28.60
Header -Soybean	30' Flex	325 hp	44,700	300	8	0.085	1.30	3.36	0.95	3.66	9.28	1.33	13.61	24.23
Header -Soybean	35' Flex	355 hp	52,200	300	8	0.072	1.11	3.14	0.95	3.32	8.54	1.33	12.35	22.23
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.77	3.73	0.57	4.72	10.81	0.80	17.54	29.16
Header Wheat/Sorghum	25' Rigid	325 hp	25,400	300	8	0.102	1.56	4.03	0.64	4.40	10.64	0.90	16.33	27.89
Header Wheat/Sorghum	30' Rigid	325 hp	29,100	300	8	0.085	1.30	3.36	0.61	3.66	8.95	0.86	13.61	23.43
Land Plane	50'x16'	MFWD 190	11,100	200	10	0.151	2.31	3.50	0.33	0.97	7.12	0.82	5.75	13.71
Levee Pull & Seed	8 Blade	MFWD 170	12,000	100	10	0.003	0.05	0.07	0.00	0.01	0.15	0.04	0.10	0.30
Levee Pull (1m/80a)	8 blade	MFWD 170	8,760	100	10	0.003	0.05	0.07	0.00	0.01	0.15	0.03	0.10	0.29
Levee Splitter (1/80	32"	MFWD 150	3,860	100	10	0.004	0.06	0.07	0.00	0.01	0.16	0.01	0.10	0.28
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	6.27	5.94	2.23	1.65	16.11	4.21	9.78	30.11
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	6.27	5.94	2.23	1.65	16.11	4.21	9.78	30.11
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	4.19	3.97	1.49	1.10	10.77	2.81	6.53	20.12
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	5.31	5.03	1.89	1.40	13.64	3.56	8.28	25.49
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	4.19	3.97	1.49	1.10	10.77	2.81	6.53	20.12
NT Grain Drill	10'	2WD 130	34,900	150	8	0.235	5.73	3.72	3.08	0.86	13.40	5.46	4.84	23.72
NT Grain Drill	12'	2WD 130	46,900	150	8	0.163	3.98	2.58	2.87	0.60	10.04	5.10	3.36	18.51
NT Grain Drill	15'	MFWD 150	56,900	150	8	0.130	3.18	2.38	2.79	0.58	8.95	4.95	3.28	17.18
NT Grain Drill	20'	MFWD 170	68,700	150	8	0.098	2.38	2.02	2.53	0.50	7.45	4.48	2.96	14.90
NT Grain Drill	24'	MFWD 190	98,000	150	8	0.081	1.99	1.88	3.00	0.52	7.41	5.33	3.10	15.85
NT Grain Drill	30'	MFWD 225	104,300	150	8	0.065	1.59	1.78	2.56	0.50	6.45	4.53	2.99	13.98
NT Grain Drill & Pre	10'	2WD 130	40,200	150	8	0.211	5.14	3.34	3.18	0.77	12.45	5.65	4.35	22.45
NT Grain Drill & Pre	12'	2WD 130	52,300	150	8	0.176	4.28	2.78	3.45	0.64	11.17	6.12	3.62	20.92
NT Grain Drill & Pre	15'	MFWD 150	62,200	150	8	0.141	3.43	2.56	3.28	0.63	9.92	5.82	3.53	19.28
NT Grain Drill & Pre	20'	MFWD 170	74,000	150	8	0.105	2.57	2.18	2.93	0.54	8.23	5.20	3.19	16.63
NT Grain Drill & Pre	24'	MFWD 190	103,000	150	8	0.088	2.14	2.03	3.40	0.56	8.15	6.03	3.34	17.52
NT Grain Drill & Pre	30'	MFWD 225	110,000	150	8	0.070	1.71	1.92	2.90	0.54	7.09	5.15	3.22	15.47
NT Plant&Pre-Folding	8R-38	MFWD 170	67,800	150	8	0.083	2.03	1.72	2.12	0.42	6.31	3.76	2.52	12.60
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	107,000	150	8	0.055	1.35	1.14	2.23	0.28	5.02	3.95	1.68	10.66
NT Plant&Pre-Folding	12R-20	MFWD 190	82,800	150	8	0.105	2.57	2.44	3.28	0.68	8.97	5.82	4.01	18.81
NT Plant&Pre-Folding	12R-30	MFWD 190	94,600	150	8	0.070	1.71	1.62	2.50	0.45	6.29	4.43	2.67	13.40
NT Plant&Pre-Folding	12R-38	MFWD 190	107,000	150	8	0.055	1.35	1.28	2.23	0.35	5.23	3.95	2.11	11.30
NT Plant&Pre-Folding	16R-30	MFWD 190	142,000	150	8	0.052	1.28	1.22	2.81	0.34	5.66	4.99	2.00	12.66
NT Plant&Pre-Folding	23R-15	MFWD 190	192,000	150	8	0.073	1.78	1.69	5.28	0.47	9.24	9.37	2.78	21.40
NT Plant&Pre-Folding	24R-20	MFWD 190	214,000	150	8	0.052	1.28	1.22	4.24	0.34	7.09	7.52	2.00	16.61
NT Plant&Pre-Folding	24R-30	MFWD 190	223,000	150	8	0.035	0.85	0.81	2.94	0.22	4.84	5.22	1.33	11.41
NT Plant&Pre-Folding	31R-15	MFWD 225	232,000	150	8	0.054	1.32	1.49	4.75	0.42	8.00	8.42	2.49	18.92
NT Plant&Pre-Folding	32R-15	MFWD 225	230,000	150	8	0.052	1.28	1.44	4.56	0.40	7.70	8.08	2.41	18.20
NT Plant&Pre-Rigid	4R-30	2WD 130	33,800	150	8	0.211	5.14	3.34	2.68	0.77	11.94	4.75	4.35	21.04
NT Plant&Pre-Rigid	4R-38	2WD 130	34,800	150	8	0.166	4.05	2.63	2.17	0.61	9.46	3.85	3.42	16.74
NT Plant&Pre-Rigid	6R-30	MFWD 150	43,600	150	8	0.141	3.43	2.56	2.30	0.63	8.93	4.08	3.53	16.55
NT Plant&Pre-Rigid	6R-38	MFWD 150	42,700	150	8	0.111	2.70	2.02	1.78	0.49	7.01	3.15	2.78	12.96
NT Plant&Pre-Rigid	8R-30	MFWD 170	54,200	150	8	0.105	2.57	2.18	2.14	0.54	7.44	3.80	3.19	14.45
NT Plant&Pre-Rigid	8R-38	MFWD 170	52,100	150	8	0.083	2.03	1.72	1.63	0.42	5.82	2.89	2.52	11.24
NT Plant&Pre-Rigid	11R-15	MFWD 170	65,100	150	8	0.143	3.50	2.97	3.51	0.73	10.72	6.22	4.34	21.29
NT Plant&Pre-Rigid	11R-20	MFWD 170	64,300	150	8	0.115	2.81	2.38	2.78	0.59	8.57	4.93	3.49	17.01
NT Plant&Pre-Rigid	12R-20	MFWD 190	66,600	150	8	0.105	2.57	2.44	2.64	0.68	8.33	4.68	4.01	17.03
NT Plant&Pre-Rigid	12R-30	MFWD 190	86,500	150	8	0.070	1.71	1.62	2.28	0.45	6.08	4.05	2.67	12.81
NT Plant&Pre-Rigid	15R-15	MFWD 190	87,300	150	8	0.113	2.75	2.61	3.70	0.72	9.79	6.56	4.29	20.65
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	173,000	150	8	0.055	1.35	1.52	3.61	0.43	6.91	6.40	2.54	15.86
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	134,900	150	8	0.083	2.03	2.28	4.22	0.64	9.19	7.49	3.82	20.51
NT Plant-Folding	8R-38	MFWD 170	62,500	150	8	0.077	1.88	1.60	1.81	0.39	5.70	3.22	2.34	11.28
NT Plant-Folding	8R-38 2x1	MFWD 170	96,300	150	8	0.051	1.25	1.06	1.86	0.26	4.45	3.30	1.56	9.32
NT Plant-Folding	12R-20	MFWD 190	77,500	150	8	0.098	2.38	2.26	2.85	0.63	8.14	5.05	3.72	16.92
NT Plant-Folding	12R-30	MFWD 190	84,300	150	8	0.065	1.59	1.51	2.06	0.42	5.59	3.66	2.48	11.74
NT Plant-Folding	12R-38	MFWD 190	96,300	150	8	0.051	1.25	1.19	1.86	0.33	4.65	3.30	1.96	9.92
NT Plant-Folding	16R-30	MFWD 190	132,000	150	8	0.049	1.19	1.13	2.43	0.31	5.07	4.30	1.86	11.24
NT Plant-Folding	23R-15	MFWD 190	182,000	150	8	0.068	1.65	1.57	4.65	0.43	8.32	8.24	2.58	19.16
NT Plant-Folding	24R-20	MFWD 190	204,000	150	8	0.049	1.19	1.13	3.75	0.31	6.40	6.65	1.86	14.92
NT Plant-Folding	24R-30	MFWD 190	208,000	150	8	0.032	0.79	0.75	2.55	0.21	4.31	4.52	1.24	10.08
NT Plant-Folding	31R-15	MFWD 225	222,000	150	8	0.050	1.23	1.38	4.22	0.39	7.24	7.48	2.31	17.05

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
NT Plant-Folding	32R-15	MFWD 225	219,000	150	8	0.049	1.19	1.34	4.03	0.38	6.95	7.14	2.24	16.34
NT Plant-Rigid	4R-30	2WD 130	28,400	150	8	0.196	4.77	3.10	2.09	0.72	10.69	3.70	4.04	18.44
NT Plant-Rigid	4R-38	2WD 130	29,500	150	8	0.154	3.76	2.44	1.71	0.56	8.48	3.03	3.18	14.69
NT Plant-Rigid	6R-30	MFWD 150	38,300	150	8	0.130	3.18	2.38	1.88	0.58	8.03	3.33	3.28	14.65
NT Plant-Rigid	6R-38	MFWD 150	37,300	150	8	0.103	2.51	1.88	1.44	0.46	6.30	2.56	2.58	11.45
NT Plant-Rigid	8R-30	MFWD 170	48,900	150	8	0.098	2.38	2.02	1.80	0.50	6.72	3.19	2.96	12.88
NT Plant-Rigid	8R-38	MFWD 170	46,800	150	8	0.077	1.88	1.60	1.36	0.39	5.25	2.41	2.34	10.01
NT Plant-Rigid	11R-15	MFWD 170	59,700	150	8	0.133	3.25	2.75	2.99	0.68	9.68	5.30	4.03	19.02
NT Plant-Rigid	11R-20	MFWD 170	59,000	150	8	0.107	2.61	2.21	2.37	0.55	7.75	4.20	3.24	15.20
NT Plant-Rigid	12R-20	MFWD 190	61,200	150	8	0.098	2.38	2.26	2.25	0.63	7.54	3.99	3.72	15.26
NT Plant-Rigid	12R-30	MFWD 190	76,200	150	8	0.065	1.59	1.51	1.87	0.42	5.39	3.31	2.48	11.19
NT Plant-Rigid	15R-15	MFWD 190	77,000	150	8	0.105	2.55	2.42	3.03	0.67	8.68	5.37	3.98	18.05
NT Plant-TwinRow	12R-30/40	MFWD 225	163,000	150	8	0.051	1.25	1.41	3.15	0.40	6.23	5.59	2.36	14.19
NT Plant-TwinRow	8R-30/40	MFWD 225	130,000	150	8	0.077	1.88	2.12	3.78	0.60	8.39	6.70	3.54	18.65
Peanut Cond.& Lifter	6-Row	MFWD 190	15,200	300	20	0.100	1.52	2.30	0.25	0.64	4.73	0.33	3.79	8.86
Peanut Conditioner	6-Row	MFWD 190	18,500	300	20	0.100	1.52	2.30	0.37	0.64	4.84	0.35	3.79	8.99
Peanut Dig/Invertor	4R-30	MFWD 190	38,600	300	15	0.235	3.60	5.44	2.26	1.51	12.82	2.50	8.95	24.28
Peanut Dig/Invertor	4R-38	MFWD 190	38,600	300	15	0.186	2.84	4.29	1.78	1.19	10.12	1.97	7.06	19.17
Peanut Dig/Invertor	6R-38	MFWD 190	54,700	300	15	0.124	1.89	2.86	1.19	0.79	6.74	1.86	4.70	13.32
Peanut Dump Cart	6-Row	MFWD 190	57,400	300	20	0.310	4.73	7.15	1.03	1.99	14.92	3.76	11.76	30.45
Peanut Harvester	4R-30	MFWD 225	160,000	300	20	0.849	12.97	23.23	7.70	6.58	50.50	25.74	38.83	115.08
Peanut Harvester	4R-38	MFWD 225	160,000	300	20	0.934	14.27	25.54	8.47	7.24	55.53	29.98	42.70	128.21
Peanut Harvester	6R-38	MFWD 225	175,000	300	20	0.625	9.54	17.08	5.28	4.84	36.75	21.92	28.55	87.24
Peanut Lifter	6-Row	MFWD 225	7,440	300	20	0.100	1.52	2.73	0.15	0.77	5.18	0.14	4.56	9.89
Peanut Plt&Pre Fold.	12R-38	MFWD 190	94,300	150	8	0.080	1.95	1.85	2.84	0.51	7.17	5.03	3.05	15.26
Peanut Plt&Pre Rigid	8R-30	MFWD 190	46,000	150	8	0.152	3.71	3.52	2.63	0.98	10.86	4.67	5.79	21.33
Peanut Plt&Pre Rigid	8R-38	MFWD 190	43,900	150	8	0.120	2.93	2.78	1.98	0.77	8.49	3.52	4.58	16.59
Peanut Ptl&PreTwin	8R-30/40	MFWD 190	127,000	150	8	0.120	2.93	2.78	5.75	0.77	12.25	10.19	4.58	27.03
Pipe Spool 160ac	1/4m roll	2WD 130	6,500	15	12	0.003	0.10	0.04	0.01	0.01	0.17	0.11	0.06	0.35
Pipe Trailer 1m/160a	30'	2WD 130	1,980	100	15	0.003	0.19	0.05	0.00	0.01	0.26	0.00	0.07	0.35
Plant & Pre-Folding	8R-38	MFWD 170	59,600	150	8	0.080	1.95	1.65	1.79	0.41	5.81	3.17	2.42	11.42
Plant & Pre-Folding	8R-38 2x1	MFWD 170	94,300	150	8	0.053	1.30	1.10	1.88	0.27	4.56	3.34	1.61	9.53
Plant & Pre-Folding	12R-20	MFWD 190	70,600	150	8	0.101	2.47	2.34	2.68	0.65	8.15	4.76	3.85	16.77
Plant & Pre-Folding	12R-30	MFWD 190	82,400	150	8	0.067	1.64	1.56	2.09	0.43	5.73	3.70	2.56	12.01
Plant & Pre-Folding	12R-38	MFWD 190	94,300	150	8	0.053	1.30	1.23	1.88	0.34	4.76	3.34	2.02	10.14
Plant & Pre-Folding	16R-30	MFWD 190	126,000	150	8	0.050	1.23	1.17	2.39	0.32	5.13	4.25	1.92	11.31
Plant & Pre-Folding	23R-15	MFWD 190	169,000	150	8	0.070	1.71	1.62	4.46	0.45	8.26	7.91	2.67	18.86
Plant & Pre-Folding	24R-20	MFWD 190	190,000	150	8	0.050	1.23	1.17	3.61	0.32	6.35	6.41	1.92	14.68
Plant & Pre-Folding	24R-30	MFWD 190	198,000	150	8	0.033	0.82	0.78	2.51	0.21	4.33	4.45	1.28	10.07
Plant & Pre-Folding	31R-15	MFWD 225	200,000	150	8	0.052	1.27	1.43	3.93	0.40	7.05	6.97	2.39	16.42
Plant & Pre-Folding	32R-15	MFWD 225	197,000	150	8	0.050	1.23	1.38	3.75	0.39	6.76	6.64	2.31	15.73
Plant & Pre-Rigid	4R-30	2WD 130	29,700	150	8	0.203	4.94	3.20	2.26	0.74	11.15	4.00	4.17	19.34
Plant & Pre-Rigid	4R-38	2WD 130	30,800	150	8	0.159	3.89	2.52	1.84	0.58	8.84	3.27	3.28	15.41
Plant & Pre-Rigid	6R-30	MFWD 150	37,500	150	8	0.135	3.29	2.46	1.90	0.60	8.26	3.37	3.39	15.03
Plant & Pre-Rigid	6R-38	MFWD 150	36,600	150	8	0.106	2.60	1.94	1.46	0.47	6.49	2.59	2.67	11.76
Plant & Pre-Rigid	8R-30	MFWD 170	46,000	150	8	0.101	2.47	2.09	1.75	0.52	6.83	3.10	3.06	13.01
Plant & Pre-Rigid	8R-38	MFWD 170	43,900	150	8	0.080	1.95	1.65	1.32	0.41	5.34	2.34	2.42	10.11
Plant & Pre-Rigid	11R-15	MFWD 170	53,900	150	8	0.148	3.60	3.06	2.99	0.75	10.42	5.30	4.47	20.21
Plant & Pre-Rigid	11R-20	MFWD 170	53,100	150	8	0.110	2.69	2.29	2.20	0.56	7.76	3.91	3.35	15.03
Plant & Pre-Rigid	12R-20	MFWD 190	54,300	150	8	0.101	2.47	2.34	2.06	0.65	7.53	3.66	3.85	15.05
Plant & Pre-Rigid	12R-30	MFWD 190	74,200	150	8	0.067	1.64	1.56	1.88	0.43	5.52	3.33	2.56	11.43
Plant & Pre-Rigid	15R-15	MFWD 190	72,000	150	8	0.108	2.64	2.50	2.93	0.69	8.78	5.19	4.12	18.09
Plant & Pre-TwinRow	12R-30/40	MFWD 225	160,700	150	8	0.053	1.30	1.46	3.22	0.41	6.39	5.70	2.44	14.54
Plant & Pre-TwinRow	8R-30/40	MFWD 225	127,000	150	8	0.080	1.95	2.19	3.82	0.62	8.59	6.77	3.66	19.03
Plant - Folding	8R-38	MFWD 170	54,300	150	8	0.074	1.81	1.53	1.51	0.38	5.25	2.68	2.25	10.19
Plant - Folding	8R-38 2x1	MFWD 170	84,000	150	8	0.049	1.20	1.02	1.56	0.25	4.04	2.77	1.49	8.31
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.29	2.17	2.30	0.60	7.38	4.08	3.57	15.04
Plant - Folding	12R-30	MFWD 190	72,100	150	8	0.062	1.52	1.45	1.69	0.40	5.08	3.01	2.38	10.48
Plant - Folding	12R-38	MFWD 190	84,000	150	8	0.049	1.20	1.14	1.56	0.31	4.23	2.77	1.88	8.88
Plant - Folding	16R-30	MFWD 190	115,000	150	8	0.047	1.14	1.08	2.03	0.30	4.57	3.60	1.78	9.96
Plant - Folding	23R-15	MFWD 190	158,000	150	8	0.065	1.59	1.51	3.87	0.42	7.40	6.87	2.48	16.76
Plant - Folding	24R-20	MFWD 190	179,000	150	8	0.047	1.14	1.08	3.16	0.30	5.70	5.60	1.78	13.09
Plant - Folding	24R-30	MFWD 190	184,000	150	8	0.031	0.76	0.72	2.16	0.20	3.86	3.84	1.19	8.89
Plant - Folding	31R-15	MFWD 225	190,000	150	8	0.048	1.18	1.33	3.47	0.37	6.36	6.15	2.22	14.74
Plant - Folding	32R-15	MFWD 225	187,000	150	8	0.047	1.14	1.28	3.30	0.36	6.10	5.85	2.15	14.11
Plant - Rigid	4R-30	2WD 130	24,400	150	8	0.188	4.58	2.97	1.72	0.69	9.98	3.05	3.87	16.91
Plant - Rigid	4R-38	2WD 130	25,400	150	8	0.148	3.61	2.34	1.41	0.54	7.91	2.50	3.05	13.47
Plant - Rigid	6R-30	MFWD 150	32,200	150	8	0.125	3.05	2.29	1.51	0.56	7.42	2.69	3.14	13.26
Plant - Rigid	6R-38	MFWD 150	31,200	150	8	0.099	2.41	1.80	1.16	0.44	5.82	2.05	2.48	10.37
Plant - Rigid	8R-30	MFWD 170	40,700	150	8	0.094	2.29	1.94	1.43	0.48	6.16	2.55	2.84	11.56
Plant - Rigid	8R-38	MFWD 170	38,600	150	8	0.074	1.81	1.53	1.07	0.38	4.81	1.91	2.25	8.97
Plant - Rigid	11R-15	MFWD 170	48,500	150	8	0.137	3.34	2.84	2.50	0.70	9.39	4.43	4.15	17.99
Plant - Rigid	11R-20	MFWD 170	47,800	150	8	0.103	2.50	2.12	1.84	0.52	7.00	3.27	3.11	13.39
Plant - Rigid	12R-20	MFWD 190	49,000	150	8	0.094	2.29	2.17	1.73	0.60	6.80	3.07	3.57	13.45
Plant - Rigid	12R-30	MFWD 190	64,000	150	8	0.062	1.52	1.45	1.50	0.40	4.89	2.67	2.38	9.95
Plant - Rigid	15R-15	2WD 150	61,700	150	8	0.094	2.29	1.71	2.18	0.34	6.53	3.86	1.91	12.32
Plant - TwinRow	12R-30/40	MFWD 225	150,000	150	8	0.049	1.20	1.35	2.79	0.38	5.73	4.94	2.26	12.95
Plant - TwinRow	8R-30/40	MFWD 225	121,000	150	8	0.074	1.81	2.03	3.38	0.57	7.80	5.99	3.40	17.20
Roller/Cultipacker	12'	2WD 130	7,470	300	12	0.124	1.90	1.96	0.21	0.45	4.54	0.27	2.55	7.37

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2022 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/acre	-----\$/acre-----							
Roller/Cultipacker	20'	MFWD 150	12,500	300	12	0.074	1.14	1.36	0.22	0.33	3.05	0.27	1.87	5.20
Roller/Cultipacker	30'	MFWD 170	16,900	300	12	0.049	0.75	1.02	0.19	0.25	2.24	0.25	1.50	3.99
Roller/Cultipacker	38'	MFWD 225	24,200	300	12	0.039	0.60	1.07	0.22	0.30	2.20	0.28	1.79	4.28
Roller/Stubble	20'	2WD 50	14,600	300	12	0.074	1.14	0.45	0.25	0.05	1.90	0.32	0.30	2.53
Roller/Stubble	32'	MFWD 225	24,500	300	12	0.046	0.71	1.27	0.26	0.36	2.61	0.34	2.13	5.09
Rotary Cutter	7'	MFWD 130	0	185	10	0.168	2.57	2.65	0.00	0.68	5.91	0.00	3.86	9.78
Rotary Cutter	12'	2WD 150	14,100	185	10	0.098	1.49	1.78	1.12	0.35	4.76	0.73	1.99	7.50
Rotary Cutter-Flex	15'	MFWD 150	21,800	185	10	0.078	1.19	1.43	1.38	0.35	4.37	0.91	1.96	7.24
Rotary Cutter-Flex	20'	MFWD 150	30,100	185	10	0.058	0.89	1.07	1.43	0.26	3.67	0.94	1.47	6.09
Row Cond & Inc-Fold.	26'	MFWD 190	29,200	100	10	0.063	1.25	1.46	0.46	0.40	3.59	1.82	2.40	7.82
Row Cond & Inc-Fold.	38'	MFWD 225	41,800	100	10	0.043	0.85	1.18	0.45	0.33	2.83	1.78	1.98	6.60
Row Cond & Inc-Rigid	13'	2WD 130	13,400	100	10	0.126	2.51	2.00	0.42	0.46	5.40	1.67	2.61	9.69
Row Cond & Inc-Rigid	21'	2WD 170	19,500	100	10	0.078	1.55	1.62	0.38	0.29	3.85	1.50	1.72	7.08
Row Cond & Inc-Rigid	26'	MFWD 190	23,900	100	10	0.026	0.52	0.61	0.15	0.17	1.47	0.62	1.00	3.10
Row Cond Folding	26'	MFWD 225	23,900	100	10	0.059	0.91	1.63	0.35	0.46	3.36	1.40	2.72	7.49
Row Cond Folding	38'	MFWD 225	31,500	100	10	0.040	0.62	1.11	0.32	0.31	2.37	1.26	1.86	5.51
Row Cond Rigid	13'	2WD 130	8,670	100	10	0.119	1.82	1.88	0.25	0.43	4.40	1.01	2.45	7.88
Row Cond Rigid	21'	2WD 170	14,200	100	10	0.073	1.12	1.52	0.26	0.27	3.19	1.03	1.62	5.84
Row Cond Rigid	26'	MFWD 190	18,600	100	10	0.059	0.91	1.37	0.27	0.38	2.95	1.09	2.26	6.31
Row Cond./Roll-Fol	30'	MFWD 190	46,200	160	10	0.062	0.95	1.44	0.72	0.40	3.52	1.77	2.37	7.66
Row Cond./Roll-Fold.	26'	MFWD 190	26,500	160	10	0.072	1.10	1.66	0.47	0.46	3.70	1.17	2.73	7.61
Row Cond./Roll-Fold.	40'	MFWD 225	34,000	160	10	0.046	0.71	1.28	0.39	0.36	2.75	0.97	2.14	5.88
Row Cond./Roll-Rig	21'	MFWD 190	25,800	160	10	0.089	1.36	2.06	0.57	0.57	4.57	1.41	3.38	9.37
Row Cond./Roll-Rig	26'	MFWD 190	28,400	160	10	0.072	1.10	1.66	0.51	0.46	3.74	1.25	2.73	7.73
Spin Spreader	5 ton	MFWD 190	14,500	100	8	0.042	1.02	0.97	0.34	0.27	2.60	0.64	1.59	4.84
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.15	0.51	0.08	0.49	6.25	0.09	1.84	8.19
Spray (ATV)	20'	800 CC	1,690	200	8	0.084	1.67	0.16	0.06	0.16	2.07	0.07	0.59	2.74
Spray (Band)	27' Fold	MFWD 170	5,300	200	8	0.062	1.24	1.29	0.15	0.32	3.01	0.17	1.89	5.08
Spray (Band)	40' Fold	MFWD 170	10,200	200	8	0.042	0.83	0.87	0.20	0.21	2.13	0.22	1.27	3.63
Spray (Band)	50' Fold	MFWD 170	9,160	200	8	0.033	0.67	0.69	0.14	0.17	1.68	0.16	1.02	2.87
Spray (Band)	60' Fold	MFWD 170	14,700	200	8	0.028	0.55	0.58	0.19	0.14	1.48	0.21	0.85	2.55
Spray (Bcast/HB)	13' Rigid	MFWD 150	8,500	200	8	0.130	2.57	2.37	0.51	0.58	6.05	0.58	3.26	9.89
Spray (Bcast/HB)	20' Rigid	MFWD 150	9,960	200	8	0.084	1.67	1.54	0.39	0.37	3.99	0.44	2.11	6.55
Spray (Bcast/HB)	27' Fold	MFWD 170	16,100	200	8	0.062	1.24	1.29	0.47	0.32	3.32	0.53	1.89	5.75
Spray (Bcast/HB)	27' Rigid	MFWD 170	11,700	200	8	0.062	1.24	1.29	0.34	0.32	3.20	0.38	1.89	5.47
Spray (Bcast/HB)	30' Fold	MFWD 170	17,100	200	8	0.056	1.11	1.16	0.45	0.28	3.02	0.50	1.70	5.23
Spray (Bcast/HB)	40' Fold	MFWD 170	19,900	200	8	0.042	0.83	0.87	0.39	0.21	2.32	0.44	1.27	4.04
Spray (Broadcast)	27'	MFWD 170	5,300	200	8	0.062	1.24	1.29	0.15	0.32	3.01	0.17	1.89	5.08
Spray (Broadcast)	40'	MFWD 170	10,200	200	8	0.042	0.83	0.87	0.20	0.21	2.13	0.22	1.27	3.63
Spray (Broadcast)	50'	MFWD 170	9,200	200	8	0.033	0.67	0.69	0.14	0.17	1.68	0.16	1.02	2.87
Spray (Broadcast)	60'	MFWD 170	14,700	200	8	0.028	0.55	0.58	0.19	0.14	1.48	0.21	0.85	2.55
Spray (Direct/Hood)	8R-30	MFWD 170	17,800	200	8	0.084	1.67	1.74	0.70	0.43	4.56	0.79	2.55	7.91
Spray (Direct/Hood)	8R-38	MFWD 170	18,700	200	8	0.066	1.32	1.38	0.58	0.34	3.63	0.65	2.02	6.31
Spray (Direct/Hood)	12R-30	MFWD 170	24,900	200	8	0.056	1.11	1.16	0.65	0.28	3.22	0.73	1.70	5.67
Spray (Direct/Hood)	12R-38	MFWD 170	26,100	200	8	0.044	0.88	0.91	0.54	0.22	2.57	0.61	1.34	4.53
Spray (Direct/Layby)	8R-30	MFWD 170	15,500	200	8	0.084	1.67	1.74	0.61	0.43	4.47	0.68	2.55	7.71
Spray (Direct/Layby)	8R-38	MFWD 170	15,500	200	8	0.066	1.32	1.38	0.48	0.34	3.53	0.54	2.02	6.10
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	22,900	200	8	0.044	0.88	0.91	0.47	0.22	2.50	0.53	1.34	4.38
Spray (Direct/Layby)	12R-30	MFWD 170	22,900	200	8	0.056	1.11	1.16	0.60	0.28	3.17	0.67	1.70	5.55
Spray (Direct/Layby)	12R-38	MFWD 170	22,900	200	8	0.044	0.88	0.91	0.47	0.22	2.50	0.53	1.34	4.38
Spray (Direct/Layby)	16R-20/30	MFWD 225	26,700	200	8	0.062	1.24	1.71	0.78	0.48	4.22	0.87	2.86	7.96
Spray (Levee Leaper)	50'	MFWD 225	13,400	200	8	0.033	0.67	0.92	0.21	0.26	2.07	0.23	1.54	3.85
Spray (Pull Type)	60'	MFWD 225	49,600	200	8	0.028	0.55	0.77	0.65	0.21	2.20	0.73	1.28	4.22
Spray (Pull Type)	80'	MFWD 225	53,300	200	8	0.021	0.41	0.57	0.52	0.16	1.68	0.59	0.96	3.24
Spray (Pull Type)	90'	MFWD 225	54,200	200	8	0.018	0.37	0.51	0.47	0.14	1.50	0.53	0.85	2.90
Spray (Pull Type)	120'	MFWD 225	84,300	200	8	0.014	0.27	0.38	0.55	0.10	1.33	0.62	0.64	2.59
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.67	1.95	0.16	0.54	4.33	0.18	3.21	7.72
Spray (Spot)	27'	MFWD 170	5,300	200	8	0.062	1.24	1.29	0.15	0.32	3.01	0.17	1.89	5.08
Spray (Spot)	40'	MFWD 170	10,200	200	8	0.042	0.83	0.87	0.20	0.21	2.13	0.22	1.27	3.63
Spray (Spot)	50'	MFWD 170	9,200	200	8	0.033	0.67	0.69	0.14	0.17	1.68	0.16	1.02	2.87
Spray (Spot)	60'	MFWD 225	14,700	200	8	0.028	0.55	0.77	0.19	0.21	1.74	0.21	1.28	3.24
Stalk Shredder	14'	MFWD 150	18,400	200	10	0.117	1.79	2.14	1.89	0.52	6.37	1.06	2.95	10.39
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.25	1.50	2.38	0.36	5.52	1.34	2.06	8.93
Stalk Shredder-Flail	12'	MFWD 150	25,900	200	10	0.137	2.09	2.50	3.11	0.61	8.33	1.75	3.44	13.53
Stalk Shredder-Flail	15'	MFWD 150	26,000	200	10	0.110	1.67	2.00	2.50	0.49	6.67	1.40	2.75	10.83
Stalk Shredder-Flail	18'	MFWD 150	29,600	200	10	0.091	1.39	1.67	2.37	0.40	5.85	1.33	2.29	9.48
Stalk Shredder-Flail	20'	MFWD 150	31,700	200	10	0.082	1.25	1.50	2.28	0.36	5.42	1.28	2.06	8.77
Stalk Shredder-Flail	25'	MFWD 150	46,900	200	10	0.066	1.00	1.20	2.70	0.29	5.21	1.52	1.65	8.38
Strip Till	8R-38	MFWD 225	43,000	150	10	0.061	0.94	1.68	1.14	0.47	4.25	1.73	2.81	8.80
Strip Till	12R-30	MFWD 225	69,600	150	10	0.061	0.94	1.68	1.85	0.47	4.96	2.81	2.81	10.58
Strip Till	12R-40	MFWD 225	75,400	150	10	0.046	0.70	1.26	1.51	0.35	3.83	2.28	2.11	8.23
Subsoiler	3 shank	MFWD 190	6,500	100	15	0.204	3.12	4.71	0.44	1.31	9.59	0.99	7.75	18.34
Subsoiler	4 shank	MFWD 225	11,430	100	15	0.153	2.34	4.19	0.58	1.19	8.32	1.31	7.01	16.65
Subsoiler	5 shank	MFWD 225	14,630	100	15	0.122	1.86	3.34	0.59	0.94	6.75	1.34	5.59	13.69
Subsoiler low-till	6 shank	MFWD 225	20,000	100	15	0.102	1.56	2.79	0.68	0.79	5.82	1.53	4.66	12.02
Subsoiler low-till	8 shank	MFWD 225	21,400	100	15	0.076	1.16	2.09	0.54	0.59	4.39	1.22	3.49	9.12

Notes:
 Labor: Includes labor from Power unit plus additional labor from the implement.
 Total Direct: Does not include interest on operating capital.

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2022

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Apron Maxx RTA	oz	0.84
Agri-Dex	pt	1.75	Artisan	oz	0.23
AMS SuperMax	pt	3.81	Avaris	oz	1.68
Class Act NG	pt	4.75	Avicta Complete Bean	oz	0.26
Crop Oil Conc. (Pet.)	pt	2.86	Bravo Weather Stick	pt	4.12
Crop Oil Conc. (Veg.)	pt	2.90	Captan 50 WP	lb	6.59
Dyne-A-Pak	pt	4.13	Convoy	oz	1.17
Fire-Zone	pt	2.87	Cotton Seed Trt.	acre	20.00
Herbimax	pt	4.00	CruiserMaxx Vibrance	oz	4.60
Induce	pt	3.00	Elatus	oz	3.31
MSO	pt	4.38	Flint Extra	oz	8.75
Penetrator Plus	pt	2.58	Headline EC	oz	4.44
Surfactant	pt	3.30	Miravis Top	oz	1.34
CLEANING			Prior Xemium	oz	3.91
Cleaning Peanuts	ton	18.00	Propimax EC	pt	12.50
CROP CONSULTANT			Prosaro	oz	2.36
Corn Consultant	acre	6.00	Provost Optimum	oz	219.44
Cotton Consultant	acre	8.00	Quadris	oz	1.56
Peanut Consultant	acre	9.25	Quadris Top	oz	2.59
Rice Consultant	acre	8.00	Quadris Top SBX	oz	2.77
Sorghum Consultant	acre	6.00	Quilt	pt	20.23
Soybeans Consultant	acre	6.50	Quilt XCEL	pt	24.10
Wheat Consultant	acre	5.50	Stratego	pt	23.93
CUSTOM FERTILIZE			Stratego YLD	oz	3.46
App Fert by Air	cwt	7.50	Tilt 3.6 EC	oz	0.90
App Fert by Air (Mi)	appl	7.50	Tilt/ Bravo SE	oz	0.72
Custom Apply Fert	acre	7.50	Trivapro	oz	1.50
CUSTOM LIME			GINNING		
Lime (Spread)	ton	59.00	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	oz	0.09
Custom Plant Air	cwt	7.50	Mepichlor 4.2%	oz	0.09
CUSTOM SPRAY			Mepiquat	oz	0.21
App by Air (3 gal)	appl	5.60	Mepstar 6	oz	0.08
App by Air (5 gal)	appl	7.00	Palisade	oz	1.20
App by Air (10 gal)	appl	9.30	Pentia	oz	0.41
Custom Spray Ground	acre	7.00	Pix WSB	oz	1.32
DRYING			Stance	oz	1.27
Dry Corn	bu	0.19	Veto	oz	0.06
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	oz	1.00
Dry Rice	bu	0.40	Boll Buster	oz	0.34
ERADICATION FEE			Def/Folex	pt	11.73
Eradication	acre	1.00	Defol 5	gal	8.54
FERTILIZERS			Display	oz	10.23
Agrotain Ultra	pt	11.30	Ethephon 6E	pt	3.89
Amm Sulfate (21% N)	cwt	19.88	Finish 6	pt	11.74
Boron Plus	pt	4.64	Folex 6EC	pt	11.74
DAP	cwt	35.88	Freefall SC	oz	1.63
Fert 10-34-0	cwt	31.55	Ginstar EC	pt	27.59
Fert 10-34-0	gal	3.68	Gramoxone SL	oz	0.19
Fert 11-37-0	cwt	26.26	Sharpen	oz	5.99
Fert 41-0-0-4	cwt	18.22	Sodium Chlorate 5L	gal	8.54
Lime	ton	49.00	SuperBoll	oz	0.24
NBPT	pt	12.93	Thidiazuron 4lb	oz	2.07
Phosphorus (46% P2O5)	cwt	27.75	Tribufos 6lb	pt	11.74
Potash (60% K2O)	cwt	26.30	Vacate	oz	1.39
Sulfur Plus	pt	2.62	HAULING		
UAN (32% N)	cwt	19.00	Haul Corn	bu	0.23
UAN (32%)	gal	2.10	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	cwt	18.45	Haul Rice	bu	0.35
UAN + Sulfur (28%)	gal	2.05	Haul Sorghum	bu	0.25
Urea, Solid (46% N)	cwt	28.63	Haul Soybeans	bu	0.27
Zinc Plus	pt	3.40	Haul Wheat	bu	0.26
FUNGICIDES			HERBICIDES		
Abound	oz	1.96	2,4-D Amine 4	pt	2.64
Alfa Guard	lb	1.26	2,4-D Ester	pt	2.41
Allegiance Flowabl	oz	3.35	AAtrex 4L	pt	1.90
Ameristar Top	oz	2.51	Accent Q	oz	18.15
Approach Prima	pt	28.00	Acuron	oz	0.51

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2022 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Aim	oz	5.79	Harmony Extra SG	oz	10.86
Anthem Flex	oz	3.57	Helmet	oz	0.41
Anthem Maxx	oz	5.38	Huskie	oz	0.82
Armezon Pro	oz	0.92	Impact	oz	15.32
Atrazine 4L	pt	1.67	Intimidator	oz	0.64
Atrazine 90DF	lb	3.36	Leadoff	oz	6.00
Authority First	lb	68.23	League	oz	4.39
Authority Elite	pt	13.75	Lexar	pt	6.79
Authority Maxx	lb	68.82	Liberty 280	oz	0.59
Authority MTZ	lb	20.63	Loyant	oz	2.29
Avatar	pt	9.62	Makaze	oz	0.21
Avenger	pt	11.75	Metolachlor	pt	5.02
Axial XL	oz	1.10	Metribuzin 4L	pt	8.25
Axiom	oz	2.06	Metribuzin 75	lb	14.73
Banvel	pt	4.81	MSMA	pt	3.42
Barrage	pt	5.36	Newpath	oz	3.84
Basagran	pt	5.43	Obey	oz	1.01
Boundary	pt	10.45	Osprey	oz	4.00
Brake	oz	1.48	Outlook	pt	13.88
Broadaxe	pt	13.95	Panther Pro	oz	6.61
Broadhead	lb	58.21	Parallel	pt	4.01
Buccaneer Plus	pt	2.97	Paraquat	oz	0.16
Buctril	pt	4.28	Parazone 3SL	oz	0.18
Butyrac 200 (2,4-DB)	pt	2.90	Permit	oz	21.96
Cadre	oz	3.33	Permit Plus	oz	21.96
Canopy	oz	2.91	PowerFlex	oz	7.00
Caparol	pt	4.87	Preface	oz	4.99
Capreno	oz	3.96	Prefix	pt	6.17
Cinch	pt	14.18	Provisia	oz	0.76
Cinch ATZ	pt	5.96	Prowl 3.3 EC	pt	5.69
Clarity	pt	11.00	Quelex	oz	7.42
Classic	oz	12.00	RealmQ	oz	5.34
Clearpath	oz	4.06	RebelEx	oz	2.00
Clethodim 2E	oz	0.50	Reflex	pt	6.71
Clincher SF	oz	2.56	Regiment	oz	45.50
Cobra	oz	1.23	Resicore	oz	0.60
Command 3ME	pt	18.00	Resource	oz	2.11
Corvus	oz	4.69	RiceBeaux	pt	5.38
Cotoran	pt	5.79	Riceshot	pt	4.92
Cotton Pro	pt	3.45	Ricestar HT	pt	26.88
Dicamba	pt	6.35	Ringside	pt	5.63
Direx	pt	2.44	Roundup Power Max	oz	0.20
Diuron	pt	3.50	Roundup PowerMax	pt	3.24
Dual II Magnum	pt	11.15	Roundup PowerMax ii	oz	0.19
Dual Magnum	pt	10.02	Roundup Pro	pt	0.20
Duet	pt	6.22	Scepter 70 DG	oz	4.64
Engenia	oz	0.83	Select Max	pt	12.73
Envive	oz	4.06	Sencor/Tricor.Metrib	lb	23.95
Envoke	oz	0.80	Sequence	pt	5.72
Facet L	pt	14.83	Sharpen	oz	5.99
Fierce	oz	6.50	Sinister	pt	13.77
Fierce XLT	oz	3.91	Sonic	oz	4.04
Finesse	oz	12.45	Stalwart	pt	3.82
Firestorm	pt	3.44	Stam 80 EDF	lb	9.45
First Rate	oz	37.79	Stam M4	qt	10.83
Flexstar	pt	7.34	Staple LX	oz	7.89
Flexstar GT	pt	4.73	Storm	pt	11.16
Fusilade DX	oz	0.88	Strada	oz	5.88
Gambit	oz	16.50	Strada Pro	oz	6.56
Glyphosate 3lbs a.e	pt	1.81	Strada XT2	pt	3.26
Glyphosate 3lbs a.e	oz	0.11	Superwham	qt	10.07
Goal 2XL	pt	8.69	Suprend	lb	13.52
Gramoxone SL 2.0	oz	0.19	SureStart II	oz	0.39
Grandstand R	pt	17.79	Surveil	oz	6.70
Grasp	oz	12.07	Synchrony XP	oz	11.26
Grasp Xtra	oz	1.61	Tempest	pt	19.50
Halex GT	pt	5.82	Touchdown Total	qt	10.21
Halomax	oz	21.11	Treflan	pt	2.50

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2022 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Trifluralin	pt	3.73	Mustang Max	oz	0.97
Triflurex	pt	3.47	Nuprid 4F	oz	0.94
Ultra Blazer	pt	5.25	Oberon	oz	2.78
Valor EZ	oz	4.71	Orthene 90	lb	11.15
Valor SX	oz	3.60	Permethrin	oz	0.40
Valor XLT	oz	3.45	Portal XLO	oz	0.74
Vamos	pt	6.49	Pounce 25WP	lb	19.52
Verdict	oz	1.54	Prevathon	oz	1.05
Veritas	pt	7.49	Python WDG	oz	19.80
Villain	pt	5.24	Radiant	oz	8.28
Volunteer	pt	10.63	Sevin 4F	pt	56.11
Warrant	pt	3.97	Sevin XLR Plus	qt	16.01
XtendiMax	oz	0.42	Sivanto Prime	oz	3.24
Zidua DF	oz	8.76	Tempest	oz	1.70
Zidua SC	oz	4.93	Transform WG	oz	7.63
INOCULANT			Up-Cyde	oz	0.36
Inoculant-Soybean	acre	1.55	Warrior ZT	oz	2.74
Optimize LIFT	oz	0.50	Zeal	oz	8.42
INSECTICIDES			IRRIGATION SUPPLIES		
Abamectin .15EC	oz	1.75	Roll-Out Pipe	ft	0.24
Acephate 90%	lb	9.87	SEED/PLANTS		
Acephate 90SP	lb	8.58	Corn Seed BtRR	thous	3.75
Admire Pro	oz	1.57	Corn Seed Conv.	thous	1.93
Agri-Mek	oz	2.66	Corn Seed Op Leptra	thous	3.66
Asana .66 XL	oz	0.63	Corn Seed RR2	thous	3.25
Avenger	oz	0.28	Corn Seed VT2P	thous	3.63
Baythroid XL	oz	1.04	Cot. Seed B3XF/W3FE	thous	2.59
Belt	oz	6.80	Cotton Seed B3XF	thous	2.59
Besiege	oz	2.38	Cotton Seed GLB2	thous	2.05
Bidrin 8EC	oz	1.34	Cotton Seed W3FE	thous	2.59
Bifenthrin	oz	0.86	Cotton Seed W3RF	thous	1.98
Bifenture 2EC	oz	0.51	Peanut Seed	lb	0.84
Brigade EC	pt	18.77	Rice Conv Hyb Trt	lb	6.60
Capture LFR	oz	1.37	Rice Fullpage Hyb Tr	lb	7.37
Centric 40WG	oz	4.97	Rice Seed CF (Levees)	lb	1.03
Cypermethrin	oz	1.31	Rice Seed Clearfield	lb	1.03
Declare	oz	1.95	Rice Seed Conv.	lb	0.32
Diamond .83EC	oz	1.28	Rice Seed Cv (Levees)	lb	0.32
Dimethoate 4E	pt	5.65	Rice Seed CvH (Levee)	lb	1.93
Dimilin 2L	oz	1.70	Rice Seed FPH (Levee)	lb	2.67
Endigo	oz	1.53	Rice Seed Provisia	lb	1.25
Force 3G	lb	7.28	Rice Seed Trt/Insect	lbseed	0.29
Hero	oz	1.09	Sorghum Concept	lb	3.10
Imidacloprid 4F	oz	0.78	Sorghum Concept+ Po	lb	3.72
Imidan 70 WSB	oz	0.79	Soybean Enlist E3	lb	1.20
IncidentalPestTrt \$8	acre	8.00	Soybean Seed LL	lb	1.16
IncidentalPestTrt\$15	acre	15.00	Soybean Seed RR2	lb	1.16
IncidentalPestTrt\$22	acre	22.00	Soybean Seed RR2X	lb	1.34
IncidentalPestTrt\$30	acre	30.00	Wheat Seed Private	lb	0.28
Intrepid 2F	oz	1.91	SOIL TEST		
Intruder 70WSP	oz	1.13	Soil Test	acre	10.00
Lambda	oz	1.88	SURVEY & MARK LEVEES		
Lannate LV	pt	9.30	Survey & Mark Levees	acre	4.50
Macho	oz	0.47	Survey & Mark Levees	acre	4.50
Malathion 8E	pt	9.84			

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2022

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	2.36
Gasoline	gal	2.81
INTEREST RATES		
Short-term	%	3.50
Intermediate-term	%	4.00

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2022

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	15.27
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)	
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2022

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '22	5.31	-0.14	5.17	2.35	5.17
Cotton Lint	lb	Dec '22	0.87	-0.016	0.8544	0.52	0.8544
Cottonseed	lb						0.11 ^f
Grain Sorghum	bu				4.91	4.09	4.91
Peanuts	ton				430.00	354.895	430.00
Soybeans	bu	Nov '22	12.45	0.01	12.46	6.41	12.46
Rice	bu	Nov '22	6.16	-0.36	5.80	3.21	5.80
Wheat	bu	Jul '22	7.44	0.16	7.28	3.60	7.28

- ^a Average of the daily closing futures contract prices during the first 5 trading days in October 2021 for the stated contract months.
- ^b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2020 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.
- ^c The forward contract price for corn, cotton, rice, soybeans and wheat is the futures contract price plus the basis. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The forward contract price for peanuts is an estimate from a poll of Extension Peanut Marketing Specialists.
- ^d Average Mississippi County CCC Loan Rate for 2021 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2020 Farm-stored Loan Rate for long grain rough rice. National 2021 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.
- ^e Price used in MSU Extension Service Planning Budgets.
- ^f Cottonseed price is the average marketing year price over the years 2008-2021.

Appendix Table 8 Estimated costs for field operations, per acre
 Contour levee rice flood irrigation system
 80-acre system, 33 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.33	0.11	0.25			0.01	0.70	1.33
Survey & Mark Levees	acre	4.50						0.08	4.58	4.58
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.88	0.30	0.65			0.03	1.86	3.52
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31			0.01	0.84	1.45
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Install Gates										
IRRIGATE LABOR	hour				2.72			0.05	2.77	2.77
Apply Water										
IRRIGATE LABOR	hour				6.80			0.12	6.92	6.92
Apply Water										
IRRIGATE LABOR	hour				6.80			0.10	6.90	6.90
Apply Water										
IRRIGATE LABOR	hour				6.80			0.08	6.88	6.88
Apply Water										
IRRIGATE LABOR	hour				6.80			0.06	6.86	6.86
Remove Gates										
IRRIGATE LABOR	hour				0.91			0.01	0.92	0.92
Tear Down Levees										
Levee Splitter (1/80)	32"		0.69	0.20	0.51			0.01	1.41	2.55
Tear Down Levees										
Levee Splitter (1/80)	32"		0.26	0.07	0.19				0.52	0.95
Land Forming (\$113)	each								7.23	7.23
Levee Gates	each								0.64	0.64
Well & Pump, Flood	each			5.91				0.09	6.00	21.76
Engine, Rice CL, 75	each								16.46	16.46
May Irrigation	ac-in		11.54	1.53				0.23	13.30	13.30
June Irrigation	ac-in		17.30	2.29				0.29	19.88	19.88
July Irrigation	ac-in		17.30	2.29				0.23	19.82	19.82
August Irrigation	ac-in		17.30	2.29				0.17	19.76	19.76
TOTALS		4.50	66.01	15.10	33.87	0.00	1.59	121.07	44.56	165.63

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

Appendix Table 9 Estimated costs for field operations, per acre
 Straight levee rice flood irrigation system
 80-acre system, 27 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Survey & Mark Levees	acre	2.25						0.04	2.29	2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.22	0.49			0.02	1.39	1.25 2.64
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31			0.01	0.84	0.61 1.45
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Install Gates										
IRRIGATE LABOR	hour				1.36			0.02	1.38	1.38
Apply Water										
IRRIGATE LABOR	hour				4.53			0.08	4.61	4.61
Apply Water										
IRRIGATE LABOR	hour				4.53			0.07	4.60	4.60
Apply Water										
IRRIGATE LABOR	hour				4.53			0.05	4.58	4.58
Apply Water										
IRRIGATE LABOR	hour				4.53			0.04	4.57	4.57
Remove Gates										
IRRIGATE LABOR	hour				0.91			0.01	0.92	0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.52	0.15	0.38			0.01	1.06	0.85 1.91
Land Forming (\$450)	each								28.81	28.81
Levee Gates	each								0.64	0.64
Well & Pump, Flood	each			5.91				0.09	6.00	15.76 21.76
Engine, Rice SL, 75	each								16.46	16.46
May Irrigation	ac-in		11.54	1.86				0.23	13.63	13.63
June Irrigation	ac-in		13.46	2.18				0.23	15.87	15.87
July Irrigation	ac-in		13.46	2.18				0.18	15.82	15.82
August Irrigation	ac-in		13.46	2.18				0.14	15.78	15.78
TOTALS		2.25	53.51	14.79	22.70	0.00	1.24	94.49	64.38	158.87

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

Appendix Table 10 Estimated costs for field operations, per acre
 Straight levee rice multi inlet flood irrigation system
 80-acre system, 23 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Survey & Mark Levees	acre	2.25						0.04	2.29	2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.66	0.22	0.49			0.02	1.39	1.25 2.64
Butt Levees										
Blade-Box	6'-7'		0.41	0.11	0.31			0.01	0.84	0.61 1.45
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Ditcher (1m/160a)			0.19	0.07	0.14			0.01	0.41	0.31 0.72
Roll-Out Pipe	ft	7.92						0.14	8.06	8.06
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.26	0.11	0.42			0.01	0.80	0.85 1.65
Install Gates										
IRRIGATE LABOR	hour				1.36			0.02	1.38	1.38
Apply Water										
IRRIGATE LABOR	hour				1.81			0.03	1.84	1.84
Apply Water										
IRRIGATE LABOR	hour				1.81			0.03	1.84	1.84
Apply Water										
IRRIGATE LABOR	hour				1.81			0.02	1.83	1.83
Apply Water										
IRRIGATE LABOR	hour				1.81			0.02	1.83	1.83
Remove Gates										
IRRIGATE LABOR	hour				0.45				0.45	0.45
Tear Down Levees										
Levee Splitter (1/80	32"		0.52	0.15	0.38			0.01	1.06	0.85 1.91
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.13	0.05	0.21				0.39	0.42 0.81
Land Forming (\$450)	each								28.81	28.81
Levee Gates	each								0.32	0.32
Well & Pump, Flood	each			5.91				0.09	6.00	15.76 21.76
Engine, Mult In Rice	each								16.46	16.46
May Irrigation	ac-in		9.61	1.75				0.20	11.56	11.56
June Irrigation	ac-in		11.54	2.10				0.20	13.84	13.84
July Irrigation	ac-in		11.54	2.10				0.16	13.80	13.80
August Irrigation	ac-in		11.54	2.10				0.12	13.76	13.76
TOTALS		10.17	46.40	14.67	12.13	0.00	1.15		84.52	65.64 150.16

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

Appendix Table 11 Estimated costs for field operations, per acre
 Straight levee rice - zero grade flood irrigation
 80-acre system, 19 ac-in., Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Set Up Engine									
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46
Apply Water									
IRRIGATE LABOR	hour				2.27		0.04	2.31	2.31
Apply Water									
IRRIGATE LABOR	hour				2.27		0.03	2.30	2.30
Apply Water									
IRRIGATE LABOR	hour				2.27		0.03	2.30	2.30
Apply Water									
IRRIGATE LABOR	hour				2.27		0.02	2.29	2.29
Land Forming (\$450)	each							28.81	28.81
Well & Pump, Flood	each			5.91			0.09	6.00	15.76
Engine, Rice SL, 75	each							16.46	16.46
May Irrigation	ac-in		7.69	1.24			0.16	9.09	9.09
June Irrigation	ac-in		9.61	1.55			0.16	11.32	11.32
July Irrigation	ac-in		9.61	1.55			0.13	11.29	11.29
August Irrigation	ac-in		9.61	1.55			0.10	11.26	11.26
TOTALS		0.00	36.52	11.80	9.53	0.00	0.77	58.62	61.03

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

Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968."
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2021 Planning Budgets." Budget Report No. 2020-03, Department of Agricultural Economics, Mississippi State University, October 2020.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
10. "Cotton 2021 Planning Budgets." Budget Report No. 2020-01, Department of Agricultural Economics, Mississippi State University, October 2020.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2022 Planning Budgets." Budget Report No. 2021-08, Department of Agricultural Economics, Mississippi State University, April 2021.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Peanuts 2021 Planning Budgets." Budget Report No. 2020-07, Department of Agricultural Economics, Mississippi State University, October 2020.
16. "Rice 2021 Planning Budgets." Budget Report No. 2020-04, Department of Agricultural Economics, Mississippi State University, October 2020.
17. "Soybeans 2021 Planning Budgets." Budget Report No. 2020-02, Department of Agricultural Economics, Mississippi State University, October 2020.
18. United States Department of Agriculture Farm Service Agency. *Commodity Loan Rates*. <https://www.fsa.usda.gov/programs-and-services/price-support/commodity-loan-rates/index>. Accessed October 22, 2021.
19. "Vegetables 2018 Planning Budgets." Budget Report No. 2017-09, Department of Agricultural Economics, Mississippi State University December 2017.



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