

# **RICE**

## **2023**

# **PLANNING BUDGETS**

**Mississippi State University  
Department of Agricultural Economics  
Budget Report 2022-04**

**November 2022**



## 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 2023 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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# 2023 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 2022. (Appendix Tables 1, 2, and 3).

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

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

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

### Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

RPH = R&M cost per hour of use

RLC = Replacement cost of machine

RP = R&M percentage (percent of RLC)

THL = Total hours of machine life

RPA = R&M cost per acre

PR = Performance rate

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

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

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

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

### Estimates of Fixed Costs

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

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

where:

CRF = Capital recovery factor

IIR = Intermediate-term interest rate

TYL = Total years of life

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

where:

CRCPY = Capital recovery charge per year

RLC = Replacement cost

SV = Salvage value (at end of useful life)

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

### Estimates of Returns

It is difficult to estimate crop yields that may be expected for a particular production system in a given year. Crop yields used in the budgets are representative of historical yields modified to match the production system used to produce the yield. All yields including conventional, no-tillage, irrigation, and double-cropping are tempered with unpublished research and judgments of the commodity committees. Producers should use yield estimates that are reflective of their own 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 2022 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, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	5.5000	41.80	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
<b>FUNGICIDES</b>					
Ameristar Top	oz	2.41	10.0000	24.10	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Regiment	oz	45.96	0.5000	22.98	
Facet L	pt	17.50	2.0000	35.00	
Permit	oz	20.07	0.6700	13.45	
Clincher SF	oz	1.95	7.5000	14.63	
<b>INSECTICIDES</b>					
Tenchu SG	oz	1.13	13.5000	15.26	
<b>SEED/PLANTS</b>					
Rice Seed Conv.	lb	0.33	75.0000	24.75	
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	
Rice Seed Cv(Levees)	lb	0.33	13.6000	4.49	
<b>ADJUVANTS</b>					
Class Act NG	pt	4.75	0.5000	2.38	
MSO	pt	1.34	1.0000	1.34	
Dyne-A-Pak	pt	6.01	0.5000	3.01	
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	
Surfactant	pt	3.30	0.1000	0.33	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	5.0000	40.00	
<b>HAULING</b>					
Haul Rice	bu	0.35	160.0000	56.00	
<b>DRYING</b>					
Dry Rice	bu	0.40	160.0000	64.00	
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5475	9.05	
Harvesters	hour	16.54	0.1269	2.10	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	3.5250	31.96	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	1.5000	13.59	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4947	8.18		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.5785	33.96	
Harvesters	gal	4.48	2.7765	12.44	
Flood Irr.	gal	4.48	26.8827	120.45	
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	10.04	1.0000	10.04	
Tractors	acre	4.73	1.0000	4.73	
Harvesters	acre	6.86	1.0000	6.86	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	23.79	1.0000	23.79	
<b>TOTAL DIRECT EXPENSES</b>					
			1020.16		
<b>FIXED EXPENSES</b>					
Implements	acre	25.53	1.0000	25.53	
Tractors	acre	33.46	1.0000	33.46	
Harvesters	acre	30.19	1.0000	30.19	
Flood Irr.	acre	52.19	1.0000	52.19	
<b>TOTAL FIXED EXPENSES</b>					
			141.37		
<b>TOTAL SPECIFIED EXPENSES</b>					
			1161.53		

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 1.B Summary of estimated costs and returns per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	160.0000	1080.00	_____
<b>TOTAL INCOME</b>				1080.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	51.40	1.0000	51.40	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	54.93	1.0000	54.93	_____
ADJUVANTS	acre	8.20	1.0000	8.20	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	16.54	0.6745	11.15	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	16.53	0.4947	8.18	_____
DIESEL FUEL	gal	4.48	37.2377	166.85	_____
REPAIR & MAINTENANCE	acre	35.94	1.0000	35.94	_____
INTEREST ON OP. CAP.	acre	23.79	1.0000	23.79	_____
<b>TOTAL DIRECT EXPENSES</b>				1020.16	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				59.84	_____
<b>TOTAL FIXED EXPENSES</b>				141.37	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1161.53	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-81.53	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 1.C Estimated resource use for field operations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	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 300	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						1.3000				
Sharpen	oz						3.0000				
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						2.0000				
Permit	oz						0.6700				
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						0.5000				
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				
Tenhu SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (CL)	40' Rigid	425 hp	0.126	1.00	Aug			0.12	0.12	0.12	0.11
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 300	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								0.67	0.67	6.02	0.49

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 1.D Estimated costs for field operations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.02	3.35	3.35
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Conv.	lb	24.75					0.79	25.54	25.54
Rice Seed Trt/Insect	lbseed	21.75					0.70	22.45	22.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
Class Act NG	pt	2.38					0.08	2.46	2.46
MSO	pt	0.67					0.02	0.69	0.69
Seed Levees									
Rice Seed Cv(Levees)	lb	4.49					0.14	4.63	4.63
Rice Seed Trt/Insect	lbseed	3.94					0.13	4.07	4.07
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
Rice Management									
RICE MGT. LABOR	hour				2.72		0.07	2.79	2.79
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	0.67					0.01	0.68	0.68
Rice Management									
RICE MGT. LABOR	hour			4.53			0.10	4.63	4.63
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			4.53			0.07	4.60	4.60
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (CL)	40' Rigid		12.44	9.49	3.99		0.28	26.20	34.89
Grain Cart Rice	700 bu		0.57	0.24	0.34		0.01	1.16	0.98
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	4.50	125.34	15.21	34.03		4.28	183.36	58.38
TOTALS		725.72	166.85	35.94	67.86	0.00	23.79	1020.16	141.37
									1161.53

Note: Cost of production estimates are based on 2022 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, 2023

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	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.93	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	0.67	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	16.70	9.52	11.33	11.33	10.08	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	14.81	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	10.07	4.58
INTEREST ON OP. CAP.	1.04	0.00	0.00	0.00	1.30	0.00	5.78	9.25	2.99	1.65	1.65	0.13
TOTAL DIRECT EXPENSES	17.27	0.00	0.00	0.00	31.88	0.00	186.45	356.75	142.93	105.01	156.61	23.26
NET INCOME	-17.27	0.00	0.00	0.00	-31.88	0.00	-186.45	-356.75	-142.93	-105.01	923.39	-23.26
NET INCOME TO DATE	-17.27	-17.27	-17.27	-17.27	-49.15	-49.15	-235.60	-592.35	-735.28	-840.29	83.10	59.84

Note: Cost of production estimates are based on 2022 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 1.F Estimated returns for various price/yield combinations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
		PRODUCT PRICE											
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-554 -695	-527 -668	-500 -641	-473 -614	-446 -587	-419 -560	-392 -533	-365 -506	-338 -479	-311 -452	-284 -425
60	96.00	bu	-485 -627	-453 -594	-420 -562	-388 -529	-356 -497	-323 -465	-291 -432	-258 -400	-226 -367	-194 -335	-161 -303
70	112.00	bu	-416 -558	-378 -520	-341 -482	-303 -444	-265 -406	-227 -369	-189 -331	-152 -293	-114 -255	-76 -217	-38 -180
80	128.00	bu	-347 -489	-304 -446	-261 -402	-218 -359	-175 -316	-131 -273	-88 -230	-45 -186	-2 -143	40 -100	84 -57
90	144.00	bu	-279 -420	-230 -371	-181 -323	-133 -274	-84 -226	-36 -177	12 -128	61 -80	109 -31	158 16	206 65
100	160.00	bu	-210 -351	-156 -297	-102 -243	-48 -189	5 -135	59 -81	113 -27	167 26	221 80	275 134	329 188
110	176.00	bu	-141 -282	-81 -223	-22 -163	36 -104	96 -45	155 14	215 73	274 133	333 192	393 251	452 311
120	192.00	bu	-72 -213	-7 -148	57 -84	121 -19	186 45	251 110	316 175	381 239	445 304	510 369	575 434
130	208.00	bu	-3 -144	66 -74	136 -4	207 65	277 135	347 206	417 276	487 346	558 416	628 486	698 557
140	224.00	bu	65 -76	140 -0	216 75	292 150	367 226	443 301	518 377	594 453	670 528	745 604	821 679
150	240.00	bu	134 -7	215 73	296 154	377 235	458 316	539 397	620 478	701 559	782 640	863 721	944 802

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 2022 input prices.

Table 2.A Estimated costs per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	5.5000	41.80	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Regiment	oz	45.96	0.5000	22.98	_____
Facet L	pt	17.50	2.0000	35.00	_____
Permit	oz	20.07	0.6700	13.45	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.33	75.0000	24.75	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.33	13.6000	4.49	_____
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	6.01	0.5000	3.01	_____
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	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4999	8.25	_____
Harvesters	hour	16.54	0.1269	2.10	_____
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	16.53	0.4947	8.18	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	_____
Harvesters	gal	4.48	2.7765	12.44	_____
Flood Irr.	gal	4.48	21.9949	98.55	_____
REPAIR & MAINTENANCE					
Implements	acre	9.98	1.0000	9.98	_____
Tractors	acre	4.48	1.0000	4.48	_____
Harvesters	acre	6.86	1.0000	6.86	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	22.96	1.0000	22.96	_____
TOTAL DIRECT EXPENSES				975.37	_____
FIXED EXPENSES					
Implements	acre	25.05	1.0000	25.05	_____
Tractors	acre	31.58	1.0000	31.58	_____
Harvesters	acre	30.19	1.0000	30.19	_____
Flood Irr.	acre	80.85	1.0000	80.85	_____
TOTAL FIXED EXPENSES				167.67	_____
TOTAL SPECIFIED EXPENSES				1143.04	_____

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 2.B Summary of estimated costs and returns per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	160.0000	1080.00	_____
<b>TOTAL INCOME</b>				1080.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	51.40	1.0000	51.40	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	54.93	1.0000	54.93	_____
ADJUVANTS	acre	8.87	1.0000	8.87	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	16.54	0.6268	10.35	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4947	8.18	_____
DIESEL FUEL	gal	4.48	31.9758	143.27	_____
REPAIR & MAINTENANCE	acre	35.63	1.0000	35.63	_____
INTEREST ON OP. CAP.	acre	22.96	1.0000	22.96	_____
<b>TOTAL DIRECT EXPENSES</b>				975.37	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				104.63	_____
<b>TOTAL FIXED EXPENSES</b>				167.67	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1143.04	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-63.04	_____

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 2.C Estimated resource use for field operations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	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	300	0.046	2.00 Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	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	300	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					1.3000				
Sharpen	oz					3.0000				
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					2.0000				
Permit	oz					0.6700				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					0.20
RICE MGT. LABOR	hour									
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					0.20
RICE MGT. LABOR	hour									
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				
Tenchu SG	oz					13.5000				
Rice Management				1.00	Aug					0.20
RICE MGT. LABOR	hour									
Header - Draper (CL)	40' Rigid	425 hp	0.126	1.00	Aug		0.12	0.12	0.12	0.11
Grain Cart Rice	700 bu	MFWD	300	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	300	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							0.62	0.62	4.03	0.49

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 2.D Estimated costs for field operations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Conv.	lb	24.75					0.79	25.54	25.54
Rice Seed Trt/Insect	lbseed	21.75					0.70	22.45	22.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed Cv(Levees)	lb	4.49					0.14	4.63	4.63
Rice Seed Trt/Insect	lbseed	3.94					0.13	4.07	4.07
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (CL)	40' Rigid		12.44	9.49	3.99		0.28	26.20	34.89
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	2.25	101.57	14.89	22.79		3.39	144.89	84.61
TOTALS		724.14	143.27	35.63	49.37	0.00	22.96	975.37	167.67
									1143.04

Note: Cost of production estimates are based on 2022 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, 2023

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	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.93	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.73	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	14.18	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	9.94	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	5.53	8.94	2.74	1.45	1.64	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	178.97	344.95	130.95	92.41	155.49	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-178.97	-344.95	-130.95	-92.41	924.51	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-231.66	-576.61	-707.56	-799.97	124.54	104.63

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice		PRODUCT PRICE											
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-509	-482	-455	-428	-401	-374	-347	-320	-293	-266	-239
			-677	-650	-623	-596	-569	-542	-515	-488	-461	-434	-407
60	96.00	bu	-440	-408	-376	-343	-311	-278	-246	-214	-181	-149	-116
			-608	-576	-543	-511	-478	-446	-414	-381	-349	-316	-284
70	112.00	bu	-371	-334	-296	-258	-220	-182	-145	-107	-69	-31	6
			-539	-501	-464	-426	-388	-350	-312	-275	-237	-199	-161
80	128.00	bu	-303	-259	-216	-173	-130	-87	-43	-0	42	85	128
			-470	-427	-384	-341	-297	-254	-211	-168	-125	-81	-38
90	144.00	bu	-234	-185	-137	-88	-39	8	57	105	154	203	251
			-401	-353	-304	-256	-207	-158	-110	-61	-13	35	84
100	160.00	bu	-165	-111	-57	-3	50	104	158	212	266	320	374
			-333	-279	-225	-171	-117	-63	-9	44	98	152	206
110	176.00	bu	-96	-37	22	81	141	200	259	319	378	438	497
			-264	-204	-145	-85	-26	32	92	151	211	270	329
120	192.00	bu	-27	37	101	166	231	296	361	425	490	555	620
			-195	-130	-65	-0	63	128	193	258	323	387	452
130	208.00	bu	41	111	181	251	322	392	462	532	602	673	743
			-126	-56	13	84	154	224	294	364	435	505	575
140	224.00	bu	110	185	261	336	412	488	563	639	714	790	866
			-57	18	93	169	244	320	396	471	547	622	698
150	240.00	bu	178	259	340	421	502	583	664	745	826	907	988
			11	92	173	254	335	416	497	578	659	740	821

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 2022 input prices.

Table 3.A Estimated costs per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	5.5000	41.80	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
<b>FUNGICIDES</b>					
Ameristar Top	oz	2.41	10.0000	24.10	_____
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e.	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Regiment	oz	45.96	0.5000	22.98	_____
Facet L	pt	17.50	2.0000	35.00	_____
Permit	oz	20.07	0.6700	13.45	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
<b>INSECTICIDES</b>					
Tenchu SG	oz	1.13	13.5000	15.26	_____
<b>IRRIGATION SUPPLIES</b>					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
<b>SEED/PLANTS</b>					
Rice Seed Conv.	lb	0.33	75.0000	24.75	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.33	13.6000	4.49	_____
<b>ADJUVANTS</b>					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	1.34	1.5000	2.01	_____
Dyne-A-Pak	pt	6.01	0.5000	3.01	_____
Crop Oil Conc.(Pet.)	pt	2.86	0.5000	1.43	_____
Surfactant	pt	3.30	0.1000	0.33	_____
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
<b>HAULING</b>					
Haul Rice	bu	0.35	160.0000	56.00	_____
<b>DRYING</b>					
Dry Rice	bu	0.40	160.0000	64.00	_____
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5281	8.72	_____
Harvesters	hour	16.54	0.1100	1.82	_____
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	_____
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93	_____	
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.4504	33.39	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	18.7364	83.95	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.73	1.0000	9.73	_____
Tractors	acre	4.64	1.0000	4.64	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	22.62	1.0000	22.62	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				955.68	_____
<b>FIXED EXPENSES</b>					
Implements	acre	25.35	1.0000	25.35	_____
Tractors	acre	32.74	1.0000	32.74	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.51	1.0000	80.51	_____
				-----	
<b>TOTAL FIXED EXPENSES</b>				164.76	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1120.44	_____

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 3.B Summary of estimated costs and returns per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	51.40	1.0000	51.40	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	54.93	1.0000	54.93	_____
ADJUVANTS	acre	9.16	1.0000	9.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	22.62	1.0000	22.62	_____
TOTAL DIRECT EXPENSES				955.68	_____
RETURNS ABOVE DIRECT EXPENSES				124.32	_____
TOTAL FIXED EXPENSES				164.76	_____
TOTAL SPECIFIED EXPENSES				1120.44	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-40.44	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 3.C Estimated resource use for field operations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	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	300	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						1.3000				
Sharpen	oz						3.0000				
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						2.0000				
Permit	oz						0.6700				
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				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp		0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD	300	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	300	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							0.63	0.63	2.82	0.47	

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 3.D Estimated costs for field operations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Conv.	lb	24.75					0.79	25.54	25.54
Rice Seed Trt/Insect	lbseed	21.75					0.70	22.45	22.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
Class Act NG	pt	2.38					0.08	2.46	2.46
MSO	pt	0.67					0.02	0.69	0.69
Seed Levees									
Rice Seed Cv(Levees)	lb	4.49					0.14	4.63	4.63
Rice Seed Trt/Insect	lbseed	3.94					0.13	4.07	4.07
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.43					0.04	1.47	1.47
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	10.17	88.08	14.80	12.26		3.08	128.39	86.36
TOTALS		732.35	128.12	34.28	38.31	0.00	22.62	955.68	164.76
									1120.44

Note: Cost of production estimates are based on 2022 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, 2023

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	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	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	15.26	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	54.93	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.44	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	5.63	8.78	2.60	1.35	1.60	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	182.17	338.63	124.36	85.86	152.06	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-182.17	-338.63	-124.36	-85.86	927.94	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-234.86	-573.49	-697.85	-783.71	144.23	124.32

Note: Cost of production estimates are based on 2022 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, 2023

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT-----		
													PRODUCT	PRICE-----	dollars-----
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43			
PERCENT	YIELD	UNIT													
50	80.00	bu	-490	-463	-436	-409	-382	-355	-328	-301	-274	-247	-220		
			-654	-627	-600	-573	-546	-519	-492	-465	-438	-411	-384		
60	96.00	bu	-421	-388	-356	-323	-291	-259	-226	-194	-161	-129	-97		
			-585	-553	-521	-488	-456	-423	-391	-359	-326	-294	-261		
70	112.00	bu	-352	-314	-276	-238	-201	-163	-125	-87	-49	-12	25		
			-517	-479	-441	-403	-365	-328	-290	-252	-214	-176	-139		
80	128.00	bu	-283	-240	-197	-153	-110	-67	-24	18	62	105	148		
			-448	-404	-361	-318	-275	-232	-188	-145	-102	-59	-16		
90	144.00	bu	-214	-165	-117	-68	-20	28	77	125	174	222	271		
			-379	-330	-282	-233	-184	-136	-87	-39	9	58	106		
100	160.00	bu	-145	-91	-37	16	70	124	178	232	286	340	394		
			-310	-256	-202	-148	-94	-40	13	67	121	175	229		
110	176.00	bu	-76	-17	41	101	160	220	279	338	398	457	517		
			-241	-182	-122	-63	-3	55	114	174	233	293	352		
120	192.00	bu	-7	56	121	186	251	316	380	445	510	575	640		
			-172	-107	-43	21	86	151	216	280	345	410	475		
130	208.00	bu	60	131	201	271	341	411	482	552	622	692	762		
			-103	-33	36	106	176	247	317	387	457	527	598		
140	224.00	bu	129	205	281	356	432	507	583	659	734	810	885		
			-34	40	116	191	267	343	418	494	569	645	721		
150	240.00	bu	198	279	360	441	522	603	684	765	846	927	1008		
			33	114	195	276	357	438	519	600	681	762	843		

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 2022 input prices.

Table 4.A Estimated costs per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	5.5000	41.80	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS				dollars	
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES				dollars	
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES				dollars	
Glyphosate 3lbs a.e.	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Regiment	oz	45.96	0.5000	22.98	_____
Facet L	pt	17.50	2.0000	35.00	_____
Permit	oz	20.07	0.6700	13.45	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES				dollars	
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS				dollars	
Rice Seed Conv.	lb	0.33	75.0000	24.75	_____
Rice Seed Trt/Insect	lbseed	0.29	75.0000	21.75	_____
ADJUVANTS				dollars	
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	1.34	1.5000	2.01	_____
Dyne-A-Pak	pt	6.01	0.5000	3.01	_____
Crop Oil Conc.(Pet.)	pt	2.86	0.5000	1.43	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE				dollars	
App Fert by Air	cwt	8.00	5.0000	40.00	_____
HAULING				dollars	
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING				dollars	
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT				dollars	
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST				dollars	
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR				dollars	
Tractors	hour	16.54	0.4228	6.98	_____
Harvesters	hour	16.54	0.1100	1.82	_____
IRRIGATE LABOR				dollars	
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR				dollars	
Special Labor	hour	9.06	0.2500	2.27	_____
implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR				dollars	
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR				dollars	
hour	16.53	0.4795	7.93	_____	
DIESEL FUEL				dollars	
Tractors	gal	4.48	6.5294	29.26	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	15.4779	69.35	_____
REPAIR & MAINTENANCE				dollars	
implements	acre	9.51	1.0000	9.51	_____
Tractors	acre	4.02	1.0000	4.02	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	21.44	1.0000	21.44	_____
TOTAL DIRECT EXPENSES				911.44	_____
FIXED EXPENSES				-----	
implements	acre	23.83	1.0000	23.83	_____
Tractors	acre	28.41	1.0000	28.41	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.17	1.0000	80.17	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1070.01	_____

Note: Cost of production estimates are based on 2022 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, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	51.40	1.0000	51.40	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	46.50	1.0000	46.50	_____
ADJUVANTS	acre	9.16	1.0000	9.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	21.44	1.0000	21.44	_____
TOTAL DIRECT EXPENSES				911.44	_____
RETURNS ABOVE DIRECT EXPENSES				168.56	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1070.01	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				9.99	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 4.C Estimated resource use for field operations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	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	300	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						1.3000				
Sharpen	oz						3.0000				
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						2.0000				
Permit	oz						0.6700				
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				
Tenchi SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour								0.20		
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	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	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000			1.05	
TOTALS								0.53	0.53	2.61	0.47

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 4.D Estimated costs for field operations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94
Grain Drill	24'			5.44	2.78	3.18	0.36	11.76
Rice Seed Conv.	lb	24.75					0.79	25.54
Rice Seed Trt/Insect	lbseed	21.75					0.70	22.45
Roller/Cultipacker	30'			3.44	0.71	1.56	0.18	5.89
App by Air ( 5 gal)	appl	7.60					0.24	7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23
Command 3ME	pt	23.40					0.75	24.15
Sharpen	oz	20.16					0.65	20.81
Class Act NG	pt	2.38					0.08	2.46
MSO	pt	0.67					0.02	0.69
Rice Consultant	acre	8.00					0.21	8.21
App Fert by Air	cwt	8.00					0.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67
DAP	cwt	27.70					0.74	28.44
App by Air ( 5 gal)	appl	7.60					0.20	7.80
Regiment	oz	22.98					0.61	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09
App Fert by Air	cwt	20.00					0.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72
NBPT	pt	13.50					0.36	13.86
Rice Management								
RICE MGT. LABOR	hour				0.91		0.02	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80
Facet L	pt	35.00					0.93	35.93
Permit	oz	13.45					0.36	13.81
Crop Oil Conc.(Pet.)	pt	1.43					0.04	1.47
App by Air ( 5 gal)	appl	3.80					0.08	3.88
Clincher SF	oz	14.63					0.31	14.94
MSO	pt	1.34					0.03	1.37
Rice Management								
RICE MGT. LABOR	hour				1.81		0.04	1.85
App Fert by Air	cwt	12.00					0.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70
Rice Management								
RICE MGT. LABOR	hour				1.81		0.03	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Ameristar Top	oz	24.10					0.39	24.49
Surfactant	pt	0.33					0.01	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75
Tenchi SG	oz	15.26					0.24	15.50
Rice Management								
RICE MGT. LABOR	hour				1.81		0.02	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36
Handling & Storage								
HAND LABOR	hour				2.27		0.02	2.29
Haul Rice	bu	56.00					0.60	56.60
Dry Rice	bu	64.00					0.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91
Flood Irr.	acre		69.35	11.80	9.53		2.17	92.85
TOTALS		713.75	109.39	31.28	35.58	0.00	21.44	911.44
								158.57
								1070.01

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 4.E Estimated monthly income and expense flows per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

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	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	46.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.44	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	4.71	8.68	2.52	1.30	1.57	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	151.97	334.79	120.54	82.07	149.47	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-151.97	-334.79	-120.54	-82.07	930.53	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-204.66	-539.45	-659.99	-742.06	188.47	168.56

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT		75	80	85	90	95	100	PERCENT					
								PRODUCT PRICE					
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
<hr/>													
PERCENT	YIELD	UNIT						dollars					
50	80.00	bu	-445	-418	-391	-364	-337	-310	-283	-256	-229	-202	-175
			-604	-577	-550	-523	-496	-469	-442	-415	-388	-361	-334
60	96.00	bu	-376	-344	-312	-279	-247	-214	-182	-150	-117	-85	-52
			-535	-503	-470	-438	-405	-373	-341	-308	-276	-243	-211
70	112.00	bu	-308	-270	-232	-194	-156	-119	-81	-43	-5	32	69
			-466	-428	-391	-353	-315	-277	-239	-202	-164	-126	-88
80	128.00	bu	-239	-195	-152	-109	-66	-23	20	63	106	149	192
			-397	-354	-311	-268	-224	-181	-138	-95	-52	-8	34
90	144.00	bu	-170	-121	-73	-24	24	72	121	169	218	267	315
			-328	-280	-231	-183	-134	-85	-37	11	59	108	157
100	160.00	bu	-101	-47	6	60	114	168	222	276	330	384	438
			-260	-206	-152	-98	-44	9	63	117	171	225	279
110	176.00	bu	-32	26	86	145	205	264	323	383	442	502	561
			-191	-131	-72	-12	46	105	165	224	284	343	402
120	192.00	bu	36	101	165	230	295	360	425	489	554	619	684
			-122	-57	7	72	136	201	266	331	396	460	525
130	208.00	bu	105	175	245	315	385	456	526	596	666	736	807
			-53	16	87	157	227	297	367	438	508	578	648
140	224.00	bu	174	249	325	400	476	552	627	703	778	854	930
			15	91	166	242	317	393	469	544	620	695	771
150	240.00	bu	242	323	404	485	566	647	728	809	890	971	1052
			84	165	246	327	408	489	570	651	732	813	894

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 2022 input prices.

Table 5.A Estimated costs per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	dollars
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e.	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Regiment	oz	45.96	0.5000	22.98	
Facet L	pt	17.50	2.0000	35.00	
Permit	oz	20.07	0.6700	13.45	
Clincher SF	oz	1.95	7.5000	14.63	
<b>INSECTICIDES</b>					
Tenhu SG	oz	1.13	13.5000	15.26	
<b>SEED/PLANTS</b>					
Rice Conv Hyb Trt	lb	6.31	23.0000	145.13	
Rice Seed CvH(Levee)	lb	1.93	4.2500	8.20	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
<b>ADJUVANTS</b>					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Dyne-A-Pak	pt	6.01	0.5000	3.01	
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	4.3220	34.58	
<b>HAULING</b>					
Haul Rice	bu	0.35	180.0000	63.00	
<b>DRYING</b>					
Dry Rice	bu	0.40	180.0000	72.00	
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5475	9.05	
Harvesters	hour	16.54	0.1100	1.82	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	3.5250	31.96	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.6209	34.15	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	26.8827	120.45	
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.69	1.0000	9.69	
Tractors	acre	4.74	1.0000	4.74	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	25.98	1.0000	25.98	
<b>TOTAL DIRECT EXPENSES</b>					
				-----	1062.41
<b>FIXED EXPENSES</b>					
Implements	acre	24.90	1.0000	24.90	
Tractors	acre	33.53	1.0000	33.53	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	52.19	1.0000	52.19	
<b>TOTAL FIXED EXPENSES</b>					
				-----	136.78
<b>TOTAL SPECIFIED EXPENSES</b>					
				-----	1199.19

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 5.B Summary of estimated costs and returns per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	180.0000	1215.00	_____
TOTAL INCOME				1215.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.80	1.0000	43.80	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	154.56	1.0000	154.56	_____
ADJUVANTS	acre	8.54	1.0000	8.54	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
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	16.54	0.6575	10.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	36.9100	165.38	_____
REPAIR & MAINTENANCE	acre	34.69	1.0000	34.69	_____
INTEREST ON OP. CAP.	acre	25.98	1.0000	25.98	_____
TOTAL DIRECT EXPENSES				1062.41	_____
RETURNS ABOVE DIRECT EXPENSES				152.59	_____
TOTAL FIXED EXPENSES				136.78	_____
TOTAL SPECIFIED EXPENSES				1199.19	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				15.81	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 5.C Estimated resource use for field operations, per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb						23.0000				
Roller/Cultipacker	30'	MFWD 300	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						1.3000				
Sharpen	oz						3.0000				
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						2.0000				
Permit	oz						0.6700				
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				
Tenchi SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	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 300	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							0.65	0.65	5.21	0.47	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 5.D Estimated costs for field operations, per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Conv Hyb Trt	lb	145.13					4.64	149.77	149.77
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CvH(Levee)	lb	8.20					0.26	8.46	8.46
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27	1.27
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	21.36					0.57	21.93	21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98	113.98
NBPT	pt	14.40					0.38	14.78	14.78
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	5.22					0.11	5.33	5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69	27.69
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	63.00					0.67	63.67	63.67
Dry Rice	bu	72.00					0.77	72.77	72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	4.50	125.34	15.21	34.03		4.28	183.36	58.38
TOTALS		776.28	165.38	34.69	60.08	0.00	25.98	1062.41	136.78
									1199.19

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 5.E Estimated monthly income and expense flows per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

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	1215.00	0.00
<b>DIRECT EXPENSES</b>												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	154.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	4.15	0.00	0.00	0.00	0.00	0.00	16.70	7.71	8.61	8.61	9.55	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	13.34	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	8.82	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.96	9.45	2.05	1.09	1.77	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	289.26	364.47	97.90	69.70	168.48	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-289.26	-364.47	-97.90	-69.70	1046.52	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-341.95	-706.42	-804.32	-874.02	172.50	152.59

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-538 -675	-508 -644	-477 -614	-447 -584	-417 -553	-386 -523	-356 -493	-325 -462	-295 -432	-265 -401	-234 -371
60	108.00	bu	-461 -597	-424 -561	-388 -524	-351 -488	-315 -452	-278 -415	-242 -379	-205 -342	-169 -306	-133 -269	-96 -233
70	126.00	bu	-383 -520	-341 -477	-298 -435	-256 -392	-213 -350	-170 -307	-128 -265	-85 -222	-43 -180	-0 -137	41 -95
80	144.00	bu	-306 -442	-257 -394	-208 -345	-160 -297	-111 -248	-63 -199	-14 -151	34 -102	82 -54	131 -5	179 43
90	162.00	bu	-228 -365	-173 -310	-119 -256	-64 -201	-9 -146	44 -92	99 -37	154 17	208 71	263 126	318 181
100	180.00	bu	-151 -287	-90 -227	-29 -166	31 -105	91 -44	152 15	213 76	274 137	334 198	395 258	456 319
110	198.00	bu	-73 -210	-6 -143	59 -76	126 -9	193 56	260 123	327 190	394 257	460 324	527 390	594 457
120	216.00	bu	3 -132	76 -60	149 12	222 85	295 158	368 231	441 304	514 377	587 450	659 523	732 596
130	234.00	bu	81 -55	160 23	239 102	318 181	397 260	476 339	555 418	634 497	713 576	792 655	871 734
140	252.00	bu	158 21	243 107	328 192	413 277	498 362	584 447	669 532	754 617	839 702	924 787	1009 872
150	270.00	bu	236 99	327 190	418 281	509 372	600 463	691 555	782 646	874 737	965 828	1056 919	1147 1010

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 2022 input prices.

Table 6.A Estimated costs per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Regiment	oz	45.96	0.5000	22.98	
Facet L	pt	17.50	2.0000	35.00	
Permit	oz	20.07	0.6700	13.45	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.31	23.0000	145.13	
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	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Dyne-A-Pak	pt	6.01	0.5000	3.01	
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	4.3220	34.58	
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	16.54	0.4999	8.25	
Harvesters	hour	16.54	0.1100	1.82	
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	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	21.9949	98.55	
REPAIR & MAINTENANCE					
Implements	acre	9.63	1.0000	9.63	
Tractors	acre	4.48	1.0000	4.48	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	25.09	1.0000	25.09	
TOTAL DIRECT EXPENSES				1023.94	
FIXED EXPENSES					
Implements	acre	24.42	1.0000	24.42	
Tractors	acre	31.58	1.0000	31.58	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.85	1.0000	80.85	
TOTAL FIXED EXPENSES				163.01	
TOTAL SPECIFIED EXPENSES				1186.95	

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 6.B Summary of estimated costs and returns per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
<b>TOTAL INCOME</b>				<b>1215.00</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	43.80	1.0000	43.80	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	154.56	1.0000	154.56	_____
ADJUVANTS	acre	8.54	1.0000	8.54	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
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	16.54	0.6099	10.07	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	31.6056	141.61	_____
REPAIR & MAINTENANCE	acre	34.37	1.0000	34.37	_____
INTEREST ON OP. CAP.	acre	25.09	1.0000	25.09	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>1023.94</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>191.06</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>163.01</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1186.95</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>28.05</b>	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 6.C Estimated resource use for field operations, per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb						23.0000				
Roller/Cultipacker	30'	MFWD 300	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						1.3000				
Sharpen	oz						3.0000				
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						2.0000				
Permit	oz						0.6700				
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				
Tenchi SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	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 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	0.07	2.45	
TOTALS							0.60	0.60	4.01	0.47	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 6.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Conv Hyb Trt	lb	145.13					4.64	149.77	149.77
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CvH(Levee)	lb	8.20					0.26	8.46	8.46
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27	1.27
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	21.36					0.57	21.93	21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98	113.98
NBPT	pt	14.40					0.38	14.78	14.78
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	5.22					0.11	5.33	5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69	27.69
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	63.00					0.67	63.67	63.67
Dry Rice	bu	72.00					0.77	72.77	72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	2.25	101.57	14.89	22.79		3.39	144.89	84.61
TOTALS		774.03	141.61	34.37	48.84	0.00	25.09	1023.94	163.01
									1186.95

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 6.E Estimated monthly income and expense flows per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

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	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	154.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.20	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	12.52	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	8.68	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.71	9.19	1.84	0.93	1.76	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	281.78	354.53	88.01	59.86	167.16	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-281.78	-354.53	-88.01	-59.86	1047.84	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-334.47	-689.00	-777.01	-836.87	210.97	191.06

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice													
PERCENT	YIELD	UNIT											
50	90.00	bu	-500	-469	-439	-408	-378	-348	-317	-287	-257	-226	-196
			-663	-632	-602	-571	-541	-511	-480	-450	-420	-389	-359
60	108.00	bu	-422	-386	-349	-313	-276	-240	-203	-167	-131	-94	-58
			-585	-549	-512	-476	-439	-403	-366	-330	-294	-257	-221
70	126.00	bu	-345	-302	-260	-217	-175	-132	-89	-47	-4	37	80
			-508	-465	-423	-380	-338	-295	-252	-210	-167	-125	-82
80	144.00	bu	-267	-219	-170	-121	-73	-24	23	72	121	169	218
			-430	-382	-333	-284	-236	-187	-139	-90	-41	6	55
90	162.00	bu	-190	-135	-80	-26	28	83	137	192	247	301	356
			-353	-298	-243	-189	-134	-79	-25	29	84	138	193
100	180.00	bu	-112	-51	8	69	130	191	251	312	373	434	494
			-275	-214	-154	-93	-32	28	88	149	210	271	331
110	198.00	bu	-35	31	98	165	232	298	365	432	499	566	633
			-198	-131	-64	2	69	135	202	269	336	403	470
120	216.00	bu	42	115	188	260	333	406	479	552	625	698	771
			-120	-47	25	97	170	243	316	389	462	535	608
130	234.00	bu	119	198	277	356	435	514	593	672	751	830	909
			-43	35	114	193	272	351	430	509	588	667	746
140	252.00	bu	197	282	367	452	537	622	707	792	877	962	1047
			34	119	204	289	374	459	544	629	714	799	884
150	270.00	bu	274	365	456	548	639	730	821	912	1003	1094	1185
			111	202	293	385	476	567	658	749	840	931	1022

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 2022 input prices.

Table 7.A Estimated costs per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	_____
NBPT	pt	18.00	0.8000	14.40	_____
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Regiment	oz	45.96	0.5000	22.98	_____
Facet L	pt	17.50	2.0000	35.00	_____
Permit	oz	20.07	0.6700	13.45	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
<b>INSECTICIDES</b>					
Tenhu SG	oz	1.13	13.5000	15.26	_____
<b>IRRIGATION SUPPLIES</b>					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
<b>SEED/PLANTS</b>					
Rice Conv Hyb Trt	lb	6.31	23.0000	145.13	_____
Rice Seed CvH(Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
<b>ADJUVANTS</b>					
MSO	pt	1.34	1.5000	2.01	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	6.01	0.5000	3.01	_____
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	_____
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	4.3220	34.58	_____
<b>HAULING</b>					
Haul Rice	bu	0.35	180.0000	63.00	_____
<b>DRYING</b>					
Dry Rice	bu	0.40	180.0000	72.00	_____
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5281	8.72	_____
Harvesters	hour	16.54	0.1100	1.82	_____
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	_____
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93	_____	
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.4504	33.39	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	18.7364	83.95	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.73	1.0000	9.73	_____
Tractors	acre	4.64	1.0000	4.64	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	24.78	1.0000	24.78	_____
<b>TOTAL DIRECT EXPENSES</b>					
				1007.44	_____
<b>FIXED EXPENSES</b>					
Implements	acre	25.35	1.0000	25.35	_____
Tractors	acre	32.74	1.0000	32.74	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.51	1.0000	80.51	_____
<b>TOTAL FIXED EXPENSES</b>					
				164.76	_____
<b>TOTAL SPECIFIED EXPENSES</b>					
				1172.20	_____

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	180.0000	1215.00	_____
TOTAL INCOME				1215.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.80	1.0000	43.80	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	154.56	1.0000	154.56	_____
ADJUVANTS	acre	8.54	1.0000	8.54	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
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	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	24.78	1.0000	24.78	_____
TOTAL DIRECT EXPENSES				1007.44	_____
RETURNS ABOVE DIRECT EXPENSES				207.56	_____
TOTAL FIXED EXPENSES				164.76	_____
TOTAL SPECIFIED EXPENSES				1172.20	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				42.80	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb						23.0000				
Roller/Cultipacker	30'	MFWD 300	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						1.3000				
Sharpen	oz						3.0000				
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						2.0000				
Permit	oz						0.6700				
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				
Tenchi SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	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 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre						1.0000	0.10	0.10	1.26	
TOTALS								0.63	0.63	2.82	0.47

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 7.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33				0.21	3.54		3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93	0.75	12.41	12.88	25.29		
Harrow - Folding	40'		2.69	0.66	1.22	0.29	4.86	3.11	7.97		
App by Air ( 5 gal)	appl	7.60				0.32	7.92		7.92		
Glyphosate 3lbs a.e	oz	16.32				0.70	17.02		17.02		
2,4-D Amine 4	pt	6.66				0.28	6.94		6.94		
Grain Drill	24'		5.44	2.78	3.18	0.36	11.76	9.71	21.47		
Rice Conv Hyb Trt	lb	145.13				4.64	149.77		149.77		
Roller/Cultipacker	30'		3.44	0.71	1.56	0.18	5.89	3.72	9.61		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23		11.23		
Command 3ME	pt	23.40				0.75	24.15		24.15		
Sharpen	oz	20.16				0.65	20.81		20.81		
MSO	pt	0.67				0.02	0.69		0.69		
Class Act NG	pt	2.38				0.08	2.46		2.46		
Seed Levees											
Rice Seed CvH(Levee)	lb	8.20				0.26	8.46		8.46		
Rice Seed Trt/Insect	lbseed	1.23				0.04	1.27		1.27		
App Fert by Air	cwt	8.00				0.21	8.21		8.21		
Amm Sulfate (21% N)	cwt	25.00				0.67	25.67		25.67		
DAP	cwt	27.70				0.74	28.44		28.44		
Rice Consultant	acre	8.00				0.21	8.21		8.21		
App by Air ( 5 gal)	appl	7.60				0.20	7.80		7.80		
Regiment	oz	22.98				0.61	23.59		23.59		
Dyne-A-Pak	pt	3.01				0.08	3.09		3.09		
App Fert by Air	cwt	21.36				0.57	21.93		21.93		
Urea, Solid (46% N)	cwt	111.02				2.96	113.98		113.98		
NBPT	pt	14.40				0.38	14.78		14.78		
Rice Management											
RICE MGT. LABOR	hour				0.91					0.93	
App by Air ( 5 gal)	appl	7.60				0.20	7.80		7.80		
Facet L	pt	35.00				0.93	35.93		35.93		
Permit	oz	13.45				0.36	13.81		13.81		
Crop Oil Conc.(Pet.)	pt	1.14				0.03	1.17		1.17		
App by Air ( 5 gal)	appl	3.80				0.08	3.88		3.88		
Clincher SF	oz	14.63				0.31	14.94		14.94		
MSO	pt	1.34				0.03	1.37		1.37		
Rice Management						1.81				1.85	
RICE MGT. LABOR	hour						0.04	1.85		1.85	
App Fert by Air	cwt	5.22					0.11	5.33		5.33	
Urea, Solid (46% N)	cwt	27.11					0.58	27.69		27.69	
Rice Management						1.81				1.84	
RICE MGT. LABOR	hour						0.03	1.84		1.84	
App by Air ( 3 gal)	appl	9.60					0.15	9.75		9.75	
Tenchu SG	oz	15.26					0.24	15.50		15.50	
Rice Management						1.81				1.83	
RICE MGT. LABOR	hour						0.02	1.83		1.83	
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46	0.24	22.71	30.23	52.94		
Grain Cart Rice	700 bu		0.76	0.25	0.34	0.01	1.36	1.05	2.41		
Handling & Storage						2.27				2.29	
HAND LABOR	hour						0.02	2.29		2.29	
Haul Rice	bu	63.00					0.67	63.67		63.67	
Dry Rice	bu	72.00					0.77	72.77		72.77	
Disk Heavy	28'		10.47	4.58	4.75	0.11	19.91	17.70	37.61		
Flood Irr.	acre	10.17	88.08	14.80	12.26	3.08	128.39	86.36	214.75		
TOTALS		781.95	128.12	34.28	38.31	0.00	24.78	1007.44	164.76	1172.20	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

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	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	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	15.26	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	154.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.81	9.02	1.70	0.83	1.76	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	284.98	347.91	81.42	53.31	167.22	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-284.98	-347.91	-81.42	-53.31	1047.78	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-337.67	-685.58	-767.00	-820.31	227.47	207.56

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-483 -648	-453 -617	-422 -587	-392 -557	-362 -526	-331 -496	-301 -466	-270 -435	-240 -405	-210 -374	-179 -344
60	108.00	bu	-406 -570	-369 -534	-333 -497	-296 -461	-260 -425	-223 -388	-187 -352	-150 -315	-114 -279	-78 -242	-41 -206
70	126.00	bu	-328 -493	-286 -450	-243 -408	-201 -365	-158 -323	-116 -280	-73 -238	-30 -195	11 -153	54 -110	96 -68
80	144.00	bu	-251 -415	-202 -367	-153 -318	-105 -270	-56 -221	-8 -172	40 -124	89 -75	137 -27	186 21	234 70
90	162.00	bu	-173 -338	-118 -283	-64 -229	-9 -174	45 -119	99 -65	154 -10	209 44	263 98	318 153	373 208
100	180.00	bu	-96 -260	-35 -200	25 -139	86 -78	146 -17	207 42	268 103	329 164	389 225	450 285	511 346
110	198.00	bu	-18 -183	48 -116	114 -49	181 17	248 83	315 150	382 217	449 284	515 351	582 417	649 484
120	216.00	bu	58 -105	131 -33	204 39	277 112	350 185	423 258	496 331	569 404	641 477	714 550	787 623
130	234.00	bu	136 -28	215 50	294 129	373 208	452 287	531 366	610 445	689 524	768 603	847 682	926 761
140	252.00	bu	213 48	298 134	383 219	468 304	553 389	638 474	724 559	809 644	894 729	979 814	1064 899
150	270.00	bu	291 126	382 217	473 308	564 399	655 490	746 582	837 673	929 764	1020 855	1111 946	1202 1037

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 2022 input prices.

Table 8.A Estimated costs per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Regiment	oz	45.96	0.5000	22.98	
Facet L	pt	17.50	2.0000	35.00	
Permit	oz	20.07	0.6700	13.45	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.31	23.0000	145.13	
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	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Dyne-A-Pak	pt	6.01	0.5000	3.01	
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	4.3220	34.58	
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	16.54	0.4228	6.98	
Harvesters	hour	16.54	0.1100	1.82	
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	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	6.5294	29.26	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	15.4779	69.35	
REPAIR & MAINTENANCE					
Implements	acre	9.51	1.0000	9.51	
Tractors	acre	4.02	1.0000	4.02	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	23.87	1.0000	23.87	
TOTAL DIRECT EXPENSES				971.90	
FIXED EXPENSES					
Implements	acre	23.83	1.0000	23.83	
Tractors	acre	28.41	1.0000	28.41	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.17	1.0000	80.17	
TOTAL FIXED EXPENSES				158.57	
TOTAL SPECIFIED EXPENSES				1130.47	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
<b>TOTAL INCOME</b>				1215.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	43.80	1.0000	43.80	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	154.56	1.0000	154.56	_____
ADJUVANTS	acre	8.54	1.0000	8.54	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
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	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	23.87	1.0000	23.87	_____
<b>TOTAL DIRECT EXPENSES</b>				971.90	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				243.10	_____
<b>TOTAL FIXED EXPENSES</b>				158.57	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1130.47	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				84.53	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb						23.0000				
Roller/Cultipacker	30'	MFWD 300	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						1.3000				
Sharpen	oz						3.0000				
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						2.0000				
Permit	oz						0.6700				
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				
Tenchi SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	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 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000				1.05	
TOTALS							0.53	0.53	2.61	0.47	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 8.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Conv Hyb Trt	lb	145.13					4.64	149.77	149.77
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CvH(Levee)	lb	8.20					0.26	8.46	8.46
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27	1.27
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	21.36					0.57	21.93	21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98	113.98
NBPT	pt	14.40					0.38	14.78	14.78
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	5.22					0.11	5.33	5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69	27.69
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	63.00					0.67	63.67	63.67
Dry Rice	bu	72.00					0.77	72.77	72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre		69.35	11.80	9.53		2.17	92.85	80.17
TOTALS		771.78	109.39	31.28	35.58	0.00	23.87	971.90	158.57
									1130.47

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests  
 Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

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	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	154.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.16	8.92	1.62	0.78	1.73	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	263.48	344.07	77.60	49.52	164.63	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-263.48	-344.07	-77.60	-49.52	1050.37	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-316.17	-660.24	-737.84	-787.36	263.01	243.10

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-448 -606	-417 -576	-387 -545	-356 -515	-326 -485	-296 -454	-265 -424	-235 -394	-205 -363	-174 -333	-144 -302
60	108.00	bu	-370 -529	-334 -492	-297 -456	-261 -419	-224 -383	-188 -346	-151 -310	-115 -273	-78 -237	-42 -201	-6 -164
70	126.00	bu	-293 -451	-250 -409	-208 -366	-165 -324	-122 -281	-80 -239	-37 -196	4 -153	47 -111	89 -68	132 -26
80	144.00	bu	-215 -374	-167 -325	-118 -276	-69 -228	-21 -179	27 -131	75 -82	124 -33	173 14	221 63	270 111
90	162.00	bu	-138 -296	-83 -242	-28 -187	25 -132	80 -78	135 -23	189 31	244 86	299 140	353 195	408 250
100	180.00	bu	-60 -219	0 -158	60 -97	121 -36	182 23	243 84	303 145	364 206	425 266	486 327	546 388
110	198.00	bu	16 -141	83 -74	150 -8	217 58	284 125	350 192	417 259	484 326	551 392	618 459	685 526
120	216.00	bu	94 -64	167 8	240 81	313 154	385 227	458 300	531 373	604 446	677 518	750 591	823 664
130	234.00	bu	171 13	250 92	329 171	408 250	487 329	566 408	645 487	724 566	803 645	882 723	961 802
140	252.00	bu	249 90	334 175	419 260	504 345	589 430	674 515	759 601	844 686	929 771	1014 856	1099 941
150	270.00	bu	326 168	417 259	509 350	600 441	691 532	782 623	873 714	964 806	1055 897	1146 988	1238 1079

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 2022 input prices.

Table 9.A Estimated costs per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
DIRECT EXPENSES				dollars			
<b>CUSTOM SPRAY</b>							
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____		
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____		
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____		
<b>FERTILIZERS</b>							
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____		
DAP	cwt	55.40	0.5000	27.70	_____		
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____		
NBPT	pt	18.00	0.7500	13.50	_____		
<b>FUNGICIDES</b>							
Ameristar Top	oz	2.41	10.0000	24.10	_____		
<b>HERBICIDES</b>							
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____		
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____		
Command 3ME	pt	18.00	1.3000	23.40	_____		
Sharpen	oz	6.72	3.0000	20.16	_____		
Clearpath	oz	4.24	9.6000	40.70	_____		
Newpath	oz	4.15	6.0000	24.90	_____		
Aim	oz	4.90	1.5000	7.35	_____		
Clincher SF	oz	1.95	7.5000	14.63	_____		
<b>INSECTICIDES</b>							
Tenhu SG	oz	1.13	13.5000	15.26	_____		
<b>SEED/PLANTS</b>							
Rice Seed Clearfield	lb	1.14	65.0000	74.10	_____		
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____		
Rice Seed CF(Levees)	lb	1.14	12.0000	13.68	_____		
<b>ADJUVANTS</b>							
Class Act NG	pt	4.75	0.5000	2.38	_____		
MSO	pt	1.34	1.5000	2.01	_____		
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____		
Surfactant	pt	3.30	0.1000	0.33	_____		
<b>CUSTOM FERTILIZE</b>							
App Fert by Air	cwt	8.00	5.0000	40.00	_____		
<b>HAULING</b>							
Haul Rice	bu	0.35	160.0000	56.00	_____		
<b>DRYING</b>							
Dry Rice	bu	0.40	160.0000	64.00	_____		
<b>SURVEY &amp; MARK LEVEES</b>							
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____		
<b>CROP CONSULTANT</b>							
Rice Consultant	acre	8.00	1.0000	8.00	_____		
<b>SOIL TEST</b>							
Soil Test	acre	10.00	0.3330	3.33	_____		
<b>OPERATOR LABOR</b>							
Tractors	hour	16.54	0.5475	9.05	_____		
Harvesters	hour	16.54	0.1269	2.10	_____		
<b>IRRIGATE LABOR</b>							
Special Labor	hour	9.06	3.5250	31.96	_____		
<b>HAND LABOR</b>							
Special Labor	hour	9.06	0.2500	2.27	_____		
Implements	hour	9.06	0.0785	0.71	_____		
<b>RICE MGT. LABOR</b>							
Special Labor	hour	9.06	1.5000	13.59	_____		
<b>UNALLOCATED LABOR</b>							
hour	16.53	0.4947	8.18	_____			
<b>DIESEL FUEL</b>							
Tractors	gal	4.48	7.6209	34.15	_____		
Harvesters	gal	4.48	2.7765	12.44	_____		
Flood Irr.	gal	4.48	26.8827	120.45	_____		
<b>REPAIR &amp; MAINTENANCE</b>							
Implements	acre	10.04	1.0000	10.04	_____		
Tractors	acre	4.74	1.0000	4.74	_____		
Harvesters	acre	6.86	1.0000	6.86	_____		
Flood Irr.	acre	14.31	1.0000	14.31	_____		
INTEREST ON OP. CAP.	acre	26.34	1.0000	26.34	_____		
<b>TOTAL DIRECT EXPENSES</b>							
				1089.67	_____		
<b>FIXED EXPENSES</b>							
Implements	acre	25.53	1.0000	25.53	_____		
Tractors	acre	33.53	1.0000	33.53	_____		
Harvesters	acre	30.19	1.0000	30.19	_____		
Flood Irr.	acre	52.19	1.0000	52.19	_____		
<b>TOTAL FIXED EXPENSES</b>							
				141.44	_____		
<b>TOTAL SPECIFIED EXPENSES</b>							
				1231.11	_____		

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 9.B Summary of estimated costs and returns per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	-----
TOTAL INCOME				1080.00	-----
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	-----
FERTILIZERS	acre	232.52	1.0000	232.52	-----
FUNGICIDES	acre	24.10	1.0000	24.10	-----
HERBICIDES	acre	165.00	1.0000	165.00	-----
INSECTICIDES	acre	15.26	1.0000	15.26	-----
SEED/PLANTS	acre	110.11	1.0000	110.11	-----
ADJUVANTS	acre	16.16	1.0000	16.16	-----
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	-----
HAULING	acre	56.00	1.0000	56.00	-----
DRYING	acre	64.00	1.0000	64.00	-----
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	-----
CROP CONSULTANT	acre	8.00	1.0000	8.00	-----
SOIL TEST	acre	3.33	1.0000	3.33	-----
HAND LABOR	hour	9.06	0.3285	2.98	-----
IRRIGATE LABOR	hour	9.06	3.5250	31.96	-----
OPERATOR LABOR	hour	16.54	0.6745	11.15	-----
RICE MGT. LABOR	hour	9.06	1.5000	13.59	-----
UNALLOCATED LABOR	hour	16.53	0.4947	8.18	-----
DIESEL FUEL	gal	4.48	37.2802	167.04	-----
REPAIR & MAINTENANCE	acre	35.95	1.0000	35.95	-----
INTEREST ON OP. CAP.	acre	26.34	1.0000	26.34	-----
TOTAL DIRECT EXPENSES				1089.67	-----
RETURNS ABOVE DIRECT EXPENSES				-9.67	-----
TOTAL FIXED EXPENSES				141.44	-----
TOTAL SPECIFIED EXPENSES				1231.11	-----
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-151.11	-----

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 9.C Estimated resource use for field operations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	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	300	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						1.3000				
Sharpen	oz						3.0000				
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				
Tenchi SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (CL)	40' Rigid	425 hp	0.126	1.00	Aug		0.12	0.12	0.12	0.11	
Grain Cart Rice	700 bu	MFWD	300	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	300	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							0.67	0.67	6.02	0.49	

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 9.D Estimated costs for field operations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

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					0.21	3.54	3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88	25.29	
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11	7.97	
App by Air ( 5 gal)	appl	7.60					0.32	7.92		7.92	
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02		17.02	
2,4-D Amine 4	pt	6.66					0.28	6.94		6.94	
Grain Drill	24'			5.44	2.78	3.18		0.36	11.76	9.71	21.47
Rice Seed Clearfield	lb	74.10					2.37	76.47		76.47	
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45		19.45	
Roller/Cultipacker	30'			3.44	0.71	1.56		0.18	5.89	3.72	9.61
App by Air ( 5 gal)	appl	7.60					0.24	7.84		7.84	
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23		11.23	
Command 3ME	pt	23.40					0.75	24.15		24.15	
Sharpen	oz	20.16					0.65	20.81		20.81	
Class Act NG	pt	2.38					0.08	2.46		2.46	
MSO	pt	0.67					0.02	0.69		0.69	
Seed Levees											
Rice Seed CF(Levees)	lb	13.68					0.44	14.12		14.12	
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59		3.59	
App by Air ( 5 gal)	appl	7.60					0.24	7.84		7.84	
Clearpath	oz	40.70					1.30	42.00		42.00	
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90		5.90	
App Fert by Air	cwt	8.00					0.21	8.21		8.21	
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67		25.67	
DAP	cwt	27.70					0.74	28.44		28.44	
Rice Consultant	acre	8.00					0.21	8.21		8.21	
App Fert by Air	cwt	20.00					0.53	20.53		20.53	
Urea, Solid (46% N)	cwt	103.95					2.77	106.72		106.72	
NBPT	pt	13.50					0.36	13.86		13.86	
App by Air (10 gal)	appl	9.70					0.26	9.96		9.96	
Newpath	oz	24.90					0.66	25.56		25.56	
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87		5.87	
Aim	oz	7.35					0.20	7.55		7.55	
Rice Management											
RICE MGT. LABOR	hour				2.72		0.07	2.79		2.79	
App by Air ( 5 gal)	appl	3.80					0.08	3.88		3.88	
Clincher SF	oz	14.63					0.31	14.94		14.94	
MSO	pt	1.34					0.03	1.37		1.37	
Rice Management											
RICE MGT. LABOR	hour				4.53		0.10	4.63		4.63	
App Fert by Air	cwt	12.00					0.26	12.26		12.26	
Urea, Solid (46% N)	cwt	62.37					1.33	63.70		63.70	
Rice Management											
RICE MGT. LABOR	hour				4.53		0.07	4.60		4.60	
App by Air ( 5 gal)	appl	7.60					0.12	7.72		7.72	
Ameristar Top	oz	24.10					0.39	24.49		24.49	
Surfactant	pt	0.33					0.01	0.34		0.34	
App by Air ( 3 gal)	appl	9.60					0.15	9.75		9.75	
Tenchi SG	oz	15.26					0.24	15.50		15.50	
Rice Management											
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83	
Header - Draper (CL)	40' Rigid		12.44	9.49	3.99		0.28	26.20	34.89	61.09	
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05	2.41	
Handling & Storage											
HAND LABOR	hour				2.27		0.02	2.29		2.29	
Haul Rice	bu	56.00					0.60	56.60		56.60	
Dry Rice	bu	64.00					0.68	64.68		64.68	
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70	37.61	
Flood Irr.	acre	4.50	125.34	15.21	34.03		4.28	183.36	58.38	241.74	
TOTALS		792.48	167.04	35.95	67.86	0.00	26.34	1089.67	141.44	1231.11	

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 9.E Estimated monthly income and expense flows per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

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	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	95.14	32.25	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	110.11	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	16.70	9.52	11.33	11.33	10.08	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	15.00	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	10.08	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.26	8.11	3.01	1.65	1.65	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	299.13	312.50	143.62	105.01	156.81	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-299.13	-312.50	-143.62	-105.01	923.19	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-351.82	-664.32	-807.94	-912.95	10.24	-9.67

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-624 -765	-597 -738	-570 -711	-543 -684	-516 -657	-489 -630	-462 -603	-435 -576	-408 -549	-381 -522	-354 -495
60	96.00	bu	-555 -696	-522 -664	-490 -631	-457 -599	-425 -566	-393 -534	-360 -502	-328 -469	-295 -437	-263 -404	-231 -372
70	112.00	bu	-486 -627	-448 -589	-410 -552	-372 -514	-335 -476	-297 -438	-259 -400	-221 -363	-183 -325	-146 -287	-108 -249
80	128.00	bu	-417 -558	-374 -515	-331 -472	-287 -429	-244 -386	-201 -342	-158 -299	-115 -256	-71 -213	-28 -170	14 -126
90	144.00	bu	-348 -489	-299 -441	-251 -392	-202 -344	-154 -295	-105 -246	-56 -198	-8 -149	40 -101	88 -52	137 -3
100	160.00	bu	-279 -421	-225 -367	-171 -313	-117 -259	-63 -205	-9 -151	44 -97	98 -43	152 10	206 64	260 118
110	176.00	bu	-210 -352	-151 -292	-91 -233	-32 -174	26 -114	86 -55	145 4	205 63	264 122	323 182	383 241
120	192.00	bu	-141 -283	-77 -218	-12 -153	52 -88	117 -24	182 40	246 105	311 170	376 235	441 299	506 364
130	208.00	bu	-73 -214	-2 -144	67 -74	137 -3	207 66	277 136	348 206	418 276	488 347	558 417	628 487
140	224.00	bu	-4 -145	71 -70	147 5	222 81	298 156	373 232	449 307	525 383	600 459	676 534	751 610
150	240.00	bu	64 -76	145 4	226 85	307 166	388 247	469 328	550 409	631 490	712 571	793 652	874 733

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 2022 input prices.

Table 10.A Estimated costs per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Clearpath	oz	4.24	9.6000	40.70	_____
Newpath	oz	4.15	6.0000	24.90	_____
Aim	oz	4.90	1.5000	7.35	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.14	65.0000	74.10	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.14	12.0000	13.68	_____
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	_____
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	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4999	8.25	_____
Harvesters	hour	16.54	0.1100	1.82	_____
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	16.53	0.4795	7.93	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	21.9949	98.55	_____
REPAIR & MAINTENANCE					
Implements	acre	9.63	1.0000	9.63	_____
Tractors	acre	4.48	1.0000	4.48	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.					
TOTAL DIRECT EXPENSES				-----	1040.31
FIXED EXPENSES					
Implements	acre	24.42	1.0000	24.42	_____
Tractors	acre	31.58	1.0000	31.58	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.85	1.0000	80.85	_____
TOTAL FIXED EXPENSES				-----	163.01
TOTAL SPECIFIED EXPENSES				-----	1203.32

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 10.B Summary of estimated costs and returns per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	165.00	1.0000	165.00	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	110.11	1.0000	110.11	_____
ADJUVANTS	acre	16.16	1.0000	16.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	16.54	0.6099	10.07	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	31.6056	141.61	_____
REPAIR & MAINTENANCE	acre	34.37	1.0000	34.37	_____
INTEREST ON OP. CAP.	acre	25.26	1.0000	25.26	_____
TOTAL DIRECT EXPENSES				1040.31	_____
RETURNS ABOVE DIRECT EXPENSES				39.69	_____
TOTAL FIXED EXPENSES				163.01	_____
TOTAL SPECIFIED EXPENSES				1203.32	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-123.32	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 10.C Estimated resource use for field operations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	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	300	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						1.3000				
Sharpen	oz						3.0000				
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					0.20
RICE MGT. LABOR	hour										
App Fert by Air	cwt				1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management					1.00	Jul					0.20
RICE MGT. LABOR	hour										
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				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					0.20
RICE MGT. LABOR	hour										
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug	0.01	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	300	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							0.60	0.60	4.01	0.47	

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 10.D Estimated costs for field operations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Clearfield	lb	74.10					2.37	76.47	76.47
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CF(Levees)	lb	13.68					0.44	14.12	14.12
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Clearpath	oz	40.70					1.30	42.00	42.00
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Newpath	oz	24.90					0.66	25.56	25.56
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Aim	oz	7.35					0.20	7.55	7.55
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	2.25	101.57	14.89	22.79		3.39	144.89	84.61
TOTALS		790.23	141.61	34.37	48.84	0.00	25.26	1040.31	163.01
									1203.32

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 10.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

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	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	95.14	32.25	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	110.11	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.20	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	12.52	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	8.68	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.01	7.80	2.74	1.45	1.60	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	291.65	300.70	130.95	92.41	152.00	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-291.65	-300.70	-130.95	-92.41	928.00	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-344.34	-645.04	-775.99	-868.40	59.60	39.69

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120		
		PRODUCT PRICE											
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-574 -737	-547 -710	-520 -683	-493 -656	-466 -629	-439 -602	-412 -575	-385 -548	-358 -521	-331 -494	-304 -467
60	96.00	bu	-505 -668	-473 -636	-440 -604	-408 -571	-376 -539	-343 -506	-311 -474	-278 -442	-246 -409	-214 -377	-181 -344
70	112.00	bu	-436 -599	-399 -562	-361 -524	-323 -486	-285 -448	-247 -410	-210 -373	-172 -335	-134 -297	-96 -259	-58 -221
80	128.00	bu	-368 -531	-324 -487	-281 -444	-238 -401	-195 -358	-152 -315	-108 -271	-65 -228	-22 -185	20 -142	63 -99
90	144.00	bu	-299 -462	-250 -413	-201 -364	-153 -316	-104 -267	-56 -219	-7 -170	41 -121	89 -73	138 -24	186 23
100	160.00	bu	-230 -393	-176 -339	-122 -285	-68 -231	-14 -177	39 -123	93 -69	147 -15	201 38	255 92	309 146
110	176.00	bu	-161 -324	-102 -265	-42 -205	16 -146	76 -86	135 -27	194 31	254 91	313 150	373 210	432 269
120	192.00	bu	-92 -255	-27 -190	37 -125	101 -61	166 3	231 68	296 133	361 198	425 262	490 327	555 392
130	208.00	bu	-23 -186	46 -116	116 -46	186 23	257 94	327 164	397 234	467 304	537 374	608 445	678 515
140	224.00	bu	45 -117	120 -42	196 33	271 108	347 184	423 260	498 335	574 411	649 486	725 562	801 638
150	240.00	bu	114 -48	195 32	276 113	357 194	438 275	519 356	600 437	681 518	762 599	843 680	924 761

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 2022 input prices.

Table 11.A Estimated costs per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Clearpath	oz	4.24	9.6000	40.70	
Newpath	oz	4.15	6.0000	24.90	
Aim	oz	4.90	1.5000	7.35	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Seed Clearfield	lb	1.14	65.0000	74.10	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
Rice Seed CF(Levees)	lb	1.14	12.0000	13.68	
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	
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	8.00	5.0000	40.00	
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.5281	8.72	
Harvesters	hour	16.54	0.1100	1.82	
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	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	7.4504	33.39	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	18.7364	83.95	
REPAIR & MAINTENANCE					
Implements	acre	9.73	1.0000	9.73	
Tractors	acre	4.64	1.0000	4.64	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	24.95	1.0000	24.95	
TOTAL DIRECT EXPENSES				1023.81	
FIXED EXPENSES					
Implements	acre	25.35	1.0000	25.35	
Tractors	acre	32.74	1.0000	32.74	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.51	1.0000	80.51	
TOTAL FIXED EXPENSES				164.76	
TOTAL SPECIFIED EXPENSES				1188.57	

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 11.B Summary of estimated costs and returns per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	160.0000	1080.00	_____
<b>TOTAL INCOME</b>				1080.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	165.00	1.0000	165.00	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	110.11	1.0000	110.11	_____
ADJUVANTS	acre	16.16	1.0000	16.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	24.95	1.0000	24.95	_____
<b>TOTAL DIRECT EXPENSES</b>				1023.81	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				56.19	_____
<b>TOTAL FIXED EXPENSES</b>				164.76	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1188.57	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-108.57	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 11.C Estimated resource use for field operations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	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	300	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						1.3000				
Sharpen	oz						3.0000				
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					0.20
RICE MGT. LABOR	hour										
App Fert by Air	cwt				1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management					1.00	Jul					0.20
RICE MGT. LABOR	hour										
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				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					0.20
RICE MGT. LABOR	hour										
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	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	300	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							0.63	0.63	2.82	0.47	

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 11.D Estimated costs for field operations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Clearfield	lb	74.10					2.37	76.47	76.47
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CF(Levees)	lb	13.68					0.44	14.12	14.12
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Clearpath	oz	40.70					1.30	42.00	42.00
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Newpath	oz	24.90					0.66	25.56	25.56
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Aim	oz	7.35					0.20	7.55	7.55
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	10.17	88.08	14.80	12.26		3.08	128.39	86.36
<b>TOTALS</b>		798.15	128.12	34.28	38.31	0.00	24.95	1023.81	164.76
									1188.57

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 11.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

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	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	95.14	32.25	14.63	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	15.26	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	110.11	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.11	7.63	2.60	1.35	1.60	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	294.85	294.08	124.36	85.86	152.06	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-294.85	-294.08	-124.36	-85.86	927.94	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-347.54	-641.62	-765.98	-851.84	76.10	56.19

Note: Cost of production estimates are based on 2022 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, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120		
		PRODUCT PRICE											
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-558 -722	-531 -695	-504 -668	-477 -641	-450 -614	-423 -587	-396 -560	-369 -533	-342 -506	-315 -479	-288 -452
60	96.00	bu	-489 -654	-456 -621	-424 -589	-392 -556	-359 -524	-327 -492	-294 -459	-262 -427	-230 -394	-197 -362	-165 -330
70	112.00	bu	-420 -585	-382 -547	-344 -509	-307 -471	-269 -433	-231 -396	-193 -358	-155 -320	-118 -282	-80 -244	-42 -207
80	128.00	bu	-351 -516	-308 -473	-265 -429	-221 -386	-178 -343	-135 -300	-92 -257	-49 -213	-5 -170	37 -127	80 -84
90	144.00	bu	-282 -447	-234 -398	-185 -350	-136 -301	-88 -253	-39 -204	8 -155	57 -107	106 -58	154 -10	203 38
100	160.00	bu	-213 -378	-159 -324	-105 -270	-51 -216	2 -162	56 -108	110 -54	164 -0	218 53	272 107	326 161
110	176.00	bu	-144 -309	-85 -250	-26 -190	33 -131	92 -72	152 -12	211 46	270 106	330 165	389 224	449 284
120	192.00	bu	-76 -240	-11 -176	53 -111	118 -46	183 18	247 83	312 147	377 212	442 277	507 342	571 407
130	208.00	bu	-7 -171	63 -101	133 -31	203 38	273 108	343 179	414 249	484 319	554 389	624 459	694 530
140	224.00	bu	61 -103	137 -27	212 48	288 123	364 199	439 274	515 350	590 426	666 501	742 577	817 652
150	240.00	bu	130 -34	211 46	292 127	373 208	454 289	535 370	616 451	697 532	778 613	859 694	940 775

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 2022 input prices.

Table 12.A Estimated costs per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Clearpath	oz	4.24	9.6000	40.70	_____
Newpath	oz	4.15	6.0000	24.90	_____
Aim	oz	4.90	1.5000	7.35	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.14	65.0000	74.10	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.14	12.0000	13.68	_____
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	_____
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	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4228	6.98	_____
Harvesters	hour	16.54	0.1100	1.82	_____
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	16.53	0.4795	7.93	_____	
DIESEL FUEL					
Tractors	gal	4.48	6.5294	29.26	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	15.4779	69.35	_____
REPAIR & MAINTENANCE					
Implements	acre	9.51	1.0000	9.51	_____
Tractors	acre	4.02	1.0000	4.02	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	24.04	1.0000	24.04	_____
TOTAL DIRECT EXPENSES				988.27	_____
FIXED EXPENSES					
Implements	acre	23.83	1.0000	23.83	_____
Tractors	acre	28.41	1.0000	28.41	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.17	1.0000	80.17	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1146.84	_____

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 12.B Summary of estimated costs and returns per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	165.00	1.0000	165.00	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	110.11	1.0000	110.11	_____
ADJUVANTS	acre	16.16	1.0000	16.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	24.04	1.0000	24.04	_____
TOTAL DIRECT EXPENSES				988.27	_____
RETURNS ABOVE DIRECT EXPENSES				91.73	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1146.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-66.84	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 12.C Estimated resource use for field operations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	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	300	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						1.3000				
Sharpen	oz						3.0000				
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				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp		0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD	300	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	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000			1.05	
TOTALS								0.53	0.53	2.61	0.47

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 12.D Estimated costs for field operations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Clearfield	lb	74.10					2.37	76.47	76.47
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CF(Levees)	lb	13.68					0.44	14.12	14.12
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Clearpath	oz	40.70					1.30	42.00	42.00
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Newpath	oz	24.90					0.66	25.56	25.56
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Aim	oz	7.35					0.20	7.55	7.55
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre		69.35	11.80	9.53		2.17	92.85	80.17
TOTALS		787.98	109.39	31.28	35.58	0.00	24.04	988.27	158.57
									1146.84

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 12.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

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	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	95.14	32.25	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	110.11	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.46	7.53	2.52	1.30	1.57	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	273.35	290.24	120.54	82.07	149.47	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-273.35	-290.24	-120.54	-82.07	930.53	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-326.04	-616.28	-736.82	-818.89	111.64	91.73

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT		75	80	85	90	95	100	PERCENT				
								PRODUCT	PRICE			
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT						dollars				
50	80.00	bu	-522 -681	-495 -654	-468 -627	-441 -600	-414 -573	-387 -546	-360 -519	-333 -492	-306 -465	-279 -438
60	96.00	bu	-453 -612	-421 -579	-388 -547	-356 -515	-324 -482	-291 -450	-259 -417	-226 -385	-194 -353	-162 -320
70	112.00	bu	-384 -543	-347 -505	-309 -467	-271 -430	-233 -392	-195 -354	-158 -316	-120 -278	-82 -241	-44 -203
80	128.00	bu	-316 -474	-272 -431	-229 -388	-186 -344	-143 -301	-100 -258	-56 -215	-13 -172	29 -128	72 -85
90	144.00	bu	-247 -405	-198 -357	-149 -308	-101 -259	-52 -211	-4 -162	44 -114	93 -65	141 -16	190 31
100	160.00	bu	-178 -336	-124 -282	-70 -228	-16 -174	37 -120	91 -66	145 -12	199 41	253 95	307 149
110	176.00	bu	-109 -267	-49 -208	9 -149	68 -89	128 -30	187 29	247 88	306 147	365 207	425 266
120	192.00	bu	-40 -199	24 -134	89 -69	153 -4	218 60	283 124	348 189	413 254	477 319	542 384
130	208.00	bu	28 -130	98 -60	168 10	238 80	309 150	379 220	449 290	519 361	589 431	660 501
140	224.00	bu	97 -61	172 14	248 89	324 165	399 241	475 316	550 392	626 467	702 543	777 619
150	240.00	bu	166 7	247 88	328 169	409 250	490 331	571 412	652 493	733 574	814 655	895 736
												976 817

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 2022 input prices.

Table 13.A Estimated costs per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	3.5000	26.60	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Preface	oz	4.99	11.0000	54.89	
Facet L	pt	17.50	2.0000	35.00	
Aim	oz	4.90	1.5000	7.35	
Clincher SF	oz	1.95	7.5000	14.63	
<b>INSECTICIDES</b>					
Tenhu SG	oz	1.13	13.5000	15.26	
<b>SEED/PLANTS</b>					
Rice Fullpage Hyb Tr	lb	7.68	23.0000	176.64	
Rice Seed FPH(Levee)	lb	7.68	4.2500	32.64	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
<b>ADJUVANTS</b>					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	4.3220	34.58	
<b>HAULING</b>					
Haul Rice	bu	0.35	180.0000	63.00	
<b>DRYING</b>					
Dry Rice	bu	0.40	180.0000	72.00	
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5475	9.05	
Harvesters	hour	16.54	0.1100	1.82	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	3.5250	31.96	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.6209	34.15	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	26.8827	120.45	
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.69	1.0000	9.69	
Tractors	acre	4.74	1.0000	4.74	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	29.11	1.0000	29.11	
<b>TOTAL DIRECT EXPENSES</b>					
			-----	1156.69	
<b>FIXED EXPENSES</b>					
Implements	acre	24.90	1.0000	24.90	
Tractors	acre	33.53	1.0000	33.53	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	52.19	1.0000	52.19	
<b>TOTAL FIXED EXPENSES</b>					
			-----	136.78	
<b>TOTAL SPECIFIED EXPENSES</b>					
			-----	1293.47	

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 13.B Summary of estimated costs and returns per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	180.0000	1215.00	_____
TOTAL INCOME				1215.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.90	1.0000	45.90	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	189.29	1.0000	189.29	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	210.51	1.0000	210.51	_____
ADJUVANTS	acre	15.83	1.0000	15.83	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
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	16.54	0.6575	10.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	36.9100	165.38	_____
REPAIR & MAINTENANCE	acre	34.69	1.0000	34.69	_____
INTEREST ON OP. CAP.	acre	29.11	1.0000	29.11	_____
TOTAL DIRECT EXPENSES				1156.69	_____
RETURNS ABOVE DIRECT EXPENSES				58.31	_____
TOTAL FIXED EXPENSES				136.78	_____
TOTAL SPECIFIED EXPENSES				1293.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-78.47	_____

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 13.C Estimated resource use for field operations, per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ INPUT	POWER UNIT	PERF SIZE	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	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb						23.0000				
Roller/Cultipacker	30'	MFWD	300	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						1.3000				
Sharpen	oz						3.0000				
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				
Tenhu SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	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	300	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							0.65	0.65	5.21	0.47	

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 13.D Estimated costs for field operations, per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33				0.21	3.54		3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93	0.75	12.41	12.88	25.29		
Harrow - Folding	40'		2.69	0.66	1.22	0.29	4.86	3.11	7.97		
App by Air ( 5 gal)	appl	7.60				0.32	7.92		7.92		
Glyphosate 3lbs a.e	oz	16.32				0.70	17.02		17.02		
2,4-D Amine 4	pt	6.66				0.28	6.94		6.94		
Grain Drill	24'		5.44	2.78	3.18	0.36	11.76	9.71	21.47		
Rice Fullpage Hyb Tr	lb	176.64				5.65	182.29		182.29		
Roller/Cultipacker	30'		3.44	0.71	1.56	0.18	5.89	3.72	9.61		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23		11.23		
Command 3ME	pt	23.40				0.75	24.15		24.15		
Sharpen	oz	20.16				0.65	20.81		20.81		
MSO	pt	0.67				0.02	0.69		0.69		
Class Act NG	pt	2.38				0.08	2.46		2.46		
Seed Levees											
Rice Seed FPH(Levee)	lb	32.64				1.04	33.68		33.68		
Rice Seed Trt/Insect	lbseed	1.23				0.04	1.27		1.27		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Preface	oz	24.95				0.80	25.75		25.75		
Facet L	pt	35.00				1.12	36.12		36.12		
Crop Oil Conc.(Pet.)	pt	5.72				0.18	5.90		5.90		
App Fert by Air	cwt	8.00				0.21	8.21		8.21		
Amm Sulfate (21% N)	cwt	25.00				0.67	25.67		25.67		
DAP	cwt	27.70				0.74	28.44		28.44		
Rice Consultant	acre	8.00				0.21	8.21		8.21		
App Fert by Air	cwt	21.36				0.57	21.93		21.93		
Urea, Solid (46% N)	cwt	111.02				2.96	113.98		113.98		
NBPT	pt	14.40				0.38	14.78		14.78		
App by Air (10 gal)	appl	9.70				0.26	9.96		9.96		
Preface	oz	29.94				0.80	30.74		30.74		
Crop Oil Conc.(Pet.)	pt	5.72				0.15	5.87		5.87		
Aim	oz	7.35				0.20	7.55		7.55		
Rice Management											
RICE MGT. LABOR	hour				0.91		0.93		0.93		
App by Air ( 5 gal)	appl	3.80				0.08	3.88		3.88		
Clincher SF	oz	14.63				0.31	14.94		14.94		
MSO	pt	1.34				0.03	1.37		1.37		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.85		1.85		
App Fert by Air	cwt	5.22				0.11	5.33		5.33		
Urea, Solid (46% N)	cwt	27.11				0.58	27.69		27.69		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.84		1.84		
App by Air ( 3 gal)	appl	9.60				0.15	9.75		9.75		
Tenchu SG	oz	15.26				0.24	15.50		15.50		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.83		1.83		
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46	0.24	22.71	30.23	52.94		
Grain Cart Rice	700 bu		0.76	0.25	0.34	0.01	1.36	1.05	2.41		
Handling & Storage											
HAND LABOR	hour				2.27		2.29		2.29		
Haul Rice	bu	63.00				0.67	63.67		63.67		
Dry Rice	bu	72.00				0.77	72.77		72.77		
Disk Heavy	28'		10.47	4.58	4.75	0.11	19.91	17.70	37.61		
Flood Irr.	acre	4.50	125.34	15.21	34.03	4.28	183.36	58.38	241.74		
TOTALS		867.43	165.38	34.69	60.08	0.00	29.11	1156.69	136.78	1293.47	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 13.E Estimated monthly income and expense flows per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

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	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	114.39	37.29	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	210.51	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	4.15	0.00	0.00	0.00	0.00	0.00	16.70	7.71	8.61	8.61	9.55	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	13.34	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	8.82	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	13.09	8.45	2.05	1.09	1.77	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	422.61	325.40	97.90	69.70	168.48	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-422.61	-325.40	-97.90	-69.70	1046.52	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-475.30	-800.70	-898.60	-968.30	78.22	58.31

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT			dollars										
50	90.00	bu	-632 -769	-602 -739	-572 -708	-541 -678	-511 -648	-480 -617	-450 -587	-420 -557	-389 -526	-359 -496	-329 -465
60	108.00	bu	-555 -692	-518 -655	-482 -619	-446 -582	-409 -546	-373 -509	-336 -473	-300 -436	-263 -400	-227 -364	-190 -327
70	126.00	bu	-477 -614	-435 -572	-392 -529	-350 -487	-307 -444	-265 -402	-222 -359	-180 -316	-137 -274	-95 -231	-52 -189
80	144.00	bu	-400 -537	-351 -488	-303 -439	-254 -391	-206 -342	-157 -294	-108 -245	-60 -196	-11 -148	36 -99	85 -51
90	162.00	bu	-322 -459	-268 -405	-213 -350	-158 -295	-104 -241	-49 -186	5 -131	59 -76	114 -22	169 32	223 87
100	180.00	bu	-245 -382	-184 -321	-123 -260	-63 -199	-2 -139	58 -78	119 -17	179 43	240 103	301 164	362 225
110	198.00	bu	-167 -304	-101 -237	-34 -171	32 -104	99 -37	166 29	232 96	299 163	366 229	433 296	500 363
120	216.00	bu	-90 -227	-17 -154	55 -81	128 -8	201 64	274 137	346 210	419 283	492 355	565 428	638 501
130	234.00	bu	-12 -149	65 -70	144 8	223 87	302 166	381 245	460 324	539 403	618 482	697 560	776 639
140	252.00	bu	64 -72	149 12	234 97	319 182	404 267	489 352	574 438	659 523	744 608	829 693	914 778
150	270.00	bu	141 5	233 96	324 187	415 278	506 369	597 460	688 551	779 643	870 734	962 825	1053 916

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 2022 input prices.

Table 14.A Estimated costs per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	3.5000	26.60	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	_____
NBPT	pt	18.00	0.8000	14.40	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	17.50	2.0000	35.00	_____
Aim	oz	4.90	1.5000	7.35	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.68	23.0000	176.64	_____
Rice Seed FPH(Levee)	lb	7.68	4.2500	32.64	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	_____
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	8.00	4.3220	34.58	_____
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	16.54	0.4999	8.25	_____
Harvesters	hour	16.54	0.1100	1.82	_____
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	16.53	0.4795	7.93	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	21.9949	98.55	_____
REPAIR & MAINTENANCE					
Implements	acre	9.63	1.0000	9.63	_____
Tractors	acre	4.48	1.0000	4.48	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	28.22	1.0000	28.22	_____
TOTAL DIRECT EXPENSES				1118.22	_____
FIXED EXPENSES					
Implements	acre	24.42	1.0000	24.42	_____
Tractors	acre	31.58	1.0000	31.58	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.85	1.0000	80.85	_____
TOTAL FIXED EXPENSES				163.01	_____
TOTAL SPECIFIED EXPENSES				1281.23	_____

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 14.B Summary of estimated costs and returns per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
<b>TOTAL INCOME</b>				<b>1215.00</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	45.90	1.0000	45.90	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	189.29	1.0000	189.29	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	210.51	1.0000	210.51	_____
ADJUVANTS	acre	15.83	1.0000	15.83	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
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	16.54	0.6099	10.07	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	31.6056	141.61	_____
REPAIR & MAINTENANCE	acre	34.37	1.0000	34.37	_____
INTEREST ON OP. CAP.	acre	28.22	1.0000	28.22	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>1118.22</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>96.78</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>163.01</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1281.23</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-66.23</b>	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 14.C Estimated resource use for field operations, per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	PERF SIZE	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	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	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	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb						23.0000				
Roller/Cultipacker	30'	MFWD	300	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						1.3000				
Sharpen	oz						3.0000				
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				
Tenchi SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	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	300	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							0.60	0.60	4.01	0.47	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 14.D Estimated costs for field operations, per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94
Grain Drill	24'			5.44	2.78	3.18	0.36	11.76
Rice Fullpage Hyb Tr	lb	176.64					5.65	182.29
Roller/Cultipacker	30'			3.44	0.71	1.56	0.18	5.89
App by Air ( 5 gal)	appl	7.60					0.24	7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23
Command 3ME	pt	23.40					0.75	24.15
Sharpen	oz	20.16					0.65	20.81
MSO	pt	0.67					0.02	0.69
Class Act NG	pt	2.38					0.08	2.46
Seed Levees								
Rice Seed FPH(Levee)	lb	32.64					1.04	33.68
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27
App by Air ( 5 gal)	appl	7.60					0.24	7.84
Preface	oz	24.95					0.80	25.75
Facet L	pt	35.00					1.12	36.12
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90
App Fert by Air	cwt	8.00					0.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67
DAP	cwt	27.70					0.74	28.44
Rice Consultant	acre	8.00					0.21	8.21
App Fert by Air	cwt	21.36					0.57	21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98
NBPT	pt	14.40					0.38	14.78
App by Air (10 gal)	appl	9.70					0.26	9.96
Preface	oz	29.94					0.80	30.74
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87
Aim	oz	7.35					0.20	7.55
Rice Management								
RICE MGT. LABOR	hour				0.91		0.02	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88
Clincher SF	oz	14.63					0.31	14.94
MSO	pt	1.34					0.03	1.37
Rice Management								
RICE MGT. LABOR	hour				1.81		0.04	1.85
App Fert by Air	cwt	5.22					0.11	5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69
Rice Management								
RICE MGT. LABOR	hour				1.81		0.03	1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75
Tenchi SG	oz	15.26					0.24	15.50
Rice Management								
RICE MGT. LABOR	hour				1.81		0.02	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36
Handling & Storage								
HAND LABOR	hour				2.27		0.02	2.29
Haul Rice	bu	63.00					0.67	63.67
Dry Rice	bu	72.00					0.77	72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91
Flood Irr.	acre	2.25	101.57	14.89	22.79		3.39	144.89
TOTALS		865.18	141.61	34.37	48.84	0.00	28.22	1118.22
								163.01 1281.23

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 14.E Estimated monthly income and expense flows per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

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	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	114.39	37.29	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	210.51	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.20	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	12.52	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	8.68	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	12.84	8.19	1.84	0.93	1.76	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	415.13	315.46	88.01	59.86	167.16	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-415.13	-315.46	-88.01	-59.86	1047.84	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-467.82	-783.28	-871.29	-931.15	116.69	96.78

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT		75	80	85	90	95	100	PERCENT					
								PRODUCT	PRICE				
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT						dollars					
50	90.00	bu	-594 -757	-564 -727	-533 -696	-503 -666	-472 -635	-442 -605	-412 -575	-381 -544	-351 -514	-321 -484	-290 -453
60	108.00	bu	-516 -679	-480 -643	-443 -607	-407 -570	-371 -534	-334 -497	-298 -461	-261 -424	-225 -388	-188 -351	-152 -315
70	126.00	bu	-439 -602	-396 -559	-354 -517	-311 -474	-269 -432	-226 -389	-184 -347	-141 -304	-99 -262	-56 -219	-14 -177
80	144.00	bu	-361 -524	-313 -476	-264 -427	-216 -379	-167 -330	-118 -281	-70 -233	-21 -184	26 -136	75 -87	124 -38
90	162.00	bu	-284 -447	-229 -392	-175 -338	-120 -283	-65 -228	-11 -174	43 -119	98 -64	152 -10	207 44	262 99
100	180.00	bu	-206 -369	-146 -309	-85 -248	-24 -187	36 -126	96 -66	157 -5	218 55	279 116	339 176	400 237
110	198.00	bu	-129 -292	-62 -225	4 -158	70 -92	137 -25	204 41	271 108	338 175	405 242	471 308	538 375
120	216.00	bu	-52 -215	20 -142	93 -69	166 3	239 76	312 149	385 222	458 295	531 368	604 441	676 513
130	234.00	bu	25 -137	104 -58	183 20	262 99	341 178	420 257	499 336	578 415	657 494	736 573	815 652
140	252.00	bu	102 -60	188 24	273 110	358 195	443 280	528 365	613 450	698 535	783 620	868 705	953 790
150	270.00	bu	180 17	271 108	362 199	453 290	544 381	636 473	727 564	818 655	909 746	1000 837	1091 928

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 2022 input prices.

Table 15.A Estimated costs per acre  
 Fullpage hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	3.5000	26.60	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Preface	oz	4.99	11.0000	54.89	
Facet L	pt	17.50	2.0000	35.00	
Aim	oz	4.90	1.5000	7.35	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.68	23.0000	176.64	
Rice Seed FPH(Levee)	lb	7.68	4.2500	32.64	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	
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	8.00	4.3220	34.58	
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	16.54	0.5281	8.72	
Harvesters	hour	16.54	0.1100	1.82	
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	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	7.4504	33.39	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	18.7364	83.95	
REPAIR & MAINTENANCE					
Implements	acre	9.73	1.0000	9.73	
Tractors	acre	4.64	1.0000	4.64	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	27.91	1.0000	27.91	
TOTAL DIRECT EXPENSES				1101.72	
FIXED EXPENSES					
Implements	acre	25.35	1.0000	25.35	
Tractors	acre	32.74	1.0000	32.74	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.51	1.0000	80.51	
TOTAL FIXED EXPENSES				164.76	
TOTAL SPECIFIED EXPENSES				1266.48	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
				-----	
<b>TOTAL INCOME</b>				<b>1215.00</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	45.90	1.0000	45.90	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	189.29	1.0000	189.29	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	210.51	1.0000	210.51	_____
ADJUVANTS	acre	15.83	1.0000	15.83	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
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	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	27.91	1.0000	27.91	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>1101.72</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>113.28</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>164.76</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1266.48</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-51.48</b>	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	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 300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb					23.0000				
Roller/Cultipacker	30'	MFWD 300	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					1.3000				
Sharpen	oz					3.0000				
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				
Tenhu SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour							0.20		
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	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 300	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							0.63	0.63	2.82	0.47

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 15.D Estimated costs for field operations, per acre  
 Fullpage hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33				0.21	3.54		3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93	0.75	12.41	12.88	25.29		
Harrow - Folding	40'		2.69	0.66	1.22	0.29	4.86	3.11	7.97		
App by Air ( 5 gal)	appl	7.60				0.32	7.92		7.92		
Glyphosate 3lbs a.e	oz	16.32				0.70	17.02		17.02		
2,4-D Amine 4	pt	6.66				0.28	6.94		6.94		
Grain Drill	24'		5.44	2.78	3.18	0.36	11.76	9.71	21.47		
Rice Fullpage Hyb Tr	lb	176.64				5.65	182.29		182.29		
Roller/Cultipacker	30'		3.44	0.71	1.56	0.18	5.89	3.72	9.61		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23		11.23		
Command 3ME	pt	23.40				0.75	24.15		24.15		
Sharpen	oz	20.16				0.65	20.81		20.81		
MSO	pt	0.67				0.02	0.69		0.69		
Class Act NG	pt	2.38				0.08	2.46		2.46		
Seed Levees											
Rice Seed FPH(Levee)	lb	32.64				1.04	33.68		33.68		
Rice Seed Trt/Insect	lbseed	1.23				0.04	1.27		1.27		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Preface	oz	24.95				0.80	25.75		25.75		
Facet L	pt	35.00				1.12	36.12		36.12		
Crop Oil Conc.(Pet.)	pt	5.72				0.18	5.90		5.90		
App Fert by Air	cwt	8.00				0.21	8.21		8.21		
Amm Sulfate (21% N)	cwt	25.00				0.67	25.67		25.67		
DAP	cwt	27.70				0.74	28.44		28.44		
Rice Consultant	acre	8.00				0.21	8.21		8.21		
App Fert by Air	cwt	21.36				0.57	21.93		21.93		
Urea, Solid (46% N)	cwt	111.02				2.96	113.98		113.98		
NBPT	pt	14.40				0.38	14.78		14.78		
App by Air (10 gal)	appl	9.70				0.26	9.96		9.96		
Preface	oz	29.94				0.80	30.74		30.74		
Crop Oil Conc.(Pet.)	pt	5.72				0.15	5.87		5.87		
Aim	oz	7.35				0.20	7.55		7.55		
Rice Management											
RICE MGT. LABOR	hour				0.91		0.93		0.93		
App by Air ( 5 gal)	appl	3.80				0.08	3.88		3.88		
Clincher SF	oz	14.63				0.31	14.94		14.94		
MSO	pt	1.34				0.03	1.37		1.37		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.85		1.85		
App Fert by Air	cwt	5.22				0.11	5.33		5.33		
Urea, Solid (46% N)	cwt	27.11				0.58	27.69		27.69		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.84		1.84		
App by Air ( 3 gal)	appl	9.60				0.15	9.75		9.75		
Tenchu SG	oz	15.26				0.24	15.50		15.50		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.83		1.83		
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46	0.24	22.71	30.23	52.94		
Grain Cart Rice	700 bu		0.76	0.25	0.34	0.01	1.36	1.05	2.41		
Handling & Storage											
HAND LABOR	hour				2.27		2.29		2.29		
Haul Rice	bu	63.00				0.67	63.67		63.67		
Dry Rice	bu	72.00				0.77	72.77		72.77		
Disk Heavy	28'		10.47	4.58	4.75	0.11	19.91	17.70	37.61		
Flood Irr.	acre	10.17	88.08	14.80	12.26	3.08	128.39	86.36	214.75		
TOTALS		873.10	128.12	34.28	38.31	0.00	27.91	1101.72	164.76	1266.48	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

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	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	114.39	37.29	14.63	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	15.26	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	210.51	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	12.94	8.02	1.70	0.83	1.76	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	418.33	308.84	81.42	53.31	167.22	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-418.33	-308.84	-81.42	-53.31	1047.78	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-471.02	-779.86	-861.28	-914.59	133.19	113.28

Note: Cost of production estimates are based on 2022 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, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Rice	PRODUCT PRICE												
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-577	-547	-517	-486	-456	-426	-395	-365	-334	-304	-274
			-742	-712	-681	-651	-621	-590	-560	-530	-499	-469	-438
60	108.00	bu	-500	-463	-427	-391	-354	-318	-281	-245	-208	-172	-135
			-665	-628	-592	-555	-519	-482	-446	-410	-373	-337	-300
70	126.00	bu	-422	-380	-337	-295	-252	-210	-167	-125	-82	-40	2
			-587	-545	-502	-460	-417	-375	-332	-289	-247	-204	-162
80	144.00	bu	-345	-296	-248	-199	-151	-102	-53	-5	43	91	140
			-510	-461	-412	-364	-315	-267	-218	-169	-121	-72	-24
90	162.00	bu	-267	-213	-158	-103	-49	5	60	114	169	224	278
			-432	-378	-323	-268	-214	-159	-104	-49	4	59	114
100	180.00	bu	-190	-129	-68	-8	52	113	174	234	295	356	417
			-355	-294	-233	-172	-112	-51	9	70	130	191	252
110	198.00	bu	-112	-46	20	87	154	221	287	354	421	488	555
			-277	-210	-144	-77	-10	56	123	190	256	323	390
120	216.00	bu	-35	37	110	183	256	328	401	474	547	620	693
			-200	-127	-54	18	91	164	237	310	382	455	528
130	234.00	bu	41	120	199	278	357	436	515	594	673	752	831
			-122	-43	35	114	193	272	351	430	509	587	666
140	252.00	bu	119	204	289	374	459	544	629	714	799	884	969
			-45	39	124	209	294	379	464	550	635	720	805
150	270.00	bu	196	288	379	470	561	652	743	834	925	1017	1108
			32	123	214	305	396	487	578	670	761	852	943

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 2022 input prices.

Table 16.A Estimated costs per acre  
 Fullpage hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	3.5000	26.60	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Preface	oz	4.99	11.0000	54.89	
Facet L	pt	17.50	2.0000	35.00	
Aim	oz	4.90	1.5000	7.35	
Clincher SF	oz	1.95	7.5000	14.63	
<b>INSECTICIDES</b>					
Tenhu SG	oz	1.13	13.5000	15.26	
<b>SEED/PLANTS</b>					
Rice Fullpage Hyb Tr	lb	7.68	23.0000	176.64	
Rice Seed FPH(Levee)	lb	7.68	4.2500	32.64	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
<b>ADJUVANTS</b>					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	4.3220	34.58	
<b>HAULING</b>					
Haul Rice	bu	0.35	180.0000	63.00	
<b>DRYING</b>					
Dry Rice	bu	0.40	180.0000	72.00	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.4228	6.98	
Harvesters	hour	16.54	0.1100	1.82	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	1.0500	9.53	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	6.5294	29.26	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	15.4779	69.35	
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.51	1.0000	9.51	
Tractors	acre	4.02	1.0000	4.02	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	27.00	1.0000	27.00	
<b>TOTAL DIRECT EXPENSES</b>					
				1066.18	
<b>FIXED EXPENSES</b>					
Implements	acre	23.83	1.0000	23.83	
Tractors	acre	28.41	1.0000	28.41	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.17	1.0000	80.17	
<b>TOTAL FIXED EXPENSES</b>					
				158.57	
<b>TOTAL SPECIFIED EXPENSES</b>					
				1224.75	

Note: Cost of production estimates are based on 2022 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, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
<b>TOTAL INCOME</b>				1215.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	45.90	1.0000	45.90	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	189.29	1.0000	189.29	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	210.51	1.0000	210.51	_____
ADJUVANTS	acre	15.83	1.0000	15.83	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
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	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	27.00	1.0000	27.00	_____
<b>TOTAL DIRECT EXPENSES</b>				1066.18	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				148.82	_____
<b>TOTAL FIXED EXPENSES</b>				158.57	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1224.75	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-9.75	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	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 300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb					23.0000				
Roller/Cultipacker	30'	MFWD 300	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					1.3000				
Sharpen	oz					3.0000				
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				
Tenhu SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour							0.20		
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	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 300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.53	0.53	2.61	0.47

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 16.D Estimated costs for field operations, per acre  
 Fullpage hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'			5.44	2.78	3.18		0.36	11.76
Rice Fullpage Hyb Tr	lb	176.64					5.65	182.29	182.29
Roller/Cultipacker	30'			3.44	0.71	1.56		0.18	5.89
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed FPH(Levee)	lb	32.64					1.04	33.68	33.68
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27	1.27
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Preface	oz	24.95					0.80	25.75	25.75
Facet L	pt	35.00					1.12	36.12	36.12
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	21.36					0.57	21.93	21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98	113.98
NBPT	pt	14.40					0.38	14.78	14.78
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Preface	oz	29.94					0.80	30.74	30.74
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Aim	oz	7.35					0.20	7.55	7.55
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	5.22					0.11	5.33	5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69	27.69
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchu SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage						2.27		0.02	2.29
HAND LABOR	hour								2.29
Haul Rice	bu	63.00					0.67	63.67	63.67
Dry Rice	bu	72.00					0.77	72.77	72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	69.35	11.80	9.53			2.17	92.85	80.17
TOTALS		862.93	109.39	31.28	35.58	0.00	27.00	1066.18	158.57
									1224.75

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

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	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	114.39	37.29	14.63	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	210.51	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	12.29	7.92	1.62	0.78	1.73	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	396.83	305.00	77.60	49.52	164.63	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-396.83	-305.00	-77.60	-49.52	1050.37	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-449.52	-754.52	-832.12	-881.64	168.73	148.82

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-542 -700	-511 -670	-481 -640	-451 -609	-420 -579	-390 -549	-360 -518	-329 -488	-299 -457	-268 -427	-238 -397
60	108.00	bu	-464 -623	-428 -586	-391 -550	-355 -514	-319 -477	-282 -441	-246 -404	-209 -368	-173 -331	-136 -295	-100 -258
70	126.00	bu	-387 -545	-344 -503	-302 -460	-259 -418	-217 -375	-174 -333	-132 -290	-89 -248	-47 -205	-4 -163	37 -120
80	144.00	bu	-309 -468	-261 -419	-212 -371	-164 -322	-115 -274	-66 -225	-18 -176	30 -128	78 -79	127 -31	176 17
90	162.00	bu	-232 -390	-177 -336	-123 -281	-68 -226	-13 -172	40 -117	95 -62	150 -8	204 46	259 101	314 155
100	180.00	bu	-154 -313	-94 -252	-33 -192	27 -131	88 -70	148 -9	209 51	270 111	331 172	391 233	452 294
110	198.00	bu	-77 -236	-10 -169	56 -102	123 -35	189 31	256 98	323 164	390 231	457 298	523 365	590 432
120	216.00	bu	0 -158	72 -85	145 -12	218 60	291 133	364 205	437 278	510 351	583 424	656 497	729 570
130	234.00	bu	77 -81	156 -2	235 76	314 155	393 234	472 313	551 392	630 471	709 550	788 629	867 708
140	252.00	bu	154 -3	240 81	325 166	410 251	495 336	580 421	665 506	750 591	835 676	920 761	1005 846
150	270.00	bu	232 73	323 165	414 256	505 347	596 438	688 529	779 620	870 711	961 802	1052 894	1143 985

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 2022 input prices.

Table 17.A Estimated costs per acre  
 Provia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Provisia	oz	0.82	31.0000	25.42	_____
Aim	oz	4.90	1.0000	4.90	_____
Permit	oz	20.07	0.7500	15.05	_____
Regiment	oz	45.96	0.2500	11.49	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.30	77.0000	100.10	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	1.34	0.5000	0.67	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	6.01	0.2500	1.50	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.5475	9.05	_____
Harvesters	hour	16.54	0.1269	2.10	_____
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	16.53	0.4947	8.18	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.6209	34.15	_____
Harvesters	gal	4.48	2.7765	12.44	_____
Flood Irr.	gal	4.48	26.8827	120.45	_____
REPAIR & MAINTENANCE					
Implements	acre	10.04	1.0000	10.04	_____
Tractors	acre	4.74	1.0000	4.74	_____
Harvesters	acre	6.86	1.0000	6.86	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	25.87	1.0000	25.87	_____
TOTAL DIRECT EXPENSES				1067.96	_____
FIXED EXPENSES					
Implements	acre	25.53	1.0000	25.53	_____
Tractors	acre	33.53	1.0000	33.53	_____
Harvesters	acre	30.19	1.0000	30.19	_____
Flood Irr.	acre	52.19	1.0000	52.19	_____
TOTAL FIXED EXPENSES				141.44	_____
TOTAL SPECIFIED EXPENSES				1209.40	_____

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 17.B Summary of estimated costs and returns per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	6.75	156.0000	1053.00	_____
TOTAL INCOME				1053.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	134.28	1.0000	134.28	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	122.43	1.0000	122.43	_____
ADJUVANTS	acre	16.32	1.0000	16.32	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	16.54	0.6745	11.15	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	16.53	0.4947	8.18	_____
DIESEL FUEL	gal	4.48	37.2802	167.04	_____
REPAIR & MAINTENANCE	acre	35.95	1.0000	35.95	_____
INTEREST ON OP. CAP.	acre	25.87	1.0000	25.87	_____
TOTAL DIRECT EXPENSES				1067.96	_____
RETURNS ABOVE DIRECT EXPENSES				-14.96	_____
TOTAL FIXED EXPENSES				141.44	_____
TOTAL SPECIFIED EXPENSES				1209.40	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-156.40	_____

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 17.C Estimated resource use for field operations, per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	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 300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	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 300	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					1.3000				
Sharpen	oz					3.0000				
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				
Tenhu SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	40' Rigid	425 hp	0.126	1.00	Aug		0.12	0.12	0.12	0.11
Grain Cart Rice	700 bu	MFWD 300	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 300	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							0.67	0.67	6.02	0.49

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 17.D Estimated costs for field operations, per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Provisia	lb	84.50					2.70	87.20	87.20
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
Class Act NG	pt	2.38					0.08	2.46	2.46
MSO	pt	0.67					0.02	0.69	0.69
Seed Levees									
Rice Seed Provisia	lb	15.60					0.50	16.10	16.10
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Provisia	oz	12.71					0.41	13.12	13.12
Aim	oz	4.90					0.16	5.06	5.06
Permit	oz	15.05					0.48	15.53	15.53
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Provisia	oz	12.71					0.34	13.05	13.05
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Rice Management									
RICE MGT. LABOR	hour				2.72		0.07	2.79	2.79
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Regiment	oz	11.49					0.25	11.74	11.74
Dyne-A-Pak	pt	1.50					0.03	1.53	1.53
Rice Management									
RICE MGT. LABOR	hour			4.53			0.10	4.63	4.63
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			4.53			0.07	4.60	4.60
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (CL)	40' Rigid		12.44	9.49	3.99		0.28	26.20	34.89
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour			2.27			0.02	2.29	2.29
Haul Rice	bu	54.60					0.58	55.18	55.18
Dry Rice	bu	62.40					0.67	63.07	63.07
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	4.50	125.34	15.21	34.03		4.28	183.36	58.38
TOTALS		771.24	167.04	35.95	67.86	0.00	25.87	1067.96	141.44
									1209.40

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 17.E Estimated monthly income and expense flows per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

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	1053.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	87.10	12.71	11.49	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	122.43	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.50	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	16.70	9.52	11.33	11.33	10.08	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	15.00	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	10.08	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.40	7.59	2.95	1.65	1.62	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	303.55	292.44	140.58	105.01	153.78	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-303.55	-292.44	-140.58	-105.01	899.22	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-356.24	-648.68	-789.26	-894.27	4.95	-14.96

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-613 -755	-587 -729	-561 -702	-534 -676	-508 -650	-482 -623	-456 -597	-429 -571	-403 -544	-377 -518	-350 -492
60	93.60	bu	-546 -688	-515 -656	-483 -625	-452 -593	-420 -561	-388 -530	-357 -498	-325 -467	-294 -435	-262 -403	-230 -372
70	109.20	bu	-479 -621	-442 -584	-405 -547	-369 -510	-332 -473	-295 -436	-258 -399	-221 -363	-184 -326	-147 -289	-111 -252
80	124.80	bu	-412 -553	-370 -511	-328 -469	-286 -427	-244 -385	-201 -343	-159 -301	-117 -259	-75 -216	-33 -174	8 -132
90	140.40	bu	-345 -486	-297 -439	-250 -392	-203 -344	-155 -297	-108 -249	-61 -202	-13 -155	33 -107	81 -60	128 -12
100	156.00	bu	-278 -419	-225 -367	-172 -314	-120 -261	-67 -209	-14 -156	37 -103	90 -51	142 1	195 54	248 106
110	171.60	bu	-211 -352	-153 -294	-95 -236	-37 -178	20 -120	78 -62	136 -5	194 52	252 110	310 168	368 226
120	187.20	bu	-143 -285	-80 -222	-17 -158	45 -95	108 -32	171 30	235 93	298 156	361 220	424 283	487 346
130	202.80	bu	-76 -218	-8 -149	60 -81	128 -12	197 55	265 124	333 192	402 260	470 329	539 397	607 466
140	218.40	bu	-9 -151	64 -77	137 -3	211 70	285 143	358 217	432 291	506 364	580 438	653 512	727 586
150	234.00	bu	57 -83	136 -4	215 74	294 153	373 232	452 310	531 389	610 468	689 547	768 626	847 705

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 2022 input prices.

Table 18.A Estimated costs per acre  
 Provia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
<b>FUNGICIDES</b>					
Ameristar Top	oz	2.41	10.0000	24.10	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Provia	oz	0.82	31.0000	25.42	
Aim	oz	4.90	1.0000	4.90	
Permit	oz	20.07	0.7500	15.05	
Regiment	oz	45.96	0.2500	11.49	
<b>INSECTICIDES</b>					
Tenchu SG	oz	1.13	13.5000	15.26	
<b>SEED/PLANTS</b>					
Rice Seed Provia	lb	1.30	77.0000	100.10	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
<b>ADJUVANTS</b>					
MSO	pt	1.34	0.5000	0.67	
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	6.01	0.2500	1.50	
Surfactant	pt	3.30	0.1000	0.33	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	5.0000	40.00	
<b>HAULING</b>					
Haul Rice	bu	0.35	156.0000	54.60	
<b>DRYING</b>					
Dry Rice	bu	0.40	156.0000	62.40	
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.4999	8.25	
Harvesters	hour	16.54	0.1100	1.82	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	2.3750	21.52	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.2043	32.28	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	21.9949	98.55	
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.63	1.0000	9.63	
Tractors	acre	4.48	1.0000	4.48	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	24.79	1.0000	24.79	
<hr/>					
<b>TOTAL DIRECT EXPENSES</b>				<b>1018.60</b>	
<b>FIXED EXPENSES</b>					
Implements	acre	24.42	1.0000	24.42	
Tractors	acre	31.58	1.0000	31.58	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.85	1.0000	80.85	
<hr/>					
<b>TOTAL FIXED EXPENSES</b>				<b>163.01</b>	
<hr/>					
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1181.61</b>	
<hr/>					

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 18.B Summary of estimated costs and returns per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	156.0000	1053.00	_____
				-----	
<b>TOTAL INCOME</b>				<b>1053.00</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	134.28	1.0000	134.28	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	122.43	1.0000	122.43	_____
ADJUVANTS	acre	16.32	1.0000	16.32	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	16.54	0.6099	10.07	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	31.6056	141.61	_____
REPAIR & MAINTENANCE	acre	34.37	1.0000	34.37	_____
INTEREST ON OP. CAP.	acre	24.79	1.0000	24.79	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>1018.60</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>34.40</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>163.01</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1181.61</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-128.61</b>	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 18.C Estimated resource use for field operations, per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	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 300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	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 300	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					1.3000				
Sharpen	oz					3.0000				
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					0.20
RICE MGT. LABOR	hour									
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					0.20
RICE MGT. LABOR	hour									
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				
Tenchi SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	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 300	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						0.60	0.60	4.01	0.47	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 18.D Estimated costs for field operations, per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33				0.21	3.54		3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93	0.75	12.41	12.88	25.29		
Harrow - Folding	40'		2.69	0.66	1.22	0.29	4.86	3.11	7.97		
App by Air ( 5 gal)	appl	7.60				0.32	7.92		7.92		
Glyphosate 3lbs a.e	oz	16.32				0.70	17.02		17.02		
2,4-D Amine 4	pt	6.66				0.28	6.94		6.94		
Grain Drill	24'		5.44	2.78	3.18	0.36	11.76	9.71	21.47		
Rice Seed Provisia	lb	84.50				2.70	87.20		87.20		
Rice Seed Trt/Insect	lbseed	18.85				0.60	19.45		19.45		
Roller/Cultipacker	30'		3.44	0.71	1.56	0.18	5.89	3.72	9.61		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23		11.23		
Command 3ME	pt	23.40				0.75	24.15		24.15		
Sharpen	oz	20.16				0.65	20.81		20.81		
MSO	pt	0.67				0.02	0.69		0.69		
Class Act NG	pt	2.38				0.08	2.46		2.46		
Seed Levees											
Rice Seed Provisia	lb	15.60				0.50	16.10		16.10		
Rice Seed Trt/Insect	lbseed	3.48				0.11	3.59		3.59		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Provisia	oz	12.71				0.41	13.12		13.12		
Aim	oz	4.90				0.16	5.06		5.06		
Permit	oz	15.05				0.48	15.53		15.53		
Crop Oil Conc.(Pet.)	pt	5.72				0.18	5.90		5.90		
App Fert by Air	cwt	8.00				0.21	8.21		8.21		
Amm Sulfate (21% N)	cwt	25.00				0.67	25.67		25.67		
DAP	cwt	27.70				0.74	28.44		28.44		
Rice Consultant	acre	8.00				0.21	8.21		8.21		
App Fert by Air	cwt	20.00				0.53	20.53		20.53		
Urea, Solid (46% N)	cwt	103.95				2.77	106.72		106.72		
NBPT	pt	13.50				0.36	13.86		13.86		
App by Air (10 gal)	appl	9.70				0.26	9.96		9.96		
Provisia	oz	12.71				0.34	13.05		13.05		
Crop Oil Conc.(Pet.)	pt	5.72				0.15	5.87		5.87		
Rice Management											
RICE MGT. LABOR	hour				0.91						
App by Air ( 5 gal)	appl	3.80				0.08	3.88		3.88		
Regiment	oz	11.49				0.25	11.74		11.74		
Dyne-A-Pak	pt	1.50				0.03	1.53		1.53		
Rice Management											
RICE MGT. LABOR	hour				1.81						
App Fert by Air	cwt	12.00				0.26	12.26		12.26		
Urea, Solid (46% N)	cwt	62.37				1.33	63.70		63.70		
Rice Management											
RICE MGT. LABOR	hour				1.81						
App by Air ( 5 gal)	appl	7.60				0.12	7.72		7.72		
Ameristar Top	oz	24.10				0.39	24.49		24.49		
Surfactant	pt	0.33				0.01	0.34		0.34		
App by Air ( 3 gal)	appl	9.60				0.15	9.75		9.75		
Tenchi SG	oz	15.26				0.24	15.50		15.50		
Rice Management											
RICE MGT. LABOR	hour				1.81						
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46	0.24	22.71	30.23	52.94		
Grain Cart Rice	700 bu		0.76	0.25	0.34	0.01	1.36	1.05	2.41		
Handling & Storage											
HAND LABOR	hour				2.27						
Haul Rice	bu	54.60				0.58	55.18		55.18		
Dry Rice	bu	62.40				0.67	63.07		63.07		
Disk Heavy	28'		10.47	4.58	4.75	0.11	19.91	17.70	37.61		
Flood Irr.	acre	2.25	101.57	14.89	22.79	3.39	144.89	84.61	229.50		
TOTALS		768.99	141.61	34.37	48.84	0.00	24.79	1018.60	163.01	1181.61	

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 18.E Estimated monthly income and expense flows per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

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	1053.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	87.10	12.71	11.49	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	122.43	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.50	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.20	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	12.52	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	8.68	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.15	7.28	2.68	1.45	1.57	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	296.07	280.64	127.91	92.41	148.97	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-296.07	-280.64	-127.91	-92.41	904.03	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-348.76	-629.40	-757.31	-849.72	54.31	34.40

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT			dollars										
50	78.00	bu	-564 -727	-538 -701	-511 -674	-485 -648	-459 -622	-432 -595	-406 -569	-380 -543	-354 -517	-327 -490	-301 -464
60	93.60	bu	-497 -660	-465 -628	-434 -597	-402 -565	-371 -534	-339 -502	-307 -470	-276 -439	-244 -407	-213 -376	-181 -344
70	109.20	bu	-430 -593	-393 -556	-356 -519	-319 -482	-282 -445	-246 -409	-209 -372	-172 -335	-135 -298	-98 -261	-61 -224
80	124.80	bu	-363 -526	-321 -484	-278 -441	-236 -399	-194 -357	-152 -315	-110 -273	-68 -231	-26 -189	15 -147	58 -104
90	140.40	bu	-296 -459	-248 -411	-201 -364	-153 -316	-106 -269	-59 -222	-11 -174	35 -127	83 -79	130 -32	177 14
100	156.00	bu	-228 -391	-176 -339	-123 -286	-70 -233	-18 -181	34 -128	87 -75	139 -23	192 29	245 81	297 134
110	171.60	bu	-161 -324	-103 -266	-45 -208	12 -150	69 -93	127 -35	185 22	243 80	301 138	359 196	417 254
120	187.20	bu	-94 -257	-31 -194	31 -131	94 -68	158 -4	221 58	284 121	347 184	410 247	474 311	537 374
130	202.80	bu	-27 -190	41 -121	109 -53	177 14	246 83	314 151	383 220	451 288	520 357	588 425	657 494
140	218.40	bu	39 -123	113 -49	187 24	260 97	334 171	408 245	482 319	555 392	629 466	703 540	776 613
150	234.00	bu	106 -56	185 22	264 101	343 180	422 259	501 338	580 417	659 496	738 575	817 654	896 733

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 2022 input prices.

Table 19.A Estimated costs per acre  
 Provia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
<b>FUNGICIDES</b>					
Ameristar Top	oz	2.41	10.0000	24.10	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Provia	oz	0.82	31.0000	25.42	
Aim	oz	4.90	1.0000	4.90	
Permit	oz	20.07	0.7500	15.05	
Regiment	oz	45.96	0.2500	11.49	
<b>INSECTICIDES</b>					
Tenhu SG	oz	1.13	13.5000	15.26	
<b>IRRIGATION SUPPLIES</b>					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
<b>SEED/PLANTS</b>					
Rice Seed Provia	lb	1.30	77.0000	100.10	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
<b>ADJUVANTS</b>					
MSO	pt	1.34	0.5000	0.67	
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	6.01	0.2500	1.50	
Surfactant	pt	3.30	0.1000	0.33	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	5.0000	40.00	
<b>HAULING</b>					
Haul Rice	bu	0.35	156.0000	54.60	
<b>DRYING</b>					
Dry Rice	bu	0.40	156.0000	62.40	
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5281	8.72	
Harvesters	hour	16.54	0.1100	1.82	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	1.1250	10.18	
Implements	hour	9.06	0.0375	0.34	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.4504	33.39	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	18.7364	83.95	
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.73	1.0000	9.73	
Tractors	acre	4.64	1.0000	4.64	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	24.48	1.0000	24.48	
<b>TOTAL DIRECT EXPENSES</b>					
				1002.10	
<b>FIXED EXPENSES</b>					
Implements	acre	25.35	1.0000	25.35	
Tractors	acre	32.74	1.0000	32.74	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.51	1.0000	80.51	
<b>TOTAL FIXED EXPENSES</b>					
				164.76	
<b>TOTAL SPECIFIED EXPENSES</b>					
				1166.86	

Note: Cost of production estimates are based on 2022 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, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	156.0000	1053.00	_____
				-----	
<b>TOTAL INCOME</b>				<b>1053.00</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	134.28	1.0000	134.28	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	122.43	1.0000	122.43	_____
ADJUVANTS	acre	16.32	1.0000	16.32	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	24.48	1.0000	24.48	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>1002.10</b>	_____
RETURNS ABOVE DIRECT EXPENSES				<b>50.90</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>164.76</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1166.86</b>	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				<b>-113.86</b>	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 19.C Estimated resource use for field operations, per acre  
 Provisia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ INPUT	POWER UNIT	PERF SIZE	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 300	0.046	2.00	Oct		0.09	0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct		0.03	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 300	0.078	1.00	Apr		0.07	0.07	0.15	0.15	0.07
Rice Seed Provisia	lb						65.0000				
Rice Seed Trt/Insect	lbseed						65.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr		0.04	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						1.3000				
Sharpen	oz						3.0000				
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				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug		0.01	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 300	0.075	2.00	Sep		0.15	0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.10	0.10	1.26	
<b>TOTALS</b>							0.63	0.63	2.82	0.47	

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 19.D Estimated costs for field operations, per acre  
 Provisia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Provisia	lb	84.50					2.70	87.20	87.20
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed Provisia	lb	15.60					0.50	16.10	16.10
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Provisia	oz	12.71					0.41	13.12	13.12
Aim	oz	4.90					0.16	5.06	5.06
Permit	oz	15.05					0.48	15.53	15.53
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Provisia	oz	12.71					0.34	13.05	13.05
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Regiment	oz	11.49					0.25	11.74	11.74
Dyne-A-Pak	pt	1.50					0.03	1.53	1.53
Rice Management									
RICE MGT. LABOR	hour			1.81			0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			1.81			0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour			2.27			0.02	2.29	2.29
Haul Rice	bu	54.60					0.58	55.18	55.18
Dry Rice	bu	62.40					0.67	63.07	63.07
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	10.17	88.08	14.80	12.26		3.08	128.39	86.36
TOTALS		776.91	128.12	34.28	38.31	0.00	24.48	1002.10	164.76
									1166.86

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 19.E Estimated monthly income and expense flows per acre  
 Provisia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

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	1053.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	87.10	12.71	11.49	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	15.26	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	122.43	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.50	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.25	7.11	2.54	1.35	1.57	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	299.27	274.02	121.32	85.86	149.03	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-299.27	-274.02	-121.32	-85.86	903.97	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-351.96	-625.98	-747.30	-833.16	70.81	50.90

Note: Cost of production estimates are based on 2022 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, 2023

PRODUCT	PERCENT	75	80	85	90	95	100	105	110	115	120	125	PRODUCT PRICE		
													5.06	5.40	5.73
Rice															
PERCENT	YIELD	UNIT	dollars												
50	78.00	bu	-548	-521	-495	-469	-442	-416	-390	-363	-337	-311	-284		
			-712	-686	-660	-633	-607	-581	-554	-528	-502	-475	-449		
60	93.60	bu	-480	-449	-417	-386	-354	-323	-291	-259	-228	-196	-165		
			-645	-614	-582	-550	-519	-487	-456	-424	-392	-361	-329		
70	109.20	bu	-413	-376	-340	-303	-266	-229	-192	-155	-118	-82	-45		
			-578	-541	-504	-467	-431	-394	-357	-320	-283	-246	-210		
80	124.80	bu	-346	-304	-262	-220	-178	-136	-93	-51	-9	32	74		
			-511	-469	-427	-385	-342	-300	-258	-216	-174	-132	-90		
90	140.40	bu	-279	-232	-184	-137	-89	-42	4	52	99	146	194		
			-444	-396	-349	-302	-254	-207	-159	-112	-65	-17	29		
100	156.00	bu	-212	-159	-107	-54	-1	50	103	156	208	261	314		
			-377	-324	-271	-219	-166	-113	-61	-8	44	96	149		
110	171.60	bu	-145	-87	-29	28	86	144	202	260	318	376	433		
			-309	-252	-194	-136	-78	-20	37	95	153	211	269		
120	187.20	bu	-78	-14	48	111	174	237	301	364	427	490	553		
			-242	-179	-116	-53	9	73	136	199	262	325	388		
130	202.80	bu	-10	57	125	194	262	331	399	468	536	605	673		
			-175	-107	-38	29	98	166	235	303	371	440	508		
140	218.40	bu	56	129	203	277	351	424	498	572	645	719	793		
			-108	-34	38	112	186	260	333	407	481	554	628		
150	234.00	bu	123	202	281	360	439	518	597	676	755	834	913		
			-41	37	116	195	274	353	432	511	590	669	748		

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 2022 input prices.

Table 20.A Estimated costs per acre  
 Provia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Provia	oz	0.82	31.0000	25.42	
Aim	oz	4.90	1.0000	4.90	
Permit	oz	20.07	0.7500	15.05	
Regiment	oz	45.96	0.2500	11.49	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Seed Provia	lb	1.30	77.0000	100.10	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
ADJUVANTS					
MSO	pt	1.34	0.5000	0.67	
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	6.01	0.2500	1.50	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.4228	6.98	
Harvesters	hour	16.54	0.1100	1.82	
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	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	6.5294	29.26	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	15.4779	69.35	
REPAIR & MAINTENANCE					
Implements	acre	9.51	1.0000	9.51	
Tractors	acre	4.02	1.0000	4.02	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	23.57	1.0000	23.57	
TOTAL DIRECT EXPENSES				966.56	
FIXED EXPENSES					
Implements	acre	23.83	1.0000	23.83	
Tractors	acre	28.41	1.0000	28.41	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.17	1.0000	80.17	
TOTAL FIXED EXPENSES				158.57	
TOTAL SPECIFIED EXPENSES				1125.13	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 20.B Summary of estimated costs and returns per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	156.0000	1053.00	_____
<b>TOTAL INCOME</b>				1053.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	134.28	1.0000	134.28	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	122.43	1.0000	122.43	_____
ADJUVANTS	acre	16.32	1.0000	16.32	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	23.57	1.0000	23.57	_____
<b>TOTAL DIRECT EXPENSES</b>				966.56	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				86.44	_____
<b>TOTAL FIXED EXPENSES</b>				158.57	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1125.13	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-72.13	_____

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 20.C Estimated resource use for field operations, per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	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 300	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 300	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						1.3000				
Sharpen	oz						3.0000				
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				
Tenchi SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	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 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000			1.05	
TOTALS								0.53	0.53	2.61	0.47

Note: Cost of production estimates are based on 2022 input prices.

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 20.D Estimated costs for field operations, per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Provisia	lb	84.50					2.70	87.20	87.20
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed Provisia	lb	15.60					0.50	16.10	16.10
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Provisia	oz	12.71					0.41	13.12	13.12
Aim	oz	4.90					0.16	5.06	5.06
Permit	oz	15.05					0.48	15.53	15.53
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Provisia	oz	12.71					0.34	13.05	13.05
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Regiment	oz	11.49					0.25	11.74	11.74
Dyne-A-Pak	pt	1.50					0.03	1.53	1.53
Rice Management									
RICE MGT. LABOR	hour			1.81			0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			1.81			0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour			2.27			0.02	2.29	2.29
Haul Rice	bu	54.60					0.58	55.18	55.18
Dry Rice	bu	62.40					0.67	63.07	63.07
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre		69.35	11.80	9.53		2.17	92.85	80.17
TOTALS		766.74	109.39	31.28	35.58	0.00	23.57	966.56	158.57
									1125.13

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 20.E Estimated monthly income and expense flows per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

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	1053.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	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	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	87.10	12.71	11.49	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	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	122.43	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.50	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.60	7.01	2.46	1.30	1.54	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	277.77	270.18	117.50	82.07	146.44	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-277.77	-270.18	-117.50	-82.07	906.56	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-330.46	-600.64	-718.14	-800.21	106.35	86.44

Note: Cost of production estimates are based on 2022 input prices.

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> 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, 2023

PRODUCT	PERCENT	YIELD	UNIT	PERCENT										
				75	80	85	90	95	100	105	110	115	120	125
Rice	PRODUCT PRICE													
				5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
dollars														
50	78.00	bu		-512 -671	-486 -644	-459 -618	-433 -592	-407 -565	-380 -539	-354 -513	-328 -486	-301 -460	-275 -434	-249 -407
60	93.60	bu		-445 -603	-413 -572	-382 -540	-350 -509	-319 -477	-287 -446	-255 -414	-224 -382	-192 -351	-161 -319	-129 -288
70	109.20	bu		-378 -536	-341 -499	-304 -463	-267 -426	-230 -389	-193 -352	-157 -315	-120 -278	-83 -241	-46 -205	-9 -168
80	124.80	bu		-311 -469	-268 -427	-226 -385	-184 -343	-142 -301	-100 -259	-58 -216	-16 -174	25 -132	67 -90	110 -48
90	140.40	bu		-243 -402	-196 -355	-149 -307	-101 -260	-54 -212	-7 -165	40 -118	87 -70	135 -23	182 23	229 71
100	156.00	bu		-176 -335	-124 -282	-71 -230	-18 -177	33 -124	86 -72	139 -19	191 33	244 85	297 138	349 191
110	171.60	bu		-109 -268	-51 -210	6 -152	64 -94	122 -36	179 21	237 79	295 137	353 195	411 253	469 310
120	187.20	bu		-42 -201	20 -137	83 -74	147 -11	210 51	273 114	336 178	399 241	462 304	526 367	589 430
130	202.80	bu		24 -133	93 -65	161 2	229 71	298 139	366 208	435 276	503 345	572 413	640 482	709 550
140	218.40	bu		91 -66	165 6	239 80	312 154	386 228	460 301	534 375	607 449	681 522	755 596	828 670
150	234.00	bu		158 0	237 79	316 158	395 237	474 316	553 395	632 474	711 553	790 632	869 711	948 790

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 2022 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, 2023

Item Name	Size	Purchase	Annual	Useful	Fuel	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use				Direct		Cost
		dollars	hours	years	gal/hr				\$/hour		
Combine (250-299 hp)	265 hp	463,000	300	8	13.64	16.54	61.10	48.22	125.87	212.16	338.04
Combine (300-349 hp)	325 hp	468,000	300	8	16.73	16.54	74.95	48.75	140.24	214.45	354.69
Combine (350-399 hp)	355 hp	500,000	300	8	18.27	16.54	81.84	52.08	150.47	229.12	379.59
Combine (400-449 hp)	425 hp	519,000	300	8	21.87	16.54	98.00	54.06	168.60	237.82	406.43
Combine (450-499hp)	475 hp	539,000	300	8	24.44	16.54	109.53	56.14	182.21	246.99	429.21
Tractor( 20-39hp)CB	MFWD 30	34,200	600	8	1.54	16.54	6.91	1.06	24.52	7.27	31.80
Tractor( 20-39hp)RB	MFWD 30	27,100	600	8	1.54	16.54	6.91	0.84	24.30	5.76	30.07
Tractor( 40-59hp)CB	2WD 50	34,600	600	8	2.57	16.54	11.52	1.08	29.15	7.36	36.51
Tractor( 40-59hp)CB	MFWD 50	47,000	600	8	2.57	16.54	11.52	1.46	29.53	10.00	39.54
Tractor( 40-59hp)RB	2WD 50	24,500	600	8	2.57	16.54	11.52	0.76	28.83	5.21	34.04
Tractor( 40-59hp)RB	MFWD 50	31,400	600	8	2.57	16.54	11.52	0.98	29.05	6.68	35.73
Tractor( 60-89hp)CB	2WD 75	64,300	600	8	3.86	16.54	17.29	2.00	35.84	13.68	49.52
Tractor( 60-89hp)CB	MFWD 75	72,000	600	8	3.86	16.54	17.29	2.25	36.08	15.32	51.40
Tractor( 60-89hp)RB	2WD 75	54,100	600	8	3.86	16.54	17.29	1.69	35.52	11.51	47.03
Tractor( 60-89hp)RB	MFWD 75	48,100	600	8	3.86	16.54	17.29	1.50	35.33	10.23	45.57
Tractor( 90-119hp)CB	2WD 105	83,900	600	8	5.40	16.54	24.21	2.62	43.37	17.85	61.23
Tractor( 90-119hp)CB	MFWD 105	104,000	600	8	5.40	16.54	24.21	3.25	44.00	22.13	66.13
Tractor( 90-119hp)RB	2WD 105	73,400	600	8	5.40	16.54	24.21	2.29	43.04	15.62	58.66
Tractor( 90-119hp)RB	MFWD 105	81,100	600	8	5.40	16.54	24.21	2.53	43.28	17.25	60.54
Tractor(120-139hp)CB	2WD 130	117,600	600	8	6.69	16.54	29.97	3.67	50.19	25.02	75.22
Tractor(120-139hp)CB	MFWD 130	133,300	600	8	6.69	16.54	29.97	4.16	50.68	28.36	79.05
Tractor(140-159hp)	2WD 150	131,200	600	8	7.72	16.54	34.58	4.10	55.22	27.92	83.15
Tractor(140-159hp)CB	MFWD 150	158,000	600	8	7.72	16.54	34.58	4.93	56.06	33.62	89.69
Tractor(160-179hp)CB	MFWD 170	186,000	600	8	8.75	16.54	39.20	5.81	61.55	41.10	102.65
Tractor(180-199hp)CB	MFWD 190	216,000	600	8	9.77	16.54	43.81	6.75	67.10	47.72	114.83
Tractor(200-249hp)CB	MFWD 225	276,000	600	8	11.58	16.54	51.88	8.62	77.04	60.98	138.03
Tractor(250-349hp)CB	4WD 300	377,000	600	8	15.44	16.54	69.17	11.78	97.50	83.30	180.80
Tractor(250-349hp)CB	MFWD 300	304,000	600	8	15.44	16.54	69.17	9.50	95.21	67.17	162.39
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	16.54	69.17	10.28	96.00	72.69	168.69
Tractor(350-449hp)	Track 400	547,000	600	8	20.58	16.54	92.23	17.09	125.87	120.87	246.74
Tractor(350-449hp)CB	4WD 400	428,000	600	8	20.58	16.54	92.23	13.37	122.15	94.57	216.72
Tractor(450-550hp)CB	4WD 500	426,000	600	8	25.73	16.54	115.29	13.31	145.14	94.13	239.28
Tractor(450-550hp)CB	Track 500	527,000	600	8	25.73	16.54	115.29	16.46	148.30	116.45	264.75
Utility Vehicle	800 CC	12,200	200	8	0.70	16.54	2.23	1.90	20.67	8.38	29.06
Utility Vehicle	900 CC	15,800	200	8	1.00	16.54	3.19	2.46	22.19	10.86	33.05

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, 2023

Item Name	Size	Purchase	Annual	Useful	Fuel	Perf	Labor	Fuel	R&M	Total	Fixed	Total	
		Price	Use	Life	Use	Rate			Direct			Cost	
		dollars	hours	years	gal/hr	hr/ac	\$/acre-----						
Cotton Picker	4R-38(250)	268,000	200	8	12.86	0.257	6.59	14.86	10.79	32.25	47.48	79.74	
Cotton Picker	4R-38(350)	351,000	200	8	18.01	0.257	6.59	20.80	14.13	41.54	62.19	103.73	
Cotton Picker	4R2x1(350)	357,000	200	8	18.01	0.172	4.41	13.90	9.61	27.92	42.28	70.21	
Cotton Picker	6R-30(355)	465,000	200	8	18.27	0.218	5.58	17.86	15.85	39.31	69.75	109.06	
Cotton Picker	6R-38(355)	465,000	200	8	18.27	0.172	4.41	14.10	12.51	31.03	55.07	86.11	
Cotton Picker/Modu	4R-38(365)	536,000	200	8	20.58	0.257	6.59	23.77	21.58	51.96	94.97	146.93	
Cotton Picker/Module	6R-30(500)	936,000	200	8	25.73	0.218	5.58	25.16	31.91	62.66	140.41	203.08	
Cotton Picker/Module	6R-38(500)	937,000	200	8	25.73	0.172	4.41	19.86	25.22	49.50	110.97	160.48	
Dry Applicator SP	70'300cuft	469,000	350	8	16.98	0.015	0.31	1.14	0.37	1.84	2.78	4.63	
Sprayer	600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.37	0.71	0.20	1.28	1.49	2.78
Sprayer	600-825gal	80' 175hp	269,000	350	8	11.81	0.013	0.27	0.69	0.19	1.16	1.39	2.56
Sprayer	600-825gal	90' 250hp	316,000	350	8	12.73	0.011	0.24	0.67	0.19	1.11	1.45	2.57
Sprayer	800gal	100' 250hp	353,000	350	8	14.15	0.010	0.22	0.67	0.20	1.09	1.46	2.56
Sprayer	800gal	80' 250hp	292,000	350	8	12.86	0.013	0.27	0.76	0.20	1.24	1.51	2.76
Sprayer	1000-1400gal	90' 275hp	330,000	350	8	14.15	0.010	0.22	0.67	0.18	1.08	1.37	2.45
Sprayer	1000gal	100' 300hp	479,000	350	8	15.44	0.010	0.22	0.73	0.27	1.22	1.99	3.21
Sprayer	1200+gal	120' 300hp	489,000	350	8	15.44	0.008	0.18	0.60	0.23	1.02	1.69	2.71

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, 2023

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	--Fixed--	Total Cost
									Imp.	P.U.	Direct			
				dollars	hours	years	hr/ac		\$/acre					
Bed-Paratill w/ro	4R-30	MFWD 225	27,800	150	12	0.204	3.37	10.60	2.05	1.76	17.79	4.10	12.46	34.35
Bed-Paratill w/ro	4R-38	MFWD 225	27,800	150	12	0.160	2.66	8.34	1.61	1.38	14.01	3.23	9.81	27.05
Bed-Paratill w/ro	6R-38	MFWD 225	38,000	150	12	0.107	1.77	5.57	1.47	0.92	9.76	2.95	6.55	19.27
Bed-Rip/Disk Fold.	8R-38	MFWD 190	69,600	300	20	0.073	1.20	3.20	0.25	0.49	5.15	1.46	3.48	10.10
Bed-Rip/Disk Fold.	12R-30	MFWD 225	98,700	300	20	0.061	1.01	3.19	0.30	0.53	5.05	1.74	3.75	10.55
Bed-Rip/Disk Fold.	12R-38	MFWD 225	98,700	300	20	0.046	0.76	2.39	0.22	0.39	3.78	1.31	2.81	7.91
Bed-Rip/Disk Rigid	4R-30	MFWD 190	30,900	300	20	0.184	3.05	8.09	0.28	1.24	12.69	1.64	8.82	23.15
Bed-Rip/Disk Rigid	4R-38	MFWD 190	30,900	300	20	0.146	2.42	6.42	0.22	0.99	10.07	1.30	7.00	18.37
Bed-Rip/Disk Rigid	6R-30	MFWD 190	42,800	300	20	0.123	2.03	5.40	0.26	0.83	8.53	1.51	5.88	15.93
Bed-Rip/Disk Rigid	6R-38	MFWD 190	42,800	300	20	0.097	1.60	4.26	0.20	0.65	6.73	1.19	4.64	12.57
Bed-Rip/Disk Rigid	8R-30	MFWD 190	56,700	300	20	0.139	2.29	6.09	0.39	0.93	9.72	2.26	6.63	18.62
Bed-Rip/Disk Rigid	8R-38	MFWD 190	56,700	300	20	0.073	1.20	3.20	0.20	0.49	5.11	1.19	3.48	9.78
Bed-Rip/Disk Cond.	6-Row	MFWD 225	37,000	150	12	0.107	1.77	5.57	1.43	0.92	9.72	2.87	6.55	19.15
Bed-Rip/Disk Cond.	8-Row	MFWD 225	49,300	150	12	0.080	1.33	4.19	1.43	0.69	7.66	2.87	4.92	15.46
Bed-Subsoil Fold	8R-38	MFWD 225	69,600	150	12	0.080	1.33	4.19	2.02	0.69	8.25	4.06	4.92	17.23
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	98,700	150	12	0.053	0.88	2.78	1.91	0.46	6.05	3.83	3.27	13.17
Bed-Subsoil Fold	12R-38	MFWD 225	98,700	150	12	0.053	0.88	2.78	1.91	0.46	6.05	3.83	3.27	13.17
Bed-Subsoil Rigid	4R-30	MFWD 225	26,100	150	12	0.204	3.37	10.60	1.92	1.76	17.66	3.85	12.46	33.98
Bed-Subsoil Rigid	4R-38	MFWD 225	27,800	150	12	0.160	2.66	8.34	1.61	1.38	14.01	3.23	9.81	27.05
Bed-Subsoil Rigid	6R-30	MFWD 225	36,300	150	12	0.136	2.25	7.06	1.78	1.17	12.28	3.57	8.30	24.16
Bed-Subsoil Rigid	6R-38	MFWD 225	37,700	150	12	0.107	1.77	5.57	1.46	0.92	9.74	2.92	6.55	19.23
Bed-Subsoil Rigid	8R-30	MFWD 225	48,500	150	12	0.102	1.68	5.30	1.78	0.88	9.66	3.57	6.23	19.47
Bed-Subsoil Rigid	8R-38	MFWD 225	50,100	150	12	0.080	1.33	4.19	1.46	0.69	7.68	2.92	4.92	15.53
Bed/Disk (Hipper)	4R-38	MFWD 150	15,700	160	10	0.147	2.44	5.10	0.57	0.72	8.85	1.73	4.96	15.55
Bed/Disk (Hipper)	6R-38	MFWD 170	23,900	160	10	0.098	1.63	3.86	0.58	0.57	6.66	1.76	4.05	12.48
Bed/Disk (Hipper)	8R-30	MFWD 190	30,700	160	10	0.093	1.55	4.10	0.71	0.63	7.01	2.15	4.47	13.64
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	76,700	160	10	0.049	0.81	2.16	0.94	0.33	4.25	2.83	2.35	9.44
Bed/Disk (Hipper)	12R-30	MFWD 225	59,900	160	10	0.062	1.03	3.24	0.93	0.53	5.75	2.80	3.81	12.36
Bed/Disk (Hipper)	12R-38	MFWD 225	76,700	160	10	0.049	0.81	2.55	0.94	0.42	4.74	2.83	3.00	10.59
Bed/Disk (Hipper)	16R40	MFWD 300	90,600	160	10	0.035	0.58	2.44	0.80	0.33	4.17	2.40	2.37	8.94
Bed/Disk (Hipper) F1	8R-38	MFWD 190	33,400	160	10	0.074	1.22	3.24	0.61	0.50	5.59	1.85	3.53	10.98
Bed/Disk (Hipper) Rd	8R-38	MFWD 190	30,800	160	10	0.074	1.22	3.24	0.57	0.50	5.54	1.71	3.53	10.79
Bed/Disk w/roller	8R-30	MFWD 190	40,100	160	10	0.093	1.55	4.10	0.93	0.63	7.23	2.81	4.47	14.52
Bed/Disk w/roller	8R-38	MFWD 190	45,900	160	10	0.074	1.22	3.24	0.85	0.50	5.82	2.54	3.53	11.90
Bed/Disk w/roller	12R-30/40	MFWD 225	76,000	160	10	0.062	1.03	3.24	1.18	0.53	6.00	3.55	3.81	13.37
Bed/Lister	4R-38	MFWD 150	25,200	160	8	0.228	3.77	7.89	1.34	1.12	14.15	4.76	7.67	26.60
Bed/Lister	6R-38	MFWD 150	28,900	160	8	0.120	1.98	4.15	0.81	0.59	7.55	2.87	4.04	14.47
Bed/Lister	8R-30	MFWD 190	39,800	160	8	0.114	1.88	5.00	1.06	0.77	8.72	3.76	5.45	17.94
Bed/Lister	8R-38	MFWD 190	40,100	160	8	0.090	1.49	3.95	0.84	0.60	6.90	2.99	4.30	14.21
Bed/Lister	8R-38 2x1	MFWD 190	60,700	160	8	0.060	0.99	2.63	0.85	0.40	4.88	3.02	2.86	10.77
Bed/Lister	12R-38	MFWD 225	60,700	160	8	0.060	0.99	3.11	0.85	0.51	5.48	3.02	3.66	12.17
Bed/Lister	16R-30	MFWD 225	67,400	160	8	0.035	0.58	1.82	0.55	0.30	3.26	1.96	2.14	7.36
Bed/Lister	16R40	MFWD 300	80,800	160	8	0.043	0.71	2.98	0.81	0.40	4.91	2.88	2.89	10.69
Bed/Lister-Roll-Fo	8R-38	MFWD 190	29,200	160	10	0.095	1.58	4.20	0.70	0.64	7.13	2.09	4.57	13.81
Bed/Lister-Roll-Fo	12R-30	MFWD 225	56,400	160	10	0.080	1.33	4.19	1.14	0.69	7.37	3.41	4.93	15.72
Bed/Lister-Roll-Fo	12R-38	MFWD 225	37,600	160	10	0.063	1.05	3.31	0.60	0.55	5.51	1.79	3.89	11.21
Bed/Lister-Roll-Fo	16R-30	MFWD 225	39,500	160	10	0.060	1.00	3.14	0.59	0.52	5.27	1.79	3.69	10.76
Bed/Lister-Roll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.58	4.20	0.59	0.64	7.03	1.79	4.57	13.40
Blade-Box	6'-7'	MFWD 105	2,070	200	20	0.020	0.33	0.48	0.01	0.05	0.88	0.01	0.34	1.24
Boll Buggy	4R-38 (250)	MFWD 190	30,500	200	10	0.257	4.26	11.29	1.96	1.74	19.26	4.57	12.30	36.13
Boll Buggy	4R-38 (350)	MFWD 190	30,500	200	10	0.257	4.26	11.29	1.96	1.74	19.26	4.57	12.30	36.13
Boll Buggy	4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.85	7.54	1.31	1.16	12.87	3.05	8.22	24.15
Boll Buggy	6R-30 (355)	MFWD 190	30,500	200	10	0.218	3.60	9.56	1.66	1.47	16.30	3.86	10.41	30.59
Boll Buggy	6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.85	7.54	1.31	1.16	12.87	3.05	8.22	24.15
Chisel Plow-Folding	24'	MFWD 190	48,500	150	12	0.076	1.26	3.34	1.33	0.51	6.46	2.67	3.64	12.79
Chisel Plow-Folding	32'	MFWD 225	65,000	150	12	0.057	0.95	2.99	1.35	0.49	5.80	2.71	3.52	12.04
Chisel Plow-Folding	42'	MFWD 225	71,900	150	12	0.044	0.72	2.28	1.14	0.37	4.53	2.28	2.68	9.50
Chisel Plow-Folding	50'	MFWD 225	99,100	150	12	0.036	0.61	1.91	1.32	0.31	4.17	2.64	2.25	9.07
Chisel Plow-Folding	61'	MFWD 225	114,800	150	12	0.030	0.50	1.57	1.25	0.26	3.59	2.51	1.84	7.95
Chisel Plow-Rigid	10'	MFWD 170	8,340	150	12	0.184	3.05	7.24	0.55	1.07	11.93	1.11	7.59	20.64
Chisel Plow-Rigid	15'	2WD 130	18,870	150	12	0.123	2.03	3.69	0.83	0.45	7.02	1.68	3.08	11.79
Chisel Plow-Rigid	20'	MFWD 225	13,400	150	12	0.102	1.69	5.32	0.49	0.88	8.41	0.99	6.26	15.66
Cultivate	4R-30	2WD 105	19,000	150	10	0.206	3.41	4.99	1.04	0.54	9.99	3.13	3.68	16.80
Cultivate	4R-38	2WD 105	19,000	150	10	0.162	2.68	3.93	0.82	0.37	7.81	2.46	2.53	12.81
Cultivate	6R-30	MFWD 150	25,200	150	10	0.137	2.27	4.75	0.92	0.67	8.63	2.76	4.62	16.02
Cultivate	6R-38	MFWD 150	26,300	150	10	0.108	1.79	3.75	0.76	0.53	6.84	2.28	3.65	12.77
Cultivate	8R-30	MFWD 190	32,600	150	10	0.103	1.70	4.51	0.89	0.69	7.81	2.68	4.92	15.42
Cultivate	8R-38	MFWD 190	35,800	150	10	0.073	1.21	3.22	0.70	0.49	5.64	2.10	3.51	11.26
Cultivate	8R-38 2x1	MFWD 190	50,700	150	10	0.054	0.89	2.37	0.73	0.36	4.37	2.19	2.59	9.16
Cultivate	12R-30	MFWD 225	50,800	150	10	0.068	1.13	3.56	0.93	0.59	6.22	2.79	4.19	13.21
Cultivate	12R-38	MFWD 225	50,700	150	10	0.054	0.89	2.81	0.73	0.46	4.91	2.19	3.31	10.42
Cultivate	16R-30	MFWD 225	78,900	150	10	0.051	0.85	2.67	1.08	0.44	5.05	3.25	3.14	11.45
Cultivate & Post	4R-30	2WD 105	24,7											

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2023 (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	12R-30	MFWD 225	56,500	150	10	0.073	1.54	3.80	1.10	0.63	7.08	3.31	4.47	14.87	
Cultivate & Post	12R-38	MFWD 225	56,400	150	10	0.057	1.21	3.00	0.87	0.49	5.59	2.60	3.53	11.73	
Cultivate & Post	16R-30	MFWD 225	84,600	150	10	0.055	1.15	2.85	1.24	0.47	5.72	3.71	3.35	12.80	
Disk & Incorporate	14'	2WD 130	45,200	200	10	0.149	3.15	4.48	2.02	0.55	10.21	4.05	3.74	18.02	
Disk & Incorporate	20'	MFWD 190	89,300	200	10	0.092	1.94	4.05	2.47	0.62	9.09	4.94	4.41	18.45	
Disk & Incorporate	24'	MFWD 190	71,300	200	10	0.087	1.83	3.82	1.86	0.58	8.12	3.73	4.16	16.01	
Disk & Incorporate	28'	MFWD 225	80,400	200	10	0.074	1.57	3.88	1.80	0.64	7.90	3.60	4.56	16.08	
Disk & Incorporate	32'	MFWD 225	87,300	200	10	0.065	1.37	3.39	1.71	0.56	7.05	3.42	3.99	14.47	
Disk Harrow	14'	2WD 130	39,400	180	10	0.140	2.32	4.20	1.53	0.51	8.57	3.68	3.51	15.77	
Disk Harrow	20'	MFWD 190	83,600	180	10	0.098	1.62	4.30	2.28	0.66	8.87	5.46	4.68	19.02	
Disk Harrow	24'	MFWD 190	65,600	180	10	0.081	1.35	3.58	1.49	0.55	6.98	3.57	3.90	14.46	
Disk Harrow	28'	MFWD 225	74,700	180	10	0.070	1.16	3.63	1.45	0.60	6.86	3.49	4.27	14.62	
Disk Harrow	32'	MFWD 225	81,500	180	10	0.061	1.01	3.18	1.38	0.52	6.11	3.33	3.74	13.19	
Disk Harrow	42'	MFWD 225	134,800	180	10	0.046	0.77	2.42	1.75	0.40	5.35	4.19	2.85	12.40	
Disk Harrow 40-100hp	14'	2WD 75	23,100	180	10	0.140	2.32	2.42	0.90	0.23	5.88	2.15	1.61	9.65	
Disk Heavy	14'	MFWD 150	39,400	180	10	0.145	2.41	5.04	1.59	0.72	9.78	3.83	4.90	18.51	
Disk Heavy	20'	MFWD 190	83,600	180	10	0.097	1.60	4.26	2.25	0.65	8.78	5.41	4.64	18.85	
Disk Heavy	28'	MFWD 225	74,700	180	10	0.075	1.25	3.92	1.57	0.65	7.40	3.76	4.61	15.78	
Disk Ripper	15'	MFWD 225	50,800	180	10	0.136	2.25	7.06	1.92	1.17	12.41	4.60	8.30	25.33	
Ditcher		2WD 130	8,760	200	10	0.020	0.33	0.59	0.07	0.07	1.07	0.10	0.50	1.67	
Ditcher (lm/160a)		2WD 130	8,760	200	10	0.009	0.15	0.28	0.03	0.03	0.50	0.04	0.23	0.78	
Fert Appl (Liquid)	4R-38	MFWD 150	25,400	150	8	0.154	3.25	5.34	2.61	0.76	11.99	3.34	5.20	20.53	
Fert Appl (Liquid)	6R-30	MFWD 170	25,300	150	8	0.130	2.75	5.13	2.20	0.76	10.86	2.82	5.38	19.06	
Fert Appl (Liquid)	6R-38	MFWD 170	25,300	150	8	0.103	2.17	4.05	1.74	0.60	8.57	2.22	4.24	15.05	
Fert Appl (Liquid)	8R-30	MFWD 190	26,300	150	8	0.098	2.06	4.30	1.72	0.66	8.75	2.19	4.68	15.64	
Fert Appl (Liquid)	8R-38	MFWD 190	29,500	150	8	0.077	1.63	3.40	1.52	0.52	7.08	1.94	3.70	12.74	
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	32,900	150	8	0.051	1.08	2.26	1.13	0.34	4.83	1.44	2.46	8.75	
Fert Appl (Liquid)	12R-30	MFWD 225	30,600	150	8	0.078	1.65	4.07	1.60	0.67	8.01	2.04	4.79	14.85	
Fert Appl (Liquid)	12R-38	MFWD 225	31,100	150	8	0.051	1.08	2.68	1.07	0.44	5.28	1.36	3.15	9.80	
Field Cult & Inc	42'	MFWD 225	82,900	100	10	0.037	0.79	1.95	0.78	0.32	3.86	3.75	2.30	9.92	
Field Cult & Inc	50'	MFWD 225	92,500	100	10	0.031	0.66	1.64	0.73	0.27	3.32	3.51	1.93	8.77	
Field Cult & Inc Fld	24'	MFWD 170	43,700	100	10	0.066	1.39	2.59	0.72	0.38	5.09	3.46	2.71	11.27	
Field Cult & Inc Fld	32'	MFWD 190	64,800	100	10	0.049	1.04	2.17	0.80	0.33	4.35	3.85	2.36	10.57	
Field Cult & Inc Rdg	12'	2WD 150	22,800	100	10	0.132	2.78	4.57	0.75	0.54	8.65	3.61	3.69	15.96	
Field Cultivate Fld	24'	MFWD 170	38,000	100	10	0.062	1.02	2.43	0.59	0.36	4.42	2.83	2.55	9.81	
Field Cultivate Fld	32'	MFWD 190	59,100	100	10	0.046	0.77	2.04	0.68	0.31	3.82	3.30	2.22	9.35	
Field Cultivate Fld	42'	MFWD 225	73,200	100	10	0.035	0.58	1.84	0.65	0.30	3.38	3.12	2.16	8.67	
Field Cultivate Fld	50'	MFWD 225	82,900	100	10	0.029	0.49	1.54	0.61	0.25	2.91	2.96	1.82	7.70	
Field Cultivate Rdg	12'	2WD 150	17,100	100	10	0.124	2.05	4.30	0.53	0.51	7.40	2.55	3.47	13.42	
Grain Cart Corn	500 bu	MFWD 190	34,100	200	12	0.025	0.41	1.10	0.23	0.17	1.93	0.46	1.20	3.60	
Grain Cart Corn	700 bu	MFWD 190	51,600	200	12	0.025	0.41	1.10	0.35	0.17	2.05	0.70	1.20	3.96	
Grain Cart Corn	1000 bu	MFWD 225	63,600	200	12	0.025	0.41	1.31	0.43	0.21	2.38	0.87	1.54	4.79	
Grain Cart Rice	500 bu	MFWD 190	34,100	200	12	0.062	1.03	2.73	0.57	0.42	4.77	1.15	2.98	8.90	
Grain Cart Rice	700 bu	MFWD 190	51,600	200	12	0.055	0.90	2.40	0.76	0.37	4.45	1.53	2.62	8.62	
Grain Cart Rice	1000 bu	MFWD 190	63,600	200	12	0.045	0.75	2.00	0.78	0.30	3.86	1.57	2.18	7.63	
Grain Cart Soybean	500 bu	MFWD 190	34,100	200	12	0.025	0.42	1.11	0.23	0.17	1.94	0.47	1.21	3.63	
Grain Cart Soybean	700 bu	MFWD 190	51,600	200	12	0.021	0.35	0.93	0.29	0.14	1.72	0.59	1.01	3.33	
Grain Cart Soybean	1000 bu	MFWD 190	63,600	200	12	0.021	0.35	0.93	0.36	0.14	1.79	0.73	1.01	3.53	
Grain Cart Wht/Sor	500 bu	MFWD 190	34,100	200	12	0.025	0.42	1.11	0.23	0.17	1.94	0.47	1.21	3.63	
Grain Cart Wht/Sor	700 bu	MFWD 190	51,600	200	12	0.021	0.35	0.93	0.29	0.14	1.72	0.59	1.01	3.33	
Grain Cart Wht/Sor	1000 bu	MFWD 190	63,600	200	12	0.021	0.35	0.93	0.36	0.14	1.79	0.73	1.01	3.53	
Grain Drill	10'	2WD 130	33,800	150	8	0.188	4.82	5.65	2.39	0.69	13.56	5.21	4.71	23.50	
Grain Drill	12'	2WD 130	40,700	150	8	0.157	4.02	4.71	2.39	0.57	11.70	5.23	3.93	20.87	
Grain Drill	15'	MFWD 150	38,900	150	8	0.125	3.21	4.34	1.83	0.62	10.02	4.00	4.22	18.25	
Grain Drill	20'	MFWD 170	45,400	150	8	0.094	2.41	3.69	1.60	0.54	8.26	3.50	3.87	15.64	
Grain Drill	24'	MFWD 190	68,900	150	8	0.078	2.01	3.44	2.03	0.53	8.01	4.43	3.75	16.19	
Grain Drill	30'	MFWD 225	82,500	150	8	0.062	1.60	3.26	1.94	0.54	7.35	4.24	3.83	15.43	
Grain Drill	35'	MFWD 225	100,200	150	8	0.053	1.37	2.79	2.02	0.46	6.66	4.41	3.28	14.36	
Grain Drill & Pre	10'	2WD 130	39,100	150	8	0.203	5.19	6.08	2.97	0.74	15.01	6.50	5.08	26.59	
Grain Drill & Pre	12'	2WD 130	46,100	150	8	0.169	4.33	5.07	2.92	0.62	12.95	6.38	4.23	23.57	
Grain Drill & Pre	15'	MFWD 150	44,200	150	8	0.135	3.46	4.68	2.24	0.66	11.06	4.89	4.55	20.51	
Grain Drill & Pre	20'	MFWD 170	50,800	150	8	0.101	2.59	3.98	1.93	0.59	9.10	4.22	4.17	17.50	
Grain Drill & Pre	24'	MFWD 190	74,200	150	8	0.084	2.16	3.70	2.35	0.57	8.79	5.14	4.03	17.97	
Grain Drill & Pre	30'	MFWD 225	87,800	150	8	0.067	1.73	3.51	2.22	0.58	8.05	4.86	4.12	17.05	
Grain Drill & Pre	35'	MFWD 225	110,400	150	8	0.058	1.48	3.01	2.40	0.50	7.39	5.24	3.53	16.18	
Grain Drill & Pre T	8R-38	MFWD 225	57,000	150	8	0.062	1.60	3.26	1.34	0.54	6.75	2.93	3.83	13.52	
Harrow - Folding	24'	MFWD 190	13,800	200	10	0.064	1.07	2.83	0.31	0.43	4.65	0.53	3.08	8.27	
Harrow - Folding	30'	MFWD 190	15,300	200	10	0.051	0.85	2.26	0.27	0.34	3.75	0.47	2.47	6.69	
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.64	1.70	0.28	0.26	2.89	0.49	1.85	5.24	
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.53	1.67	0.29	0.27	2.78	0.50	1.97	5.26	
Header - Corn	6R-30	265 hp	64,800	300	8	0.170	2.81	10.40	2.75	8.21	24.19	4.69	36.12	65.01	
Header - Corn	6R-38	265 hp	64,900	300	8	0.134	2.22	8.21	2.18	6.48	19.10	3.71	28.52	51.33	
Header - Corn	8R-30	265 hp	87,400	300	8	0.127	2.11	7.80	2.79	6.15	18.86	4.75	27.09	50.71	
Header - Corn	8R-38	325 hp	80,000	300	8	0.100	1.66	7.56	2.01	4.92	16.17	3.43	21.65	41.26	

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2023 (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						
Header - Draper (CL)	36' Rigid	355 hp	85,500	300	8	0.141	2.33	11.54	2.76	7.34	23.98	4.93	32.31	61.23	
Header - Draper (CL)	40' Rigid	425 hp	90,400	300	8	0.126	2.09	12.43	2.62	6.86	24.02	4.69	30.18	58.91	
Header - Draper (SL)	25' Rigid	325 hp	77,900	300	8	0.176	2.91	13.19	3.14	8.58	27.82	5.61	37.74	71.18	
Header - Draper (SL)	30' Rigid	325 hp	81,600	300	8	0.146	2.42	10.99	2.74	7.15	23.31	4.89	31.45	59.66	
Header - Draper (SL)	36' Rigid	355 hp	85,500	300	8	0.122	2.02	10.00	2.39	6.36	20.78	4.27	28.00	53.06	
Header - Draper (SL)	40' Rigid	425 hp	90,400	300	8	0.110	1.81	10.78	2.27	5.94	20.82	4.07	26.16	51.05	
Header - RiceStrp(CL)	20'	265 hp	50,600	300	8	0.253	4.19	15.51	3.21	12.24	35.16	5.46	53.85	94.49	
Header - RiceStrp(CL)	24'	325 hp	54,000	300	8	0.211	3.49	15.85	2.85	10.31	32.52	4.86	45.36	82.75	
Header - RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.62	11.89	2.41	7.73	24.66	4.10	34.02	62.79	
Header - RiceStrp(SL)	20'	265 hp	50,600	300	8	0.220	3.63	13.44	2.78	10.61	30.47	4.73	46.67	81.89	
Header - RiceStrp(SL)	24'	325 hp	54,000	300	8	0.183	3.03	13.74	2.47	8.93	28.18	4.21	39.31	71.71	
Header - RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	2.27	10.30	2.09	6.70	21.37	3.55	29.48	54.41	
Header - Soybean	22' Flex	265 hp	38,700	300	8	0.116	1.92	7.09	1.12	5.59	15.73	1.91	24.63	42.28	
Header - Soybean	25' Flex	325 hp	39,600	300	8	0.102	1.68	7.65	1.01	4.98	15.33	1.72	21.91	38.97	
Header - Soybean	30' Flex	325 hp	47,100	300	8	0.085	1.40	6.38	1.00	4.15	12.94	1.70	18.25	32.90	
Header - Soybean	35' Flex	355 hp	55,300	300	8	0.072	1.20	5.97	1.00	3.80	11.99	1.71	16.72	30.42	
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.92	7.09	0.57	5.59	15.18	0.97	24.63	40.80	
Header Wheat/Sorghum	25' Rigid	325 hp	41,800	300	8	0.102	1.68	7.65	1.06	4.98	15.39	1.81	21.91	39.12	
Header Wheat/Sorghum	30' Rigid	325 hp	55,100	300	8	0.085	1.40	6.38	1.17	4.15	13.11	1.99	18.25	33.36	
Land Plane	50'x16'	MFWD 190	13,000	200	10	0.151	2.50	6.64	0.39	1.02	10.57	1.18	7.23	18.99	
Levee Pull & Seed	8 Blade	MFWD 170	12,000	100	10	0.003	0.05	0.13	0.00	0.02	0.22	0.05	0.14	0.42	
Levee Pull (1m/80a)	8 blade	MFWD 170	7,560	100	10	0.003	0.05	0.13	0.00	0.02	0.22	0.03	0.14	0.40	
Levee Splitter (1/80	32"	MFWD 150	9,220	100	10	0.004	0.06	0.14	0.00	0.02	0.24	0.04	0.14	0.42	
Module Builder	4R-38 (250)	MFWD 190	34,700	200	10	0.257	6.59	11.29	2.23	1.74	21.86	5.20	12.30	39.37	
Module Builder	4R-38 (350)	MFWD 190	34,700	200	10	0.257	6.59	11.29	2.23	1.74	21.86	5.20	12.30	39.37	
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	4.41	7.54	1.49	1.16	14.61	3.47	8.22	26.31	
Module Builder	6R-30 (355)	MFWD 190	34,700	200	10	0.218	5.58	9.56	1.89	1.47	18.51	4.40	10.41	33.33	
Module Builder	6R-38 (355)	MFWD 190	34,700	200	10	0.172	4.41	7.54	1.49	1.16	14.61	3.47	8.22	26.31	
NT Grain Drill	10'	2WD 130	37,700	150	8	0.235	6.03	7.06	3.33	0.86	17.29	7.27	5.89	30.47	
NT Grain Drill	12'	2WD 130	50,200	150	8	0.163	4.19	4.90	3.08	0.60	12.78	6.72	4.09	23.60	
NT Grain Drill	15'	MFWD 150	63,300	150	8	0.130	3.35	4.52	3.10	0.64	11.63	6.78	4.40	22.82	
NT Grain Drill	20'	MFWD 170	81,200	150	8	0.098	2.51	3.84	2.99	0.57	9.92	6.52	4.03	20.49	
NT Grain Drill	24'	MFWD 190	111,300	150	8	0.081	2.09	3.58	3.41	0.55	9.65	7.45	3.90	21.01	
NT Grain Drill	30'	MFWD 225	110,200	150	8	0.065	1.67	3.39	2.70	0.56	8.34	5.90	3.99	18.24	
NT Grain Drill & Pre	10'	2WD 130	43,000	150	8	0.211	5.41	6.34	3.41	0.77	15.94	7.44	5.29	28.68	
NT Grain Drill & Pre	12'	2WD 130	55,600	150	8	0.176	4.51	5.28	3.67	0.64	14.12	8.02	4.41	26.55	
NT Grain Drill & Pre	15'	MFWD 150	68,700	150	8	0.141	3.61	4.87	3.63	0.69	12.81	7.93	4.74	25.49	
NT Grain Drill & Pre	20'	MFWD 170	86,500	150	8	0.105	2.70	4.14	3.43	0.61	10.89	7.49	4.34	22.73	
NT Grain Drill & Pre	24'	MFWD 190	116,600	150	8	0.088	2.25	3.86	3.85	0.59	10.56	8.41	4.20	23.18	
NT Grain Drill & Pre	30'	MFWD 225	115,500	150	8	0.070	1.80	3.65	3.05	0.60	9.12	6.66	4.30	20.09	
NT Plant&Pre-Folding	8R-38	MFWD 170	67,800	150	8	0.083	2.14	3.27	2.12	0.48	8.02	4.64	3.43	16.10	
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	107,000	150	8	0.055	1.42	2.18	2.23	0.32	6.16	4.87	2.28	13.32	
NT Plant&Pre-Folding	12R-20	MFWD 190	82,800	150	8	0.105	2.70	4.63	3.28	0.71	11.33	7.16	5.04	23.55	
NT Plant&Pre-Folding	12R-30	MFWD 190	101,000	150	8	0.070	1.80	3.08	2.67	0.47	8.04	5.83	3.36	17.23	
NT Plant&Pre-Folding	12R-38	MFWD 190	111,800	150	8	0.055	1.42	2.43	2.33	0.37	6.57	5.09	2.65	14.32	
NT Plant&Pre-Folding	16R-30	MFWD 190	149,400	150	8	0.052	1.35	2.31	2.96	0.35	6.99	6.46	2.52	15.98	
NT Plant&Pre-Folding	23R-15	MFWD 190	202,900	150	8	0.073	1.88	3.21	5.58	0.49	11.18	12.20	3.50	26.88	
NT Plant&Pre-Folding	24R-20	MFWD 190	238,100	150	8	0.052	1.35	2.31	4.72	0.35	8.74	10.30	2.52	21.58	
NT Plant&Pre-Folding	24R-30	MFWD 190	224,900	150	8	0.035	0.90	1.54	2.97	0.23	5.65	6.49	1.68	13.83	
NT Plant&Pre-Folding	31R-15	MFWD 225	244,300	150	8	0.054	1.39	2.83	5.00	0.47	9.71	10.93	3.33	23.97	
NT Plant&Pre-Folding	32R-15	MFWD 225	248,700	150	8	0.052	1.35	2.74	4.93	0.45	9.48	10.76	3.22	23.47	
NT Plant&Pre-Rigid	4R-30	2WD 130	37,700	150	8	0.211	5.41	6.34	2.99	0.77	15.52	6.52	5.29	27.34	
NT Plant&Pre-Rigid	4R-38	2WD 130	34,500	150	8	0.166	4.26	4.99	2.15	0.61	12.02	4.70	4.16	20.89	
NT Plant&Pre-Rigid	6R-30	MFWD 150	47,400	150	8	0.141	3.61	4.87	2.50	0.69	11.69	5.47	4.74	21.90	
NT Plant&Pre-Rigid	6R-38	MFWD 150	47,500	150	8	0.111	2.85	3.85	1.98	0.54	9.23	4.32	3.74	17.30	
NT Plant&Pre-Rigid	8R-30	MFWD 170	60,300	150	8	0.105	2.70	4.14	2.39	0.61	9.86	5.22	4.34	19.42	
NT Plant&Pre-Rigid	8R-38	MFWD 170	56,200	150	8	0.083	2.14	3.27	1.76	0.48	7.66	3.84	3.43	14.94	
NT Plant&Pre-Rigid	11R-15	MFWD 170	67,300	150	8	0.143	3.68	5.64	3.63	0.83	13.79	7.92	5.91	27.63	
NT Plant&Pre-Rigid	11R-20	MFWD 170	68,500	150	8	0.115	2.95	4.53	2.96	0.67	11.13	6.48	4.75	22.36	
NT Plant&Pre-Rigid	12R-20	MFWD 190	73,000	150	8	0.105	2.70	4.63	2.89	0.71	10.95	6.32	5.04	22.32	
NT Plant&Pre-Rigid	12R-30	MFWD 190	86,600	150	8	0.070	1.80	3.08	2.28	0.47	7.66	4.99	3.36	16.02	
NT Plant&Pre-Rigid	15R-15	MFWD 190	89,600	150	8	0.113	2.89	4.95	3.80	0.76	12.41	8.29	5.39	26.11	
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	172,500	150	8	0.055	1.42	2.88	3.60	0.48	8.39	7.86	3.39	19.65	
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	135,300	150	8	0.083	2.14	4.33	4.24	0.72	11.44	9.26	5.09	25.80	
NT Plant-Folding	8R-38	MFWD 170	72,900	150	8	0.077	1.98	3.04	2.12	0.45	7.60	4.63	3.19	15.42	
NT Plant-Folding	8R-38 2x1	MFWD 170	102,000	150	8	0.051	1.32	2.02	1.97	0.30	5.62	4.31	2.12	12.06	
NT Plant-Folding	12R-20	MFWD 190	77,500	150	8	0.098	2.51	4.30	2.85	0.66	10.33	6.23	4.68	21.25	
NT Plant-Folding	12R-30	MFWD 190	91,300	150	8	0.065	1.67	2.86	2.24	0.44	7.22	4.89	3.12	15.24	
NT Plant-Folding	12R-38	MFWD 190	102,000	150	8	0.051	1.32	2.26	1.97	0.34	5.91	4.31	2.46	12.69	
NT Plant-Folding	16R-30	MFWD 190	139,600	150	8	0.049	1.25	2.15	2.57	0.33	6.31	5.61	2.34	14.26	
NT Plant-Folding	23R-15	MFWD 190	193,000	150	8	0.068	1.74	2.98	4.93	0.46	10.13	10.77	3.25	24.16	
NT Plant-Folding	24R-20	MFWD 190	228,000	150	8	0.049	1.25	2.15	4.19	0.33	7.93	9.16	2.34	19.45	
NT Plant-Folding	24R-30	MFWD 190	208,000	15											

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2023 (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						
NT Plant-Rigid	8R-30	MFWD 170	54,600	150	8	0.098	2.51	3.84	2.01	0.57	8.94	4.38	4.03	17.37	
NT Plant-Rigid	8R-38	MFWD 170	50,500	150	8	0.077	1.98	3.04	1.47	0.45	6.95	3.20	3.19	13.35	
NT Plant-Rigid	11R-15	MFWD 170	61,600	150	8	0.133	3.42	5.23	3.08	0.77	12.52	6.73	5.49	24.75	
NT Plant-Rigid	11R-20	MFWD 170	62,700	150	8	0.107	2.74	4.20	2.52	0.62	10.10	5.50	4.41	20.02	
NT Plant-Rigid	12R-20	MFWD 190	67,300	150	8	0.098	2.51	4.30	2.47	0.66	9.95	5.41	4.68	20.05	
NT Plant-Rigid	12R-30	MFWD 190	76,800	150	8	0.065	1.67	2.86	1.88	0.44	6.87	4.11	3.12	14.11	
NT Plant-Rigid	15R-15	MFWD 190	79,900	150	8	0.105	2.68	4.60	3.14	0.70	11.14	6.87	5.01	23.03	
NT Plant-TwinRow	12R-30/40	MFWD 225	163,000	150	8	0.051	1.32	2.68	3.15	0.44	7.61	6.89	3.15	17.66	
NT Plant-TwinRow	8R-30/40	MFWD 225	130,000	150	8	0.077	1.98	4.02	3.78	0.66	10.47	8.26	4.73	23.46	
Peanut Cond. & Lifter	6-Row	MFWD 190	15,200	300	20	0.100	1.65	4.38	0.25	0.67	6.96	0.44	4.77	12.18	
Peanut Conditioner	6-Row	MFWD 190	21,600	300	20	0.100	1.65	4.38	0.43	0.67	7.14	0.58	4.77	12.50	
Peanut Dig/Invertor	4R-30	MFWD 190	37,900	300	15	0.235	3.90	10.33	2.22	1.59	18.05	3.07	11.25	32.37	
Peanut Dig/Invertor	4R-38	MFWD 190	37,900	300	15	0.186	3.08	8.15	1.75	1.25	14.25	2.42	8.88	25.56	
Peanut Dig/Invertor	6R-38	MFWD 190	51,100	300	15	0.124	2.05	5.43	1.11	0.83	9.43	2.17	5.92	17.53	
Peanut Dump Cart	6-Row	MFWD 190	67,400	300	20	0.310	5.12	13.58	1.21	2.09	22.02	6.00	14.79	42.82	
Peanut Harvester	4R-30	MFWD 225	171,000	300	20	0.849	14.05	44.10	8.23	7.33	73.72	39.40	51.83	164.97	
Peanut Harvester	4R-38	MFWD 225	171,000	300	20	0.934	15.45	48.48	9.05	8.06	81.06	44.63	56.99	182.70	
Peanut Harvester	6R-38	MFWD 225	190,000	300	20	0.625	10.33	32.42	5.73	5.39	53.89	33.16	38.11	125.18	
Peanut Lifter	6-Row	MFWD 225	9,220	300	20	0.100	1.65	5.18	0.19	0.86	7.89	0.24	6.09	14.24	
Peanut Plt&Pre Fold.	12R-38	MFWD 190	99,500	150	8	0.080	2.05	3.52	3.00	0.54	9.12	6.55	3.83	19.51	
Peanut Plt&Pre Rigid	8R-30	MFWD 190	52,200	150	8	0.152	3.91	6.69	2.99	1.03	14.62	6.52	7.29	28.44	
Peanut Plt&Pre Rigid	8R-38	MFWD 190	48,000	150	8	0.120	3.09	5.29	2.17	0.81	11.37	4.74	5.76	21.88	
Peanut Ptlt&PreTwin	8R-30/40	MFWD 190	127,000	150	8	0.120	3.09	5.29	5.75	0.81	14.94	12.55	5.76	33.27	
Pipe Spool 160ac	1/4m roll	ZWD 130	6,480	15	12	0.003	0.10	0.09	0.01	0.01	0.22	0.14	0.07	0.44	
Pipe Trailer 1m/160a	30'	ZWD 130	2,700	100	15	0.003	0.19	0.11	0.00	0.01	0.32	0.01	0.09	0.43	
Plant & Pre-Folding	8R-38	MFWD 170	70,400	150	8	0.080	2.05	3.14	2.11	0.46	7.78	4.62	3.29	15.71	
Plant & Pre-Folding	8R-38 2x1	MFWD 170	99,500	150	8	0.053	1.36	2.09	1.99	0.31	5.76	4.35	2.19	12.31	
Plant & Pre-Folding	12R-20	MFWD 190	70,600	150	8	0.101	2.59	4.44	2.68	0.68	10.42	5.86	4.84	21.13	
Plant & Pre-Folding	12R-30	MFWD 190	88,800	150	8	0.067	1.73	2.96	2.25	0.45	7.40	4.92	3.23	15.56	
Plant & Pre-Folding	12R-38	MFWD 190	99,500	150	8	0.053	1.36	2.34	1.99	0.36	6.06	4.35	2.55	12.96	
Plant & Pre-Folding	16R-30	MFWD 190	133,000	150	8	0.050	1.29	2.22	2.53	0.34	6.39	5.52	2.42	14.35	
Plant & Pre-Folding	23R-15	MFWD 190	179,000	150	8	0.070	1.80	3.08	4.73	0.47	10.10	10.33	3.36	23.80	
Plant & Pre-Folding	24R-20	MFWD 190	214,000	150	8	0.050	1.29	2.22	4.07	0.34	7.94	8.89	2.42	19.25	
Plant & Pre-Folding	24R-30	MFWD 190	200,000	150	8	0.033	0.86	1.48	2.53	0.22	5.11	5.54	1.61	12.27	
Plant & Pre-Folding	31R-15	MFWD 225	213,000	150	8	0.052	1.34	2.72	4.19	0.45	8.70	9.14	3.20	21.05	
Plant & Pre-Folding	32R-15	MFWD 225	216,000	150	8	0.050	1.29	2.63	4.11	0.43	8.48	8.97	3.09	20.55	
Plant & Pre-Rigid	4R-30	ZWD 130	33,700	150	8	0.203	5.19	6.08	2.56	0.74	14.59	5.60	5.08	25.28	
Plant & Pre-Rigid	4R-38	ZWD 130	30,400	150	8	0.159	4.09	4.79	1.82	0.58	11.29	3.97	4.00	19.27	
Plant & Pre-Rigid	6R-30	MFWD 150	41,200	150	8	0.135	3.46	4.68	2.09	0.66	10.90	4.56	4.55	20.02	
Plant & Pre-Rigid	6R-38	MFWD 150	41,400	150	8	0.106	2.73	3.69	1.65	0.52	8.62	3.62	3.59	15.83	
Plant & Pre-Rigid	8R-30	MFWD 170	52,200	150	8	0.101	2.59	3.98	1.98	0.59	9.15	4.33	4.17	17.67	
Plant & Pre-Rigid	8R-38	MFWD 170	48,000	150	8	0.080	2.05	3.14	1.44	0.46	7.11	3.15	3.29	13.56	
Plant & Pre-Rigid	11R-15	MFWD 170	56,100	150	8	0.148	3.79	5.81	3.11	0.86	13.58	6.80	6.09	26.48	
Plant & Pre-Rigid	11R-20	MFWD 170	57,200	150	8	0.110	2.84	4.35	2.38	0.64	10.21	5.19	4.56	19.97	
Plant & Pre-Rigid	12R-20	MFWD 190	60,800	150	8	0.101	2.59	4.44	2.31	0.68	10.04	5.05	4.84	19.94	
Plant & Pre-Rigid	12R-30	MFWD 190	74,400	150	8	0.067	1.73	2.96	1.88	0.45	7.04	4.12	3.23	14.39	
Plant & Pre-Rigid	15R-15	MFWD 190	74,300	150	8	0.108	2.78	4.75	3.02	0.73	11.29	6.60	5.18	23.08	
Plant & Pre-TwinRow	12R-30/40	MFWD 225	160,200	150	8	0.053	1.36	2.77	3.21	0.46	7.81	7.00	3.25	18.08	
Plant & Pre-TwinRow	8R-30/40	MFWD 225	127,000	150	8	0.080	2.05	4.16	3.82	0.69	10.73	8.34	4.89	23.97	
Plant - Folding	8R-38	MFWD 170	64,700	150	8	0.074	1.90	2.92	1.80	0.43	7.07	3.94	3.06	14.08	
Plant - Folding	8R-38 2x1	MFWD 170	89,800	150	8	0.049	1.27	1.94	1.67	0.28	5.17	3.64	2.03	10.86	
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.41	4.13	2.30	0.63	9.48	5.03	4.50	19.02	
Plant - Folding	12R-30	MFWD 190	79,000	150	8	0.062	1.60	2.75	1.86	0.42	6.64	4.06	3.00	13.71	
Plant - Folding	12R-38	MFWD 190	89,800	150	8	0.049	1.27	2.17	1.67	0.33	5.45	3.64	2.36	11.46	
Plant - Folding	16R-30	MFWD 190	123,000	150	8	0.047	1.20	2.06	2.17	0.31	5.76	4.74	2.24	12.76	
Plant - Folding	23R-15	MFWD 190	170,000	150	8	0.065	1.67	2.86	4.17	0.44	9.16	9.11	3.12	21.40	
Plant - Folding	24R-20	MFWD 190	204,000	150	8	0.047	1.20	2.06	3.60	0.31	7.19	7.87	2.24	17.31	
Plant - Folding	24R-30	MFWD 190	184,000	150	8	0.031	0.80	1.37	2.16	0.21	4.56	4.73	1.50	10.79	
Plant - Folding	31R-15	MFWD 225	203,000	150	8	0.048	1.24	2.52	3.70	0.42	7.90	8.09	2.97	18.97	
Plant - Folding	32R-15	MFWD 225	206,000	150	8	0.047	1.20	2.44	3.64	0.40	7.70	7.94	2.87	18.52	
Plant - Rigid	4R-30	ZWD 130	27,900	150	8	0.188	4.82	5.65	1.97	0.69	13.14	4.30	4.71	22.17	
Plant - Rigid	4R-38	ZWD 130	24,700	150	8	0.148	3.80	4.45	1.37	0.54	10.17	3.00	3.71	16.89	
Plant - Rigid	6R-30	MFWD 150	35,500	150	8	0.125	3.21	4.34	1.67	0.62	9.86	3.65	4.22	17.74	
Plant - Rigid	6R-38	MFWD 150	35,700	150	8	0.099	2.54	3.43	1.32	0.49	7.79	2.90	3.33	14.03	
Plant - Rigid	8R-30	MFWD 170	46,500	150	8	0.094	2.41	3.69	1.64	0.54	8.30	3.58	3.87	15.76	
Plant - Rigid	8R-38	MFWD 170	42,300	150	8	0.074	1.90	2.92	1.18	0.43	6.44	2.58	3.06	12.08	
Plant - Rigid	11R-15	MFWD 170	50,400	150	8	0.137	3.52	5.39	2.60	0.80	12.32	5.67	5.65	23.65	
Plant - Rigid	11R-20	MFWD 170	51,500	150	8	0.103	2.63	4.03	1.98	0.59	9.26	4.34	4.23	17.84	
Plant - Rigid	12R-20	MFWD 190	55,000	150	8	0.094	2.41	4.13	1.94	0.63	9.12	4.24	4.50	17.87	
Plant - Rigid	12R-30	MFWD 190	64,600	150	8	0.062	1.60	2.75	1.52	0.42	6.31	3.32	3.00	12.63	
Plant - Rigid	15R-15	ZWD 150	64,600	150	8	0.094	2.41	3.26	2.28	0.38	8.34	4.98	2.63	15.96	
Plant - TwinRow	12R-30/40	MFWD 225	150,000	150	8	0.049	1.27	2.57	2.79	0.42	7.06	6.09	3.02	16.18	

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2023 (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					
Rotary Cutter	7'	MFWD 130	0	185	10	0.168	2.78	5.04	0.00	0.70	8.53	0.00	4.77	13.30
Rotary Cutter	12'	2WD 150	20,200	185	10	0.098	1.62	3.39	1.60	0.40	7.03	1.28	2.74	11.06
Rotary Cutter-Flex	15'	MFWD 150	28,700	185	10	0.078	1.29	2.71	1.82	0.38	6.23	1.46	2.64	10.33
Rotary Cutter-Flex	20'	MFWD 150	41,400	185	10	0.058	0.97	2.03	1.97	0.29	5.28	1.58	1.98	8.84
Row Cond & Inc-Fold.	26'	MFWD 190	37,600	100	10	0.063	1.33	2.78	0.59	0.42	5.14	2.86	3.02	11.03
Row Cond & Inc-Fold.	38'	MFWD 225	49,800	100	10	0.043	0.91	2.25	0.54	0.37	4.08	2.59	2.64	9.32
Row Cond & Inc-Rigid	13'	2WD 130	18,700	100	10	0.126	2.67	3.80	0.59	0.46	7.53	2.84	3.17	13.56
Row Cond & Inc-Rigid	21'	2WD 170	26,900	100	10	0.078	1.65	3.08	0.52	0.29	5.55	2.53	2.06	10.15
Row Cond & Inc-Rigid	26'	MFWD 190	29,300	100	10	0.026	0.56	1.16	0.19	0.17	2.10	0.93	1.27	4.30
Row Cond Folding	26'	MFWD 225	31,900	100	10	0.059	0.98	3.09	0.47	0.51	5.07	2.28	3.64	11.00
Row Cond Folding	38'	MFWD 225	40,100	100	10	0.040	0.67	2.12	0.40	0.35	3.55	1.96	2.49	8.01
Row Cond Rigid	13'	2WD 130	12,900	100	10	0.119	1.97	3.58	0.38	0.43	6.38	1.84	2.98	11.21
Row Cond Rigid	21'	2WD 170	21,200	100	10	0.073	1.22	2.89	0.39	0.27	4.78	1.87	1.94	8.61
Row Cond Rigid	26'	MFWD 190	23,600	100	10	0.059	0.98	2.61	0.35	0.40	4.36	1.69	2.85	8.90
Row Cond./Roll-Fol	30'	MFWD 190	69,000	160	10	0.062	1.03	2.73	1.07	0.42	5.27	3.23	2.98	11.48
Row Cond./Roll-Fold.	26'	MFWD 190	38,000	160	10	0.072	1.19	3.15	0.68	0.48	5.52	2.05	3.44	11.02
Row Cond./Roll-Fold.	40'	MFWD 225	57,100	160	10	0.046	0.77	2.43	0.66	0.40	4.28	2.00	2.85	9.14
Row Cond./Roll-Rig	21'	MFWD 190	38,400	160	10	0.089	1.47	3.91	0.85	0.60	6.84	2.56	4.26	13.68
Row Cond./Roll-Rig	26'	MFWD 190	42,300	160	10	0.072	1.19	3.15	0.76	0.48	5.60	2.28	3.44	11.33
Spin Spreader	5 ton	MFWD 190	14,500	100	8	0.042	1.07	1.84	0.34	0.28	3.54	0.77	2.00	6.33
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.48	0.58	0.08	0.49	6.65	0.11	2.18	8.95
Spray (ATV)	20'	800 CC	1,440	200	8	0.084	1.78	0.18	0.05	0.16	2.19	0.07	0.70	2.97
Spray (Band)	27' Fold	MFWD 170	5,700	200	8	0.062	1.32	2.45	0.16	0.36	4.30	0.22	2.57	7.11
Spray (Band)	40' Fold	MFWD 170	9,740	200	8	0.042	0.89	1.65	0.19	0.24	2.98	0.26	1.73	4.99
Spray (Band)	50' Fold	MFWD 170	9,590	200	8	0.033	0.71	1.32	0.15	0.19	2.38	0.20	1.39	3.98
Spray (Band)	60' Fold	MFWD 170	16,700	200	8	0.028	0.59	1.10	0.22	0.16	2.08	0.30	1.15	3.54
Spray (Bcast/HB)	13' Rigid	MFWD 150	8,700	200	8	0.130	2.74	4.50	0.53	0.64	8.41	0.72	4.37	13.51
Spray (Bcast/HB)	20' Rigid	MFWD 150	10,200	200	8	0.084	1.78	2.92	0.40	0.41	5.53	0.55	2.84	8.92
Spray (Bcast/HB)	27' Fold	MFWD 170	14,700	200	8	0.062	1.32	2.45	0.43	0.36	4.57	0.58	2.57	7.73
Spray (Bcast/HB)	27' Rigid	MFWD 170	14,800	200	8	0.062	1.32	2.45	0.43	0.36	4.57	0.59	2.57	7.74
Spray (Bcast/HB)	30' Fold	MFWD 170	19,900	200	8	0.056	1.18	2.21	0.52	0.32	4.25	0.71	2.31	7.28
Spray (Bcast/HB)	40' Fold	MFWD 170	21,500	200	8	0.042	0.89	1.65	0.42	0.24	3.22	0.58	1.73	5.54
Spray (Broadcast)	27'	MFWD 170	5,720	200	8	0.062	1.32	2.45	0.16	0.36	4.31	0.22	2.57	7.11
Spray (Broadcast)	40'	MFWD 170	9,740	200	8	0.042	0.89	1.65	0.19	0.24	2.98	0.26	1.73	4.99
Spray (Broadcast)	50'	MFWD 170	9,600	200	8	0.033	0.71	1.32	0.15	0.19	2.38	0.20	1.39	3.98
Spray (Broadcast)	60'	MFWD 170	16,700	200	8	0.028	0.59	1.10	0.22	0.16	2.08	0.30	1.15	3.54
Spray (Direct/Layby)	8R-30	MFWD 170	19,500	200	8	0.084	1.78	3.31	0.77	0.49	6.36	1.05	3.47	10.89
Spray (Direct/Layby)	8R-38	MFWD 170	19,500	200	8	0.066	1.40	2.62	0.61	0.38	5.03	0.83	2.74	8.61
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	29,500	200	8	0.044	0.93	1.74	0.61	0.25	3.55	0.83	1.83	6.22
Spray (Direct/Layby)	12R-30	MFWD 170	29,500	200	8	0.056	1.18	2.21	0.78	0.32	4.50	1.06	2.31	7.88
Spray (Direct/Layby)	12R-38	MFWD 170	29,500	200	8	0.044	0.93	1.74	0.61	0.25	3.55	0.83	1.83	6.22
Spray (Direct/Layby)	16R-20/30	MFWD 225	34,600	200	8	0.062	1.32	3.25	1.01	0.54	6.12	1.38	3.82	11.33
Spray (Levee Leaper)	50'	MFWD 225	16,900	200	8	0.033	0.71	1.75	0.26	0.29	3.02	0.36	2.06	5.45
Spray (Pull Type)	60'	MFWD 225	62,600	200	8	0.028	0.59	1.46	0.82	0.24	3.12	1.12	1.72	5.97
Spray (Pull Type)	80'	MFWD 225	61,500	200	8	0.021	0.44	1.09	0.60	0.18	2.33	0.83	1.28	4.45
Spray (Pull Type)	90'	MFWD 225	62,400	200	8	0.018	0.39	0.97	0.54	0.16	2.08	0.74	1.14	3.97
Spray (Pull Type)	120'	MFWD 225	106,200	200	8	0.014	0.29	0.73	0.70	0.12	1.85	0.95	0.85	3.66
Spray (Ropewick)	20'	MFWD 190	4,110	200	8	0.084	1.78	3.70	0.16	0.57	6.22	0.22	4.03	10.48
Spray (Spot)	27'	MFWD 170	5,720	200	8	0.062	1.32	2.45	0.16	0.36	4.31	0.22	2.57	7.11
Spray (Spot)	40'	MFWD 170	9,740	200	8	0.042	0.89	1.65	0.19	0.24	2.98	0.26	1.73	4.99
Spray (Spot)	50'	MFWD 170	9,600	200	8	0.033	0.71	1.32	0.15	0.19	2.38	0.20	1.39	3.98
Spray (Spot)	60'	MFWD 225	16,700	200	8	0.028	0.59	1.46	0.22	0.24	2.52	0.30	1.72	4.54
Stalk Shredder	14'	MFWD 150	36,300	200	10	0.117	1.94	4.07	3.74	0.58	10.35	2.56	3.96	16.87
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.36	2.85	2.38	0.40	7.01	1.63	2.77	11.42
Stalk Shredder-Flail	12'	MFWD 150	26,200	200	10	0.137	2.27	4.75	3.15	0.67	10.86	2.15	4.62	17.64
Stalk Shredder-Flail	15'	MFWD 150	31,000	200	10	0.110	1.81	3.80	2.98	0.54	9.15	2.04	3.69	14.89
Stalk Shredder-Flail	18'	MFWD 150	47,300	200	10	0.091	1.51	3.17	3.79	0.45	8.93	2.59	3.08	14.61
Stalk Shredder-Flail	20'	MFWD 150	40,200	200	10	0.082	1.36	2.85	2.90	0.40	7.52	1.98	2.77	12.28
Stalk Shredder-Flail	25'	MFWD 150	66,400	200	10	0.066	1.09	2.28	3.83	0.32	7.53	2.62	2.21	12.38
Strip Till	8R-38	MFWD 225	58,200	150	10	0.061	1.01	3.19	1.55	0.53	6.30	2.86	3.75	12.92
Strip Till	12R-30	MFWD 225	98,900	150	10	0.061	1.01	3.19	2.64	0.53	7.38	4.87	3.75	16.01
Strip Till	12R-40	MFWD 225	99,800	150	10	0.046	0.76	2.39	1.99	0.39	5.56	3.68	2.81	12.06
Subsoiler	3 shank	MFWD 190	5,400	100	15	0.204	3.37	8.95	0.36	1.37	14.07	1.07	9.75	24.90
Subsoiler	4 shank	MFWD 225	12,200	100	15	0.153	2.54	7.97	0.62	1.32	12.46	1.81	9.36	23.65
Subsoiler	5 shank	MFWD 225	17,100	100	15	0.122	2.02	6.34	0.69	1.05	10.12	2.03	7.46	19.61
Subsoiler low-till	6 shank	MFWD 225	16,400	100	15	0.102	1.68	5.30	0.55	0.88	8.43	1.62	6.23	16.28
Subsoiler low-till	8 shank	MFWD 225	24,300	100	15	0.076	1.26	3.97	0.61	0.66	6.51	1.80	4.66	12.98

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, 2023

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
dollars			dollars		
ADJUVANTS			Artisan	oz	0.23
Agri-Dex	pt	5.28	Avaris	oz	1.68
AMS SuperMax	pt	3.81	Avicta 500 Soybean	oz	2.14
Class Act NG	pt	4.75	Bravo Weather Stick	pt	6.32
Crop Oil Conc.(Pet.)	pt	2.86	Captan 50 WP	lb	6.13
Crop Oil Conc.(Veg.)	pt	2.90	Convoy	oz	1.13
Dyne-A-Pak	pt	6.01	Cotton Seed Trt.	acre	20.00
Fire-Zone	pt	2.42	CruiserMaxx Vibrance	oz	7.63
Herbimax	pt	2.75	Elatus	oz	3.81
Induce	pt	5.00	Flint Extra	oz	9.41
MSO	pt	1.34	Headline EC	oz	4.46
Penetrator Plus	pt	2.32	Miravis Top	oz	5.31
Surfactant	pt	3.30	Prior Xemium	oz	2.17
CLEANING			Propimax EC	pt	12.50
Cleaning Peanuts	ton	18.00	Prosaro	oz	1.78
CROP CONSULTANT			Provost Optimum	oz	2.17
Corn Consultant	acre	6.00	Provost Silver	oz	1.41
Cotton Consultant	acre	8.00	Quadris	oz	6.73
Peanut Consultant	acre	9.25	Quadris Top	oz	3.05
Rice Consultant	acre	8.00	Quadris Top SBX	oz	3.35
Sorghum Consultant	acre	6.00	Quilt	pt	18.23
Soybeans Consultant	acre	6.50	Quilt XCEL	pt	25.08
Wheat Consultant	acre	5.50	Stratego	pt	23.93
CUSTOM FERTILIZE			Stratego YLD	oz	4.02
App Fert by Air	cwt	8.00	Tilt 3.6 EC	oz	1.00
App Fert by Air(Mi	appl	8.00	Tilt/ Bravo SE	oz	0.72
Custom Apply Fert	acre	7.50	Trivapro	oz	1.43
CUSTOM LIME			GINNING		
Lime (Spread)	ton	58.00	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	oz	0.09
Custom Plant Air	cwt	8.00	Mepichlor 4.2%	oz	0.04
CUSTOM SPRAY			Mepiquat	oz	0.22
App by Air ( 3 gal)	appl	6.40	Mepstar 6	oz	0.09
App by Air ( 5 gal)	appl	7.60	Palisade	oz	1.41
App by Air (10 gal)	appl	9.70	Pentia	oz	0.41
Custom Spray Ground	acre	7.00	Pix WSB	oz	1.26
DRYING			Stance	oz	1.40
Dry Corn	bu	0.19	Veto	oz	0.06
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	oz	0.96
Dry Rice	bu	0.40	Boll Buster	oz	0.34
ERADICATION FEE			Def/Folex	pt	12.50
Eradication	acre	1.00	Defol 5	gal	8.61
FERTILIZERS			Display	oz	10.59
Agrotrain Ultra	pt	20.99	Ethewphon 6E	pt	3.56
Amm Sulfate (21% N)	cwt	50.00	Finish 6	pt	10.93
Boron Plus	pt	4.31	Folex 6EC	pt	12.50
DAP	cwt	55.40	Freefall SC	oz	1.52
Fert 10-34-0	cwt	45.99	Ginstar EC	pt	29.72
Fert 10-34-0	gal	5.36	Gramoxone SL	oz	0.37
Fert 11-37-0	cwt	50.15	Sharpen	oz	6.72
Fert 41-0-0-4	cwt	37.06	Sodium Chlorate 5L	gal	8.61
Lime	ton	48.00	SuperBoll	oz	0.32
NBPT	pt	18.00	Thidiazuron 4lb	oz	1.52
Phosphorus(46% P205)	cwt	50.00	Tribufos 6lb	pt	12.50
Potash (60% K2O)	cwt	46.60	Vacate	oz	1.39
Sulfur Plus	pt	2.62	HAULING		
UAN (32% N)	cwt	38.90	Haul Corn	bu	0.23
UAN (32%)	gal	4.30	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	cwt	39.65	Haul Rice	bu	0.35
UAN + Sulfur (28%)	gal	4.41	Haul Sorghum	bu	0.25
Urea, Solid (46% N)	cwt	41.58	Haul Soybeans	bu	0.27
Zinc Plus	pt	3.68	Haul Wheat	bu	0.26
FUNGICIDES			HERBICIDES		
Abound	oz	1.88	2,4-D Amine 4	pt	3.33
Alfa Guard	lb	1.41	2,4-D Ester	pt	5.03
Allegiance Flowable	oz	3.66	AAatrex 4L	pt	2.62
Ameristar Top	oz	2.41	Accent Q	oz	20.47
Approach Prima	pt	33.33	Auron	oz	0.54
Apron Maxx RTA	oz	1.00			(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
dollars					dollars
Aim	oz	4.90	Harmony Extra SG	oz	10.34
Anthem Flex	oz	5.57	Helmet	oz	0.48
Anthem Maxx	oz	5.26	Huskie	oz	0.96
Armezon Pro	oz	1.03	Impact	oz	13.44
Atrazine 4L	pt	3.00	Intimidator	oz	0.64
Atrazine 90DF	lb	4.50	Leadoff	oz	6.79
Authority First	lb	40.00	League	oz	4.19
Authority Elite	pt	11.92	Lexar	pt	6.76
Authority Maxx	lb	68.82	Liberty 280	oz	0.76
Authority MTZ	lb	19.75	Loyant	oz	2.29
Avatar	pt	9.62	Makaze	oz	0.21
Avenger	pt	15.00	Metolachlor	pt	7.89
Axial XL	oz	1.71	Metribuzin 4L	pt	21.13
Axiom	oz	2.10	Metribuzin 75	lb	14.80
Banvel	pt	4.81	MSMA	pt	6.35
Barrage	pt	4.13	Newpath	oz	4.15
Basagran	pt	5.43	Obey	oz	1.08
Boundary	pt	11.75	Osprey	oz	3.58
Brake	oz	1.48	Outlook	pt	14.77
Broadaxe	pt	14.17	Panther Pro	oz	6.61
Broadhead	lb	58.21	Parallel	pt	8.32
Bucaneer Plus	pt	9.81	Paraquat	oz	0.23
Buctril	pt	4.28	Parazone 3SL	oz	0.18
Butyrac 200 (2,4-DB)	pt	4.06	Permit	oz	20.07
Cadre	oz	1.97	Permit Plus	oz	22.22
Canopy	oz	3.25	PowerFlex	oz	7.21
Caparol	pt	4.97	Preface	oz	4.99
Capreno	oz	4.49	Prefix	pt	5.26
Cinch	pt	14.18	Provisia	oz	0.82
Cinch ATZ	pt	6.26	Prowl 3.3 EC	pt	6.63
Clarity	pt	14.30	Qualex	oz	11.30
Classic	oz	18.50	RealmQ	oz	4.32
Clearpath	oz	4.24	RebelEx	oz	2.00
Clethodim 2E	oz	0.53	Reflex	pt	7.34
Clincher SF	oz	1.95	Regiment	oz	45.96
Cobra	oz	1.22	Resicore	oz	0.60
Command 3ME	pt	18.00	Resource	oz	2.03
Corvus	oz	5.30	RiceBeaux	pt	6.25
Cotoran	pt	6.37	Riceshot	pt	4.68
Cotton Pro	pt	3.45	Ricestar HT	pt	26.01
Dicamba	pt	5.88	Ringside	pt	5.63
Direx	pt	5.25	Roundup Power Max	oz	0.46
Diuron	pt	3.47	Roundup PowerMax	pt	7.33
Dual II Magnum	pt	11.60	Roundup PowerMax ii	oz	0.27
Dual Magnum	pt	11.45	Roundup Pro	pt	0.20
Duet	pt	6.09	Scepter 70 DG	oz	4.64
Engenia	oz	0.83	Select Max	pt	13.86
Enlist Duo	pt	8.60	Sencor/Tricor.Metrib	lb	17.78
Enlist One	pt	6.77	Sequence	pt	7.14
Envive	oz	3.78	Sharpen	oz	6.72
Envoke	oz	88.33	Sinister	pt	13.77
Facet L	pt	17.50	Sonic	oz	4.50
Fierce	oz	7.75	Stalwart	pt	3.82
Fierce XLT	oz	4.47	Stam 80 EDF	lb	9.45
Finesse	oz	18.64	Stam M4	qt	8.00
Firestorm	pt	3.44	Staple LX	oz	3.95
First Rate	oz	37.79	Storm	pt	12.65
Flexstar	pt	9.90	Strada	oz	7.34
Flexstar GT	pt	6.77	Strada Pro	oz	8.20
Fusilade DX	oz	1.19	Strada XT2	oz	3.26
Gambit	oz	16.50	Superwham	qt	9.82
Glyphosate 3lbs a.e	pt	5.38	Suprend	lb	13.52
Glyphosate 3lbs a.e	oz	0.34	SureStart II	oz	0.39
Goal 2XL	pt	8.75	Surveil	oz	6.70
Gramoxone SL 2.0	oz	0.37	Synchrony XP	oz	13.00
Grandstand R	pt	18.68	Tempest	pt	19.50
Grasp	oz	3.17	Touchdown Total	qt	10.21
Grasp Xtra	oz	1.61	Treflan	pt	4.36
Halex GT	pt	10.50			
Halomax	oz	21.11			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2023 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE		
dollars					dollars		
Trifluralin	pt	4.36	Mustang Max	oz	1.17		
Triflarex	pt	3.47	Nuprid 4F	oz	1.04		
Ultra Blazer	pt	7.50	Oberon	oz	3.10		
Valor EZ	oz	5.23	Orthene 97	lb	11.66		
Valor SX	oz	3.20	Permethrin	oz	0.47		
Valor XLT	oz	3.64	Portal XLO	oz	0.74		
Vamos	pt	6.49	Pounce 25WP	lb	19.96		
Verdict	oz	1.53	Prevathon	oz	1.16		
Veritas	pt	7.49	Python WDG	oz	20.19		
Villain	pt	5.24	Radiant	oz	5.77		
Volunteer	pt	10.63	Sevin 4F	pt	8.55		
Warrant	pt	4.84	Sevin XLR Plus	qt	17.53		
XtendiMax	oz	0.44	Sivanto Prime	oz	3.36		
Zidua SC	oz	6.20	Tempest	oz	1.70		
Zidua WG	oz	8.76	Tenchi SG	oz	1.13		
<b>INOCULANT</b>							
Inoculant -Soybean	acre	1.55	Transform WG	oz	8.82		
Optimize LIFT	oz	0.15	Up-Cyde	oz	0.49		
<b>INSECTICIDES</b>							
Abamectin .15EC	oz	0.30	<b>IRRIGATION SUPPLIES</b>				
Acephate 90%	lb	9.30	Roll-Out Pipe	ft	0.24		
Acephate 90SP	lb	6.62	<b>SEED/PLANTS</b>				
Admire Pro	oz	1.76	Corn Seed BtRR	thous	3.75		
Agri-Mek	oz	3.13	Corn Seed Conv.	thous	2.36		
Asana .66 XL	oz	0.58	Corn Seed Op Leptra	thous	3.66		
Avenger	oz	0.28	Corn Seed RR2	thous	2.93		
Baythroid XL	oz	1.32	Corn Seed VT2P	thous	2.62		
Belt	oz	6.80	Cot. Seed B3XF/W3FE	thous	2.34		
Besiege	oz	2.75	Cotton Seed B3XF	thous	2.35		
Bidrin 8EC	oz	1.43	Cotton Seed GLB2	thous	1.59		
Bifenthrin	oz	1.13	Cotton Seed W3FE	thous	2.32		
Bifenture 2EC	oz	0.47	Cotton Seed W3RF	thous	1.31		
Brigade EC	pt	20.27	Peanut Seed	lb	0.84		
Capture LFR	oz	1.37	Rice Conv Hyb Trt	lb	6.31		
Centric 40WG	oz	5.95	Rice Fullpage Hyb Tr	lb	7.68		
Cypermethrin	oz	1.31	Rice Seed CF(Levees)	lb	1.14		
Declare	oz	2.03	Rice Seed Clearfield	lb	1.14		
Diamond .83EC	oz	2.23	Rice Seed Conv.	lb	0.33		
Dimethoate 4E	pt	6.45	Rice Seed Cv(Levees)	lb	0.33		
Dimilin 2L	oz	1.63	Rice Seed CvH(Levee)	lb	1.93		
Endigo	oz	2.10	Rice Seed FPH(Levee)	lb	7.68		
Force 3G	lb	7.28	Rice Seed Provisia	lb	1.30		
Hero	oz	1.35	Rice Seed Trt/Insect	lbseed	0.29		
Imidacloprid 4F	oz	1.06	Sorghum Concept	lb	2.42		
Imidan 70 WSB	oz	0.86	Sorghum Concept+ Po	lb	3.51		
IncidentalPestTrt \$8	acre	8.00	Soybean Enlist E3	lb	1.20		
IncidentalPestTrt\$15	acre	15.00	Soybean Seed LL	lb	1.16		
IncidentalPestTrt\$22	acre	22.00	Soybean Seed RR2	lb	1.16		
IncidentalPestTrt\$30	acre	30.00	Soybean Seed RR2X	lb	1.34		
Intrepid 2F	oz	2.06	Wheat Seed Private	lb	0.38		
Intruder 70WSP	oz	1.13	<b>SOIL TEST</b>				
Lambda	oz	2.08	Soil Test	acre	10.00		
Lannate LV	pt	8.33	<b>SURVEY &amp; MARK LEVEES</b>				
Macho	oz	1.28	Survey & Mark Levees	acre	4.50		
Malathion 8E	pt	9.84	Survey & Mark Levees	acre	4.50		

Appendix Table 5. Estimated fuel prices  
and interest rates, Mississippi, 2023

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	4.48
Gasoline	gal	3.19
INTEREST RATES		
Short-term	%	6.40
Intermediate-term	%	6.90

Appendix Table 6. Labor types, wage rates and unallocated labor  
Multipliers for crop enterprises, Mississippi, 2023

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	16.54
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, 2023

Crop	unit	Futures Contract Month	Futures Contract Price <sup>a</sup>	Basis <sup>b</sup>	Forward Contract Price <sup>c</sup>	Loan Rated	Budget Price <sup>e</sup>
Corn	bu	Dec '23	6.20	-0.05	6.15	2.35	6.15
Cotton Lint	lb	Dec '23	0.75	-0.011	0.7389	0.52	0.7389
Cottonseed	lb						0.11f
Grain Sorghum	bu				5.84	4.09	5.84
Peanuts	ton				575.00	354.895	575.00
Soybeans	bu	Nov '23	13.54	0.12	13.66	6.41	13.66
Rice	bu	Nov '23	6.93	-0.18	6.75	3.21	6.75
Wheat	bu	Jul '23	9.03	0.13	8.90	3.60	8.90

<sup>a</sup> Average of the daily closing futures contract prices during the first 5 trading days in October 2022 for the stated contract months.

<sup>b</sup> Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2013 to 2022 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.

<sup>c</sup> 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.

<sup>d</sup> Average Mississippi County CCC Loan Rate for 2022 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2022 Farm-stored Loan Rate for long grain rough rice. National 2022 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

<sup>e</sup> Price used in MSU Extension Service Planning Budgets.

<sup>f</sup> 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, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----										
<b>Set Up Engine</b>										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade	0.63	0.11	0.27		0.03	1.04	0.81	1.85	
Survey & Mark Levees	acre	4.50				0.14	4.64			4.64
Build Inside Levees										
Levee Pull (1m/80a)	8 blade	1.68	0.31	0.71		0.09	2.79	2.15	4.94	
Butt Levees										
Blade-Box	6'-7'	0.78	0.14	0.33		0.04	1.29	0.84	2.13	
IRRIGATE LABOR	hour				0.68		0.02	0.70		0.70
Install Gates										
IRRIGATE LABOR	hour				2.72		0.09	2.81		2.81
Apply Water						6.80		0.22	7.02	
IRRIGATE LABOR	hour					6.80		0.18	6.98	
Apply Water							6.80			6.98
IRRIGATE LABOR	hour						0.15	6.95		6.95
Apply Water							6.80			6.91
Remove Gates							0.11	6.91		6.91
IRRIGATE LABOR	hour							0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"	1.31	0.25	0.55		0.02	2.13	1.74	3.87	
Tear Down Levees										
Levee Splitter (1/80	32"	0.49	0.09	0.21		0.01	0.80	0.65	1.45	
Land Forming (\$113)	each								9.61	9.61
Levee Gates	each								0.68	0.68
Well & Pump, Flood	each				5.91		0.16	6.07	20.94	27.01
Engine, Rice CL, 75	each								20.96	20.96
May Irrigation	ac-in	21.90	1.53			0.75	24.18			24.18
June Irrigation	ac-in	32.85	2.29			0.94	36.08			36.08
July Irrigation	ac-in	32.85	2.29			0.75	35.89			35.89
August Irrigation	ac-in	32.85	2.29			0.56	35.70			35.70
<b>TOTALS</b>		<b>4.50</b>	<b>125.34</b>	<b>15.21</b>	<b>34.03</b>	<b>0.00</b>	<b>4.28</b>	<b>183.36</b>	<b>58.38</b>	<b>241.74</b>

Note: Cost of production estimates are based on 2022 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, 2023

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
Survey & Mark Levees	acre	2.25					0.07	2.32	2.32
Build Inside Levees									
Levee Pull (1m/80a)	8 blade		1.26	0.24	0.53		0.06	2.09	1.61
Butt Levees									
Blade-Box	6'-7'		0.78	0.14	0.33		0.04	1.29	0.84
IRRIGATE LABOR	hour				0.68		0.02	0.70	0.70
Install Gates									
IRRIGATE LABOR	hour				1.36		0.04	1.40	1.40
Apply Water									
IRRIGATE LABOR	hour				4.53		0.14	4.67	4.67
Apply Water									
IRRIGATE LABOR	hour				4.53		0.12	4.65	4.65
Apply Water									
IRRIGATE LABOR	hour				4.53		0.10	4.63	4.63
Apply Water									
IRRIGATE LABOR	hour				4.53		0.07	4.60	4.60
Remove Gates									
IRRIGATE LABOR	hour				0.91		0.01	0.92	0.92
Tear Down Levees									
Levee Splitter (1/80	32"		0.98	0.20	0.41		0.02	1.61	1.31
Land Forming (\$450)	each								38.27
Levee Gates	each								0.68
Well & Pump, Flood	each				5.91		0.16	6.07	20.94
Engine, Rice SL, 75	each								27.01
May Irrigation	ac-in	21.90	1.86				0.76	24.52	24.52
June Irrigation	ac-in	25.55	2.18				0.74	28.47	28.47
July Irrigation	ac-in	25.55	2.18				0.59	28.32	28.32
August Irrigation	ac-in	25.55	2.18				0.44	28.17	28.17
TOTALS		2.25	101.57	14.89	22.79	0.00	3.39	144.89	84.61
									229.50

Note: Cost of production estimates are based on 2022 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, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Set Up Engine								
IRRIGATE LABOR	hour				0.45		0.01	0.46
Survey & Mark Levees	acre	2.25					0.07	2.32
Build Inside Levees								
Levee Pull (1m/80a)	8 blade		1.26	0.24	0.53		0.06	2.09
Butt Levees								
Blade-Box	6'-7'		0.78	0.14	0.33		0.04	1.29
IRRIGATE LABOR	hour				0.68		0.02	0.70
Ditcher (1m/160a)			0.37	0.08	0.16		0.02	0.63
Roll-Out Pipe	ft	7.92					0.25	8.17
Lay Roll-out Pipe								
Pipe Spool 160ac	1/4m roll		0.49	0.12	0.44		0.03	1.08
Install Gates								
IRRIGATE LABOR	hour				1.36		0.04	1.40
Apply Water								
IRRIGATE LABOR	hour				1.81		0.06	1.87
Apply Water								
IRRIGATE LABOR	hour				1.81		0.05	1.86
Apply Water								
IRRIGATE LABOR	hour				1.81		0.04	1.85
Apply Water								
IRRIGATE LABOR	hour				1.81		0.03	1.84
Remove Gates								
IRRIGATE LABOR	hour				0.45			0.45
Tear Down Levees								
Levee Splitter (1/80	32"		0.98	0.20	0.41		0.02	1.61
Pick Up Pipe								
Pipe Spool 160ac	1/4m roll		0.25	0.06	0.21		0.01	0.53
Land Forming (\$450)	each							38.27
Levee Gates	each							0.34
Well & Pump, Flood	each				5.91		0.16	6.07
Engine, Mult In Rice	each							20.94
May Irrigation	ac-in	18.25	1.75				0.64	20.64
June Irrigation	ac-in	21.90	2.10				0.64	24.64
July Irrigation	ac-in	21.90	2.10				0.51	24.51
August Irrigation	ac-in	21.90	2.10				0.38	24.38
TOTALS		10.17	88.08	14.80	12.26	0.00	3.08	128.39
								86.36
								214.75

Note: Cost of production estimates are based on 2022 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, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Set Up Engine											
IRRIGATE LABOR	hour				0.45			0.01	0.46		0.46
Apply Water											
IRRIGATE LABOR	hour				2.27			0.07	2.34		2.34
Apply Water											
IRRIGATE LABOR	hour				2.27			0.06	2.33		2.33
Apply Water											
IRRIGATE LABOR	hour				2.27			0.05	2.32		2.32
Apply Water											
IRRIGATE LABOR	hour				2.27			0.04	2.31		2.31
Land Forming (\$450)	each									38.27	38.27
Well & Pump, Flood	each				5.91			0.16	6.07	20.94	27.01
Engine, Rice SL, 75	each									20.96	20.96
May Irrigation	ac-in		14.60	1.24				0.51	16.35		16.35
June Irrigation	ac-in		18.25	1.55				0.53	20.33		20.33
July Irrigation	ac-in		18.25	1.55				0.42	20.22		20.22
August Irrigation	ac-in		18.25	1.55				0.32	20.12		20.12
TOTALS		0.00	69.35	11.80	9.53	0.00	2.17	92.85	80.17	173.02	

Note: Cost of production estimates are based on 2022 input prices.



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