

**RICE
2020
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2019-04**

October 2019

Foreword

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

Acknowledgments

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

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

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Table of Contents

	Page
Foreword.....	i
Acknowledgments.....	i
2020 Budget Committees.....	ii
2020 Planning Budgets	1
Budgets for Agricultural Enterprises.....	1
Methods and Procedures	1
Production Practices	1
Machinery	1
Estimates of Direct Costs.....	2
Estimates of Fixed Costs.....	2
Estimates of Returns	3
Irrigation Costs	3
Net Returns	3
 Enterprise Budgets	
Table	
1 Contour levee rice Flood irrigated, 33 ac-in,.....	6
2 Straight levee rice Flood irrigated, 27 ac-in,.....	12
3 Straight levee rice Multi inlet flood irrigated, 23 ac-in,.....	18
4 Straight levee rice – zero grade Flood irrigated, 19 ac-in,.....	24
5 Conventional hybrid contour levee rice Flood irrigated, 33 ac-in,.....	30
6 Conventional hybrid straight levee rice Flood irrigated, 27 ac-in,.....	36
7 Conventional hybrid straight levee multi inlet rice Flood irrigated, 23 ac-in,.....	42
8 Conventional hybrid straight levee-zero grade rice Flood irrigated, 19 ac-in,.....	48
9 Clearfield contour levee rice Flood irrigated, 33 ac-in,.....	54
10 Clearfield straight levee rice Flood irrigated, 27 ac-in,.....	60
11 Clearfield straight levee multi inlet rice Flood irrigated, 23 ac-in,.....	66
12 Clearfield straight levee-zero grade rice Flood irrigated, 19 ac-in,.....	72

13	Clearfield hybrid contour levee rice Flood irrigated, 33 ac-in,.....	78
14	Clearfield hybrid straight levee rice Flood irrigated, 27 ac-in,.....	84
15	Clearfield hybrid straight levee multi inlet rice Flood irrigated, 23 ac-in,.....	90
16	Clearfield hybrid straight levee-zero grade rice Flood irrigated, 19 ac-in,.....	96
17	Provisia contour levee rice Flood irrigated, 33 ac-in,.....	102
18	Provisia straight levee rice Flood irrigated, 27 ac-in,.....	108
19	Provisia straight levee multi inlet rice Flood irrigated, 23 ac-in,.....	114
20	Provisia straight levee-zero grade rice Flood irrigated, 19 ac-in,.....	120

Appendix

Table

1	Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed costs per hour	128
2	Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed costs per acre.....	129
3	Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed costs per acre	130
4	Operating inputs: estimated prices	135
5	Estimated fuel prices and interest rates	138
6	Labor types, wage rates and unallocated labor multipliers for crop enterprises.....	138
7	Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets	139
8	Contour levee rice flood irrigation system 80-acre system, 33 ac-in., Delta Area.....	140
9	Straight levee rice flood irrigation system 80-acre system, 27 ac-in., Delta Area	141
10	Straight levee rice multi-inlet flood irrigation system 80-acre system, 23 ac-in., Delta Area	142
11	Straight levee rice - zero grade flood irrigation system 80-acre system, 19 ac-in., Delta Area	143
	Literature Cited	145

2020 Planning Budgets

Budgets for Agricultural Enterprises

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

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

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

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

Methods and Procedures

Production Practices

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

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

Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2019. (Appendix Tables 1, 2, and 3).

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

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

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

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

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

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

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2019 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8, 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, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.28	75.0000	21.00	_____
Rice Seed Trt./Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.28	13.6000	3.81	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	1.5000	5.32	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc. (Pet.)	pt	3.00	0.4000	1.20	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.2030	3.09	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	15.21	0.5633	8.57	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	3.3975	7.81	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.85	1.0000	8.85	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	8.10	1.0000	8.10	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	14.07	1.0000	14.07	_____
TOTAL DIRECT EXPENSES				759.69	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	34.38	1.0000	34.38	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____
TOTAL FIXED EXPENSES				127.73	_____
TOTAL SPECIFIED EXPENSES				887.42	_____

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

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

Table 1.B Summary of estimated costs and returns per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	50.50	1.0000	50.50	_____
ADJUVANTS	acre	11.01	1.0000	11.01	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.22	0.7506	11.42	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.21	0.5633	8.57	_____
DIESEL FUEL	gal	2.30	36.2688	83.39	_____
REPAIR & MAINTENANCE	acre	34.35	1.0000	34.35	_____
INTEREST ON OP. CAP.	acre	14.07	1.0000	14.07	_____

TOTAL DIRECT EXPENSES				759.69	_____
RETURNS ABOVE DIRECT EXPENSES				32.31	_____
TOTAL FIXED EXPENSES				127.73	_____

TOTAL SPECIFIED EXPENSES				887.42	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-95.42	_____

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

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

Table 1.C Estimated resource use for field operations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Sep	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Table 1.D Estimated costs for field operations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

Fertilization decisions should be based on soil tests.

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

Table 1.E Estimated monthly income and expense flows per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	50.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.27	9.52	11.33	11.33	11.88	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	9.02	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	11.44	3.33
INTEREST ON OP. CAP.	0.50	0.00	0.00	0.00	0.68	0.00	3.53	5.20	1.68	1.08	1.34	0.06
TOTAL DIRECT EXPENSES	10.05	0.00	0.00	0.00	19.86	0.00	137.94	242.26	98.05	82.73	153.68	15.12
NET INCOME	-10.05	0.00	0.00	0.00	-19.86	0.00	-137.94	-242.26	-98.05	-82.73	638.32	-15.12
NET INCOME TO DATE	-10.05	-10.05	-10.05	-10.05	-29.91	-29.91	-167.85	-410.11	-508.16	-590.89	47.43	32.31

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

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs

Table 1.F Estimated returns for various price/yield combinations, per acre
 Contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

Table 2.A Estimated costs per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.28	75.0000	21.00	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv (Levees)	lb	0.28	13.6000	3.81	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc. (Pet.)	pt	3.00	0.4000	1.20	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	13.58	1.0000	13.58	_____
TOTAL DIRECT EXPENSES				722.77	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				870.23	_____

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

Table 2.B Summary of estimated costs and returns per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2020

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

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	50.50	1.0000	50.50	_____
ADJUVANTS	acre	11.01	1.0000	11.01	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	13.58	1.0000	13.58	_____

TOTAL DIRECT EXPENSES				722.77	_____
RETURNS ABOVE DIRECT EXPENSES				69.23	_____
TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				870.23	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-78.23	_____

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

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

Table 2.C Estimated resource use for field operations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Liberate	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.4000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 2.D Estimated costs for field operations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2020

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

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

Fertilization decisions should be based on soil tests.

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

Table 2.E Estimated monthly income and expense flows per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	50.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	3.36	5.02	1.53	0.96	1.31	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	131.10	234.15	89.06	73.77	149.50	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-131.10	-234.15	-89.06	-73.77	642.50	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-164.51	-398.66	-487.72	-561.49	81.01	69.23

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 2.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice
 Flood irrigated, 27 ac-in, Mississippi, 2020

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

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

Table 3.A Estimated costs per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.28	75.0000	21.00	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.28	13.6000	3.81	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	1.5000	5.32	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc. (Pet.)	pt	3.00	0.5000	1.50	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	13.43	1.0000	13.43	_____
TOTAL DIRECT EXPENSES				713.23	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				862.02	_____

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

Table 3.B Summary of estimated costs and returns per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

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

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	50.50	1.0000	50.50	_____
ADJUVANTS	acre	11.31	1.0000	11.31	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	13.43	1.0000	13.43	_____

TOTAL DIRECT EXPENSES				713.23	_____
RETURNS ABOVE DIRECT EXPENSES				78.77	_____
TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				862.02	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-70.02	_____

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

Fertilization decisions should be based on soil tests.

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

Table 3.C Estimated resource use for field operations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.5000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 3.D Estimated costs for field operations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

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

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

Fertilization decisions should be based on soil tests.

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

Table 3.E Estimated monthly income and expense flows per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	50.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	4.23	3.55	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	3.48	4.92	1.44	0.89	1.30	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	135.61	229.68	84.30	69.03	149.42	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-135.61	-229.68	-84.30	-69.03	642.58	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-169.02	-398.70	-483.00	-552.03	90.55	78.77

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

Table 3.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-355 -504	-335 -484	-316 -464	-296 -445	-276 -425	-256 -405	-236 -385	-217 -365	-197 -346	-177 -326	-157 -306
60	96.00	bu	-308 -457	-284 -433	-260 -409	-237 -385	-213 -362	-189 -338	-165 -314	-142 -290	-118 -267	-94 -243	-70 -219
70	112.00	bu	-261 -409	-233 -382	-205 -354	-177 -326	-150 -299	-122 -271	-94 -243	-67 -215	-39 -188	-11 -160	16 -132
80	128.00	bu	-213 -362	-182 -330	-150 -299	-118 -267	-87 -235	-55 -204	-23 -172	7 -140	39 -109	71 -77	102 -45
90	144.00	bu	-166 -315	-130 -279	-95 -244	-59 -208	-23 -172	11 -137	47 -101	82 -65	118 -30	154 5	189 41
100	160.00	bu	-119 -268	-79 -228	-40 -188	-0 -149	39 -109	78 -70	118 -30	157 9	197 48	237 88	276 127
110	176.00	bu	-71 -220	-28 -177	15 -133	58 -90	102 -46	145 -2	189 40	232 84	276 127	320 171	363 214
120	192.00	bu	-24 -173	22 -125	70 -78	117 -30	165 16	212 64	260 111	308 159	355 206	403 254	450 301
130	208.00	bu	22 -126	74 -74	125 -23	177 28	228 79	280 131	331 182	383 234	434 285	485 337	537 388
140	224.00	bu	69 -78	125 -23	180 32	236 87	291 142	347 198	402 253	458 309	513 364	568 420	624 475
150	240.00	bu	117 -31	176 27	236 87	295 146	354 206	414 265	473 324	533 384	592 443	651 503	711 562

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

Table 4.A Estimated costs per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	5.5000	38.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.28	75.0000	21.00	_____
Rice Seed Trt/Insect	lbseed	0.29	75.0000	21.75	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	1.5000	5.32	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc. (Pet.)	pt	3.00	0.5000	1.50	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	12.66	1.0000	12.66	_____
TOTAL DIRECT EXPENSES				679.63	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____
TOTAL FIXED EXPENSES				143.71	_____
TOTAL SPECIFIED EXPENSES				823.34	_____

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

Fertilization decisions should be based on soil tests.

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

Table 4.B Summary of estimated costs and returns per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.75	1.0000	46.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	42.75	1.0000	42.75	_____
ADJUVANTS	acre	11.31	1.0000	11.31	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	12.66	1.0000	12.66	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 4.C Estimated resource use for field operations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Liberate	pt					0.5000				
MSO	pt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.5000				
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000				1.05
TOTALS							0.59	0.59	2.67	0.53

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

Fertilization decisions should be based on soil tests.

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

Table 4.D Estimated costs for field operations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

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

Fertilization decisions should be based on soil tests.

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

Table 4.E Estimated monthly income and expense flows per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	42.75	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	4.23	3.55	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	2.81	4.88	1.41	0.87	1.29	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	109.75	227.72	82.35	67.09	147.53	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-109.75	-227.72	-82.35	-67.09	644.47	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-143.16	-370.88	-453.23	-520.32	124.15	112.37

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

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

Table 5.A Estimated costs per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.15	23.0000	141.45	_____
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc. (Pet.)	pt	3.00	0.4000	1.20	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	16.07	1.0000	16.07	_____
TOTAL DIRECT EXPENSES				812.79	_____
FIXED EXPENSES					
Implements	acre	20.07	1.0000	20.07	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____
TOTAL FIXED EXPENSES				122.49	_____
TOTAL SPECIFIED EXPENSES				935.28	_____

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

Table 5.B Summary of estimated costs and returns per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	150.88	1.0000	150.88	_____
ADJUVANTS	acre	10.48	1.0000	10.48	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.22	0.7235	11.01	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	35.8158	82.35	_____
REPAIR & MAINTENANCE	acre	32.89	1.0000	32.89	_____
INTEREST ON OP. CAP.	acre	16.07	1.0000	16.07	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 5.C Estimated resource use for field operations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

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

Table 5.D Estimated costs for field operations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

Fertilization decisions should be based on soil tests.

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

Table 5.E Estimated monthly income and expense flows per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	150.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.27	7.71	8.61	8.61	11.10	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	7.98	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	9.98	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.17	5.27	1.22	0.57	1.44	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	240.96	245.63	71.36	44.15	165.50	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-240.96	-245.63	-71.36	-44.15	725.50	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-274.37	-520.00	-591.36	-635.51	89.99	78.21

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 5.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

Table 6.A Estimated costs per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.15	23.0000	141.45	_____
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc. (Pet.)	pt	3.00	0.4000	1.20	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	15.58	1.0000	15.58	_____
TOTAL DIRECT EXPENSES				786.40	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				933.86	_____

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

Table 6.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

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

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	150.88	1.0000	150.88	_____
ADJUVANTS	acre	10.48	1.0000	10.48	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	15.58	1.0000	15.58	_____

TOTAL DIRECT EXPENSES				786.40	_____
RETURNS ABOVE DIRECT EXPENSES				104.60	_____
TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				933.86	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-42.86	_____

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

Fertilization decisions should be based on soil tests.

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

Table 6.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

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

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

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

Table 6.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

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

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

Table 6.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	150.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.00	5.13	1.12	0.49	1.44	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	234.12	239.37	65.14	37.95	164.63	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-234.12	-239.37	-65.14	-37.95	726.37	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-267.53	-506.90	-572.04	-609.99	116.38	104.60

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-384 -531	-361 -509	-339 -487	-317 -464	-295 -442	-272 -420	-250 -397	-228 -375	-205 -353	-183 -331	-161 -308
60	108.00	bu	-330 -478	-304 -451	-277 -424	-250 -398	-224 -371	-197 -344	-170 -318	-143 -291	-117 -264	-90 -237	-63 -211
70	126.00	bu	-277 -425	-246 -394	-215 -362	-184 -331	-153 -300	-121 -269	-90 -238	-59 -206	-28 -175	2 -144	34 -113
80	144.00	bu	-224 -372	-188 -336	-153 -300	-117 -265	-82 -229	-46 -193	-10 -158	24 -122	60 -86	96 -51	131 -15
90	162.00	bu	-171 -318	-131 -278	-91 -238	-51 -198	-10 -158	29 -118	69 -78	109 -38	149 1	189 42	229 82
100	180.00	bu	-118 -265	-73 -221	-29 -176	15 -131	60 -87	104 -42	149 1	193 46	238 90	282 135	327 179
110	198.00	bu	-64 -212	-15 -163	33 -114	82 -65	131 -16	180 32	229 81	278 130	327 179	376 228	425 27
120	216.00	bu	-11 -159	41 -105	95 -52	148 1	202 54	255 108	309 161	362 215	415 268	469 321	522 375
130	234.00	bu	41 -105	99 -48	157 9	215 67	273 125	331 183	388 241	446 299	504 357	562 415	620 473
140	252.00	bu	94 -52	157 9	219 71	281 134	344 196	406 259	468 321	531 383	593 446	656 508	718 570
150	270.00	bu	147 0	214 67	281 134	348 200	415 267	482 334	548 401	615 468	682 535	749 601	816 668

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

Table 7.A Estimated costs per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.15	23.0000	141.45	_____
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc. (Pet.)	pt	3.00	0.4000	1.20	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	15.43	1.0000	15.43	_____
TOTAL DIRECT EXPENSES				776.56	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				925.35	_____

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

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

Table 7.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	150.88	1.0000	150.88	_____
ADJUVANTS	acre	10.48	1.0000	10.48	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	15.43	1.0000	15.43	_____

TOTAL DIRECT EXPENSES				776.56	_____
RETURNS ABOVE DIRECT EXPENSES				114.44	_____
TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				925.35	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-34.35	_____

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

Fertilization decisions should be based on soil tests.

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

Table 7.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

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

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

Table 7.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

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

Table 7.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	150.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.12	5.03	1.03	0.42	1.43	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	238.63	234.60	60.38	33.21	164.55	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-238.63	-234.60	-60.38	-33.21	726.45	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-272.04	-506.64	-567.02	-600.23	126.22	114.44

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

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

Table 8.A Estimated costs per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Regiment	oz	42.66	0.5000	21.33	_____
Facet L	pt	13.61	2.6900	36.61	_____
Permit	oz	21.22	0.7500	15.92	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.15	23.0000	141.45	_____
Rice Seed CvH (Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Dyne-A-Pak	pt	5.45	0.5000	2.73	_____
Crop Oil Conc. (Pet.)	pt	3.00	0.4000	1.20	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.					
	acre	14.86	1.0000	14.86	_____
TOTAL DIRECT EXPENSES				750.91	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____
TOTAL FIXED EXPENSES				143.71	_____
TOTAL SPECIFIED EXPENSES				894.62	_____

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

Table 8.B Summary of estimated costs and returns per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	39.75	1.0000	39.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	135.33	1.0000	135.33	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	150.88	1.0000	150.88	_____
ADJUVANTS	acre	10.48	1.0000	10.48	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	14.86	1.0000	14.86	_____

TOTAL DIRECT EXPENSES				750.91	_____
RETURNS ABOVE DIRECT EXPENSES				140.09	_____
TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				894.62	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-3.62	_____

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

Fertilization decisions should be based on soil tests.

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

Table 8.C Estimated resource use for field operations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

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

Fertilization decisions should be based on soil tests.

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

Table 8.D Estimated costs for field operations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

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

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

Table 8.E Estimated monthly income and expense flows per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	7.00	14.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	31.89	73.86	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	150.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.93	3.55	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.65	4.99	1.00	0.40	1.42	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	220.72	232.64	58.43	31.27	162.66	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-220.72	-232.64	-58.43	-31.27	728.34	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-254.13	-486.77	-545.20	-576.47	151.87	140.09

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

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

Table 9.A Estimated costs per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clearfield	lb	0.95	65.0000	61.75	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF (Levees)	lb	0.95	12.0000	11.40	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	1.5000	5.32	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.2030	3.09	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.21	0.5633	8.57	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	3.3975	7.81	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.85	1.0000	8.85	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	8.10	1.0000	8.10	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	15.51	1.0000	15.51	_____
TOTAL DIRECT EXPENSES				802.01	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	34.38	1.0000	34.38	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____
TOTAL FIXED EXPENSES				127.73	_____
TOTAL SPECIFIED EXPENSES				929.74	_____

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

Table 9.B Summary of estimated costs and returns per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

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

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	95.48	1.0000	95.48	_____
ADJUVANTS	acre	19.08	1.0000	19.08	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.22	0.7506	11.42	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.21	0.5633	8.57	_____
DIESEL FUEL	gal	2.30	36.2688	83.39	_____
REPAIR & MAINTENANCE	acre	34.35	1.0000	34.35	_____
INTEREST ON OP. CAP.	acre	15.51	1.0000	15.51	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 9.C Estimated resource use for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Fertilization decisions should be based on soil tests.

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

Table 9.D Estimated costs for field operations, per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

Table 9.E Estimated monthly income and expense flows per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	95.48	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.27	9.52	11.33	11.33	11.88	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	9.02	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	11.44	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.81	4.20	1.68	1.08	1.34	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	226.99	195.37	98.05	82.73	153.68	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-226.99	-195.37	-98.05	-82.73	638.32	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-260.40	-455.77	-553.82	-636.55	1.77	-10.01

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

Table 10.A Estimated costs per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clearfield	lb	0.95	65.0000	61.75	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF (Levees)	lb	0.95	12.0000	11.40	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	14.86	1.0000	14.86	_____
TOTAL DIRECT EXPENSES				764.93	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				912.39	_____

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

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

Table 10.B Summary of estimated costs and returns per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

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

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	95.48	1.0000	95.48	_____
ADJUVANTS	acre	19.08	1.0000	19.08	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	14.86	1.0000	14.86	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 10.C Estimated resource use for field operations, per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

Table 10.D Estimated costs for field operations, per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

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

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

Fertilization decisions should be based on soil tests.

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

Table 10.E Estimated monthly income and expense flows per acre
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	95.48	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.64	4.02	1.53	0.96	1.31	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	220.15	187.26	89.06	73.77	149.50	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-220.15	-187.26	-89.06	-73.77	642.50	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-253.56	-440.82	-529.88	-603.65	38.85	27.07

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 10.F Estimated returns for various price/yield combinations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

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

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

Table 11.A Estimated costs per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Clearfield	lb	0.95	65.0000	61.75	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	0.95	12.0000	11.40	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	14.71	1.0000	14.71	_____
TOTAL DIRECT EXPENSES				755.09	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				903.88	_____

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

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

Table 11.B Summary of estimated costs and returns per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	95.48	1.0000	95.48	_____
ADJUVANTS	acre	19.08	1.0000	19.08	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	14.71	1.0000	14.71	_____

TOTAL DIRECT EXPENSES				755.09	_____
RETURNS ABOVE DIRECT EXPENSES				36.91	_____
TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				903.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-111.88	_____

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

Fertilization decisions should be based on soil tests.

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

Table 11.C Estimated resource use for field operations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

Table 11.D Estimated costs for field operations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

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

Table 11.E Estimated monthly income and expense flows per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	95.48	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.76	3.92	1.44	0.89	1.30	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	224.66	182.49	84.30	69.03	149.42	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-224.66	-182.49	-84.30	-69.03	642.58	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-258.07	-440.56	-524.86	-593.89	48.69	36.91

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

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

Table 12.A Estimated costs per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clearfield	lb	0.95	65.0000	61.75	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF (Levees)	lb	0.95	12.0000	11.40	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	14.14	1.0000	14.14	_____
TOTAL DIRECT EXPENSES				729.44	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____
TOTAL FIXED EXPENSES				143.71	_____
TOTAL SPECIFIED EXPENSES				873.15	_____

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

Fertilization decisions should be based on soil tests.

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

Table 12.B Summary of estimated costs and returns per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

TOTAL INCOME				792.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	95.48	1.0000	95.48	_____
ADJUVANTS	acre	19.08	1.0000	19.08	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	14.14	1.0000	14.14	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 12.C Estimated resource use for field operations, per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF (Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

Table 12.D Estimated costs for field operations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Mississippi, 2020

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

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

Fertilization decisions should be based on soil tests.

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

Table 12.E Estimated monthly income and expense flows per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	95.48	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.29	3.88	1.41	0.87	1.29	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	206.75	180.53	82.35	67.09	147.53	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-206.75	-180.53	-82.35	-67.09	644.47	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-240.16	-420.69	-503.04	-570.13	74.34	62.56

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs

Table 12.F Estimated returns for various price/yield combinations, per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

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

Table 13.A Estimated costs per acre
Clearfield hybrid countour levee rice
Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	6.10	23.0000	140.30	_____
Rice Seed CFH(Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	16.22	1.0000	16.22	_____
TOTAL DIRECT EXPENSES				810.84	_____
FIXED EXPENSES					
Implements	acre	20.07	1.0000	20.07	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____
TOTAL FIXED EXPENSES				122.49	_____
TOTAL SPECIFIED EXPENSES				933.33	_____

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

Table 13.B Summary of estimated costs and returns per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	152.88	1.0000	152.88	_____
ADJUVANTS	acre	18.55	1.0000	18.55	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.22	0.7235	11.01	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	35.8158	82.35	_____
REPAIR & MAINTENANCE	acre	32.89	1.0000	32.89	_____
INTEREST ON OP. CAP.	acre	16.22	1.0000	16.22	_____

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

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

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

Fertilization decisions should be based on soil tests.

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

Table 13.C Estimated resource use for field operations, per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

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

Table 13.D Estimated costs for field operations, per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

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

Table 13.E Estimated monthly income and expense flows per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	152.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.27	7.71	8.61	8.61	11.10	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	7.98	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	9.98	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	7.32	4.27	1.22	0.57	1.44	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	285.90	198.74	71.36	44.15	165.50	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-285.90	-198.74	-71.36	-44.15	725.50	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-319.31	-518.05	-589.41	-633.56	91.94	80.16

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre
 Clearfield hybrid countour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

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

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

Table 14.A Estimated costs per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	6.10	23.0000	140.30	_____
Rice Seed CFH(Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	15.73	1.0000	15.73	_____
TOTAL DIRECT EXPENSES				784.45	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				931.91	_____

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

Fertilization decisions should be based on soil tests.

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

Table 14.B Summary of estimated costs and returns per acre
 Clearfield hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

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

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	152.88	1.0000	152.88	_____
ADJUVANTS	acre	18.55	1.0000	18.55	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	15.73	1.0000	15.73	_____

TOTAL DIRECT EXPENSES				784.45	_____
RETURNS ABOVE DIRECT EXPENSES				106.55	_____
TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				931.91	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-40.91	_____

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

Fertilization decisions should be based on soil tests.

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

Table 14.C Estimated resource use for field operations, per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

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

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

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

Table 14.D Estimated costs for field operations, per acre
 Clearfield hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

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

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

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

Table 14.E Estimated monthly income and expense flows per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	152.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	7.15	4.13	1.12	0.49	1.44	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	279.06	192.48	65.14	37.95	164.63	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-279.06	-192.48	-65.14	-37.95	726.37	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-312.47	-504.95	-570.09	-608.04	118.33	106.55

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 14.F Estimated returns for various price/yield combinations, per acre
 Clearfield hybrid straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

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

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

Table 15.A Estimated costs per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	6.10	23.0000	140.30	_____
Rice Seed CFH(Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	15.58	1.0000	15.58	_____
TOTAL DIRECT EXPENSES				774.61	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				923.40	_____

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

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

Table 15.B Summary of estimated costs and returns per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	152.88	1.0000	152.88	_____
ADJUVANTS	acre	18.55	1.0000	18.55	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	15.58	1.0000	15.58	_____

TOTAL DIRECT EXPENSES				774.61	_____
RETURNS ABOVE DIRECT EXPENSES				116.39	_____
TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				923.40	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-32.40	_____

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

Fertilization decisions should be based on soil tests.

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

Table 15.C Estimated resource use for field operations, per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

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

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

Table 15.D Estimated costs for field operations, per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70			0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12			0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00						0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72						0.24	6.96		6.96
2,4-D Amine 4	pt	5.46						0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99			0.20	7.77	7.83	15.60
Rice Clrflld Hyb Trt	lb	140.30						3.68	143.98		143.98
Roller/Cultipacker	30'		1.33	0.58	1.44			0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00						0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48						0.12	4.60		4.60
Command 3ME	pt	16.09						0.42	16.51		16.51
Sharpen	oz	11.32						0.30	11.62		11.62
MSO	pt	1.78						0.05	1.83		1.83
Class Act NG	pt	1.22						0.03	1.25		1.25
Seed Levees											
Rice Seed CFH(Levee)	lb	11.35						0.30	11.65		11.65
Rice Seed Trt/Insect	lbseed	1.23						0.03	1.26		1.26
App by Air (5 gal)	appl	7.00						0.18	7.18		7.18
Clearpath	lb	28.79						0.76	29.55		29.55
Crop Oil Conc.(Pet.)	pt	6.00						0.16	6.16		6.16
App Fert by Air	cwt	7.50						0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73						0.19	8.92		8.92
DAP	cwt	11.32						0.25	11.57		11.57
Rice Consultant	acre	8.00						0.18	8.18		8.18
App Fert by Air	cwt	20.02						0.44	20.46		20.46
Urea, Solid (46% N)	cwt	53.99						1.18	55.17		55.17
NBPT	pt	6.38						0.14	6.52		6.52
App by Air (10 gal)	appl	9.00						0.20	9.20		9.20
Newpath	oz	22.38						0.49	22.87		22.87
Crop Oil Conc.(Pet.)	pt	6.00						0.13	6.13		6.13
Aim	oz	8.52						0.19	8.71		8.71
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.50						0.06	3.56		3.56
Clincher SF	oz	17.40						0.30	17.70		17.70
MSO	pt	3.55						0.06	3.61		3.61
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	4.89						0.09	4.98		4.98
Urea, Solid (46% N)	cwt	13.18						0.23	13.41		13.41
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air (3 gal)	appl	8.25						0.11	8.36		8.36
Warrior ZT	oz	7.71						0.10	7.81		7.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09			0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32			0.01	0.81	0.74	1.55
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	63.00						0.55	63.55		63.55
Dry Rice	bu	72.00						0.63	72.63		72.63
Disk Heavy	28'		4.03	3.33	4.37			0.05	11.78	12.51	24.29
Flood Irr.	acre	10.17	45.21	14.17	12.12			1.69	83.36	79.52	162.88
TOTALS		624.56	63.24	32.47	38.76	0.00	15.58	774.61	148.79	923.40	

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

Table 15.E Estimated monthly income and expense flows per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	152.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	7.27	4.03	1.03	0.42	1.43	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	283.57	187.71	60.38	33.21	164.55	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-283.57	-187.71	-60.38	-33.21	726.45	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-316.98	-504.69	-565.07	-598.28	128.17	116.39

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-372 -521	-350 -498	-327 -476	-305 -454	-283 -432	-261 -409	-238 -387	-216 -365	-194 -342	-171 -320	-149 -298
60	108.00	bu	-319 -467	-292 -441	-265 -414	-238 -387	-212 -361	-185 -334	-158 -307	-132 -280	-105 -254	-78 -227	-51 -200
70	126.00	bu	-265 -414	-234 -383	-203 -352	-172 -321	-141 -290	-110 -258	-78 -227	-47 -196	-16 -165	14 -134	45 -102
80	144.00	bu	-212 -361	-177 -325	-141 -290	-105 -254	-70 -219	-34 -183	1 -147	36 -112	72 -76	107 -40	143 -5
90	162.00	bu	-159 -308	-119 -268	-79 -228	-39 -188	0 -147	40 -107	81 -67	121 -27	161 12	201 52	241 92
100	180.00	bu	-106 -255	-61 -210	-17 -166	27 -121	71 -76	116 -32	160 12	205 56	250 101	294 145	339 190
110	198.00	bu	-53 -201	-4 -152	44 -103	93 -54	142 -5	191 43	240 92	289 141	338 190	387 239	436 288
120	216.00	bu	0 -148	53 -95	106 -41	160 11	213 65	267 118	320 172	374 225	427 278	481 332	534 385
130	234.00	bu	53 -95	111 -37	169 20	227 78	284 136	342 194	400 251	458 309	516 367	574 425	632 483
140	252.00	bu	106 -42	168 20	231 82	293 144	355 207	418 269	480 331	543 394	605 456	667 519	730 581
150	270.00	bu	159 10	226 77	293 144	360 211	426 278	493 345	560 411	627 478	694 545	761 612	827 679

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

Table 16.A Estimated costs per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	3.5000	24.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	3.3220	67.17	_____
NBPT	pt	7.97	0.8000	6.38	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Clearpath	lb	57.57	0.5000	28.79	_____
Newpath	oz	3.73	6.0000	22.38	_____
Aim	oz	5.68	1.5000	8.52	_____
Clincher SF	oz	2.32	7.5000	17.40	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	6.10	23.0000	140.30	_____
Rice Seed CFH(Levee)	lb	2.67	4.2500	11.35	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	3.55	1.5000	5.32	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc.(Pet.)	pt	3.00	4.0000	12.00	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	4.3220	32.42	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	15.01	1.0000	15.01	_____
TOTAL DIRECT EXPENSES				748.96	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____
TOTAL FIXED EXPENSES				143.71	_____
TOTAL SPECIFIED EXPENSES				892.67	_____

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

Table 16.B Summary of estimated costs and returns per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

TOTAL INCOME				891.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	41.75	1.0000	41.75	_____
FERTILIZERS	acre	93.60	1.0000	93.60	_____
HERBICIDES	acre	121.16	1.0000	121.16	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	152.88	1.0000	152.88	_____
ADJUVANTS	acre	18.55	1.0000	18.55	_____
CUSTOM FERTILIZE	acre	32.41	1.0000	32.41	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	15.01	1.0000	15.01	_____

TOTAL DIRECT EXPENSES				748.96	_____
RETURNS ABOVE DIRECT EXPENSES				142.04	_____
TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				892.67	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-1.67	_____

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

Fertilization decisions should be based on soil tests.

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

Table 16.C Estimated resource use for field operations, per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

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

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

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

Table 16.D Estimated costs for field operations, per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.17	3.50	3.50
Field Cultivate Fld	32'		2.49	1.66	2.70			0.36	7.21	9.10
Harrow - Folding	40'		1.03	0.55	1.12			0.14	2.84	2.32
App by Air (5 gal)	appl	7.00						0.25	7.25	7.25
Glyphosate 3lbs a.e	oz	6.72						0.24	6.96	6.96
2,4-D Amine 4	pt	5.46						0.19	5.65	5.65
Grain Drill	24'		2.09	2.49	2.99			0.20	7.77	7.83
Rice Clrflld Hyb Trt	lb	140.30						3.68	143.98	143.98
Roller/Cultipacker	30'		1.33	0.58	1.44			0.09	3.44	2.74
App by Air (5 gal)	appl	7.00						0.18	7.18	7.18
Glyphosate 3lbs a.e	oz	4.48						0.12	4.60	4.60
Command 3ME	pt	16.09						0.42	16.51	16.51
Sharpen	oz	11.32						0.30	11.62	11.62
MSO	pt	1.78						0.05	1.83	1.83
Class Act NG	pt	1.22						0.03	1.25	1.25
Seed Levees										
Rice Seed CFH(Levee)	lb	11.35						0.30	11.65	11.65
Rice Seed Trt/Insect	lbseed	1.23						0.03	1.26	1.26
App by Air (5 gal)	appl	7.00						0.18	7.18	7.18
Clearpath	lb	28.79						0.76	29.55	29.55
Crop Oil Conc.(Pet.)	pt	6.00						0.16	6.16	6.16
App Fert by Air	cwt	7.50						0.16	7.66	7.66
Amm Sulfate (21% N)	cwt	8.73						0.19	8.92	8.92
DAP	cwt	11.32						0.25	11.57	11.57
Rice Consultant	acre	8.00						0.18	8.18	8.18
App Fert by Air	cwt	20.02						0.44	20.46	20.46
Urea, Solid (46% N)	cwt	53.99						1.18	55.17	55.17
NBPT	pt	6.38						0.14	6.52	6.52
App by Air (10 gal)	appl	9.00						0.20	9.20	9.20
Newpath	oz	22.38						0.49	22.87	22.87
Crop Oil Conc.(Pet.)	pt	6.00						0.13	6.13	6.13
Aim	oz	8.52						0.19	8.71	8.71
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	3.50						0.06	3.56	3.56
Clincher SF	oz	17.40						0.30	17.70	17.70
MSO	pt	3.55						0.06	3.61	3.61
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	4.89						0.09	4.98	4.98
Urea, Solid (46% N)	cwt	13.18						0.23	13.41	13.41
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air (3 gal)	appl	8.25						0.11	8.36	8.36
Warrior ZT	oz	7.71						0.10	7.81	7.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09			0.19	21.55	34.03
Grain Cart Rice	700 bu		0.29	0.19	0.32			0.01	0.81	0.74
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	63.00						0.55	63.55	63.55
Dry Rice	bu	72.00						0.63	72.63	72.63
Disk Heavy	28'		4.03	3.33	4.37			0.05	11.78	12.51
Flood Irr.	acre		35.60	11.46	9.53			1.12	57.71	74.44
TOTALS		614.39	53.63	29.76	36.17	0.00	15.01	748.96	143.71	892.67

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

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

Table 16.E Estimated monthly income and expense flows per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	891.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	8.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.42	13.18	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	60.68	30.90	17.40	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	152.88	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	3.55	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.52	4.89	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.80	3.99	1.00	0.40	1.42	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	265.66	185.75	58.43	31.27	162.66	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-265.66	-185.75	-58.43	-31.27	728.34	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-299.07	-484.82	-543.25	-574.52	153.82	142.04

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-346 -490	-324 -468	-302 -445	-279 -423	-257 -401	-235 -379	-213 -356	-190 -334	-168 -312	-146 -289	-123 -267
60	108.00	bu	-293 -437	-266 -410	-240 -383	-213 -357	-186 -330	-159 -303	-133 -276	-106 -250	-79 -223	-52 -196	-26 -169
70	126.00	bu	-240 -384	-209 -352	-177 -321	-146 -290	-115 -259	-84 -228	-53 -196	-22 -165	9 -134	40 -103	71 -72
80	144.00	bu	-187 -330	-151 -295	-115 -259	-80 -223	-44 -188	-8 -152	26 -116	62 -81	97 -45	133 -10	169 25
90	162.00	bu	-133 -277	-93 -237	-53 -197	-13 -157	26 -117	66 -77	106 -37	146 3	186 43	226 83	267 123
100	180.00	bu	-80 -224	-36 -179	8 -135	52 -90	97 -46	142 -1	186 42	231 87	275 131	320 176	364 221
110	198.00	bu	-27 -171	21 -122	70 -73	119 -24	168 24	217 73	266 122	315 171	364 220	413 269	462 318
120	216.00	bu	25 -118	79 -64	132 -11	186 42	239 95	293 149	346 202	399 256	453 309	506 363	560 416
130	234.00	bu	78 -64	136 -6	194 51	252 108	310 166	368 224	426 282	484 340	542 398	600 456	658 514
140	252.00	bu	132 -11	194 50	256 113	319 175	381 237	443 300	506 362	568 424	631 487	693 549	755 612
150	270.00	bu	185 41	252 108	318 175	385 242	452 308	519 375	586 442	653 509	719 576	786 643	853 709

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

Table 17.A Estimated costs per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Provisia	oz	0.83	31.0000	25.73	_____
Aim	oz	5.68	1.0000	5.68	_____
Permit	oz	21.22	0.7500	15.92	_____
Regiment	oz	42.66	0.2500	10.67	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.08	77.0000	83.16	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
Class Act NG	pt	2.44	0.5000	1.22	_____
MSO	pt	3.55	0.5000	1.78	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
Dyne-A-Pak	pt	5.45	0.2500	1.36	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5475	8.33	_____
Harvesters	hour	15.22	0.2030	3.09	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	15.21	0.5633	8.57	_____
DIESEL FUEL					
Tractors	gal	2.30	5.9886	13.76	_____
Harvesters	gal	2.30	3.3975	7.81	_____
Flood Irr.	gal	2.30	26.8827	61.82	_____
REPAIR & MAINTENANCE					
Implements	acre	8.85	1.0000	8.85	_____
Tractors	acre	3.61	1.0000	3.61	_____
Harvesters	acre	8.10	1.0000	8.10	_____
Flood Irr.	acre	13.79	1.0000	13.79	_____
INTEREST ON OP. CAP.	acre	15.35	1.0000	15.35	_____
TOTAL DIRECT EXPENSES				787.59	_____
FIXED EXPENSES					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	24.51	1.0000	24.51	_____
Harvesters	acre	34.38	1.0000	34.38	_____
Flood Irr.	acre	48.12	1.0000	48.12	_____
TOTAL FIXED EXPENSES				127.73	_____
TOTAL SPECIFIED EXPENSES				915.32	_____

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

Table 17.B Summary of estimated costs and returns per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	156.0000	772.20	_____

TOTAL INCOME				772.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	102.08	1.0000	102.08	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	105.49	1.0000	105.49	_____
ADJUVANTS	acre	16.89	1.0000	16.89	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	15.22	0.7506	11.42	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	15.21	0.5633	8.57	_____
DIESEL FUEL	gal	2.30	36.2688	83.39	_____
REPAIR & MAINTENANCE	acre	34.35	1.0000	34.35	_____
INTEREST ON OP. CAP.	acre	15.35	1.0000	15.35	_____

TOTAL DIRECT EXPENSES				787.59	_____
RETURNS ABOVE DIRECT EXPENSES				-15.39	_____
TOTAL FIXED EXPENSES				127.73	_____

TOTAL SPECIFIED EXPENSES				915.32	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-143.12	_____

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

Fertilization decisions should be based on soil tests.

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

Table 17.C Estimated resource use for field operations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.08	
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour							0.30		
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour							0.50		
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour							0.50		
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour							0.20		
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.18	
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.00	
Handling & Storage				1.00	Aug					
HAND LABOR	hour							0.25		
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.13	
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

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

Fertilization decisions should be based on soil tests.

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

Table 17.D Estimated costs for field operations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70			0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12			0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00						0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72						0.24	6.96		6.96
2,4-D Amine 4	pt	5.46						0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99			0.20	7.77	7.83	15.60
Rice Seed Provisia	lb	70.20						1.84	72.04		72.04
Rice Seed Trt/Insect	lbseed	18.85						0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44			0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00						0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48						0.12	4.60		4.60
Command 3ME	pt	16.09						0.42	16.51		16.51
Sharpen	oz	11.32						0.30	11.62		11.62
Class Act NG	pt	1.22						0.03	1.25		1.25
MSO	pt	1.78						0.05	1.83		1.83
Seed Levees											
Rice Seed Provisia	lb	12.96						0.34	13.30		13.30
Rice Seed Trt/Insect	lbseed	3.48						0.09	3.57		3.57
App by Air (5 gal)	appl	7.00						0.18	7.18		7.18
Provisia	oz	12.87						0.34	13.21		13.21
Aim	oz	5.68						0.15	5.83		5.83
Permit	oz	15.92						0.42	16.34		16.34
Crop Oil Conc.(Pet.)	pt	6.00						0.16	6.16		6.16
App Fert by Air	cwt	7.50						0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73						0.19	8.92		8.92
DAP	cwt	11.32						0.25	11.57		11.57
Rice Consultant	acre	8.00						0.18	8.18		8.18
App Fert by Air	cwt	18.75						0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55						1.11	51.66		51.66
NBPT	pt	5.98						0.13	6.11		6.11
App by Air (10 gal)	appl	9.00						0.20	9.20		9.20
Provisia	oz	12.87						0.28	13.15		13.15
Crop Oil Conc.(Pet.)	pt	6.00						0.13	6.13		6.13
Rice Management											
RICE MGT. LABOR	hour				2.72			0.06	2.78		2.78
App by Air (5 gal)	appl	3.50						0.06	3.56		3.56
Regiment	oz	10.67						0.19	10.86		10.86
Dyne-A-Pak	pt	1.36						0.02	1.38		1.38
Rice Management											
RICE MGT. LABOR	hour				4.53			0.08	4.61		4.61
App Fert by Air	cwt	11.25						0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33						0.53	30.86		30.86
Rice Management											
RICE MGT. LABOR	hour				4.53			0.06	4.59		4.59
App by Air (5 gal)	appl	7.00						0.09	7.09		7.09
Stratego	pt	27.82						0.37	28.19		28.19
Surfactant	pt	0.53						0.01	0.54		0.54
App by Air (3 gal)	appl	8.25						0.11	8.36		8.36
Warrior ZT	oz	7.71						0.10	7.81		7.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (CL)	25' Rigid		7.81	10.96	5.87			0.22	24.86	39.27	64.13
Grain Cart Rice	700 bu		0.29	0.19	0.32			0.01	0.81	0.74	1.55
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.48	55.08		55.08
Dry Rice	bu	62.40						0.55	62.95		62.95
Disk Heavy	28'		4.03	3.33	4.37			0.05	11.78	12.51	24.29
Flood Irr.	acre	4.50	64.32	14.59	33.85			2.33	119.59	53.22	172.81
TOTALS			585.98	83.39	34.35	68.52	0.00	15.35	787.59	127.73	915.32

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

Fertilization decisions should be based on soil tests.

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

Table 17.E Estimated monthly income and expense flows per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	772.20	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	66.36	12.87	10.67	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.49	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	1.36	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	16.27	9.52	11.33	11.33	11.88	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	16.24	16.86	16.86	16.86	9.02	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.01	8.06	2.15	2.15	11.44	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.22	3.80	1.53	1.08	1.32	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	243.09	176.94	88.98	82.73	150.66	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-243.09	-176.94	-88.98	-82.73	621.54	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-276.50	-453.44	-542.42	-625.15	-3.61	-15.39

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre
 Provisia contour levee rice
 Flood irrigated, 33 ac-in., Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-439 -566	-419 -547	-400 -528	-381 -508	-361 -489	-342 -470	-323 -450	-303 -431	-284 -412	-265 -392	-245 -373
60	93.60	bu	-392 -520	-369 -497	-346 -474	-323 -451	-300 -427	-277 -404	-253 -381	-230 -358	-207 -335	-184 -312	-161 -288
70	109.20	bu	-346 -474	-319 -447	-292 -420	-265 -393	-238 -366	-211 -339	-184 -312	-157 -285	-130 -258	-103 -231	-76 -204
80	124.80	bu	-300 -428	-269 -397	-238 -366	-208 -335	-177 -304	-146 -273	-115 -243	-84 -212	-53 -181	-22 -150	8 -119
90	140.40	bu	-254 -382	-219 -347	-185 -312	-150 -278	-115 -243	-80 -208	-46 -173	-11 -139	23 -104	58 -69	92 -34
100	156.00	bu	-208 -336	-169 -297	-131 -258	-92 -220	-54 -181	-15 -143	23 -104	61 -65	100 -27	139 11	177 49
110	171.60	bu	-162 -290	-119 -247	-77 -205	-34 -162	7 -120	50 -77	92 -35	134 7	177 49	219 92	262 134
120	187.20	bu	-116 -243	-69 -197	-23 -151	22 -104	69 -58	115 -12	161 34	208 80	254 126	300 173	347 219
130	202.80	bu	-70 -197	-19 -147	30 -97	80 -47	130 2	180 53	231 103	281 153	331 203	381 253	431 304
140	218.40	bu	-23 -151	30 -97	84 -43	138 10	192 64	246 118	300 172	354 226	408 280	462 334	516 388
150	234.00	bu	22 -105	80 -47	137 10	195 68	253 126	311 183	369 241	427 299	485 357	543 415	601 473

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

Table 18.A Estimated costs per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Provisia	oz	0.83	31.0000	25.73	_____
Aim	oz	5.68	1.0000	5.68	_____
Permit	oz	21.22	0.7500	15.92	_____
Regiment	oz	42.66	0.2500	10.67	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.08	77.0000	83.16	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	3.55	0.5000	1.78	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
Dyne-A-Pak	pt	5.45	0.2500	1.36	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4999	7.61	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.5719	12.81	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	21.9949	50.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.39	1.0000	8.39	_____
Tractors	acre	3.38	1.0000	3.38	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.78	1.0000	13.78	_____
INTEREST ON OP. CAP.	acre	14.70	1.0000	14.70	_____
TOTAL DIRECT EXPENSES				750.51	_____
FIXED EXPENSES					
Implements	acre	19.62	1.0000	19.62	_____
Tractors	acre	22.94	1.0000	22.94	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	75.11	1.0000	75.11	_____
TOTAL FIXED EXPENSES				147.46	_____
TOTAL SPECIFIED EXPENSES				897.97	_____

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

Table 18.B Summary of estimated costs and returns per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	156.0000	772.20	_____

TOTAL INCOME				772.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	102.08	1.0000	102.08	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	105.49	1.0000	105.49	_____
ADJUVANTS	acre	16.89	1.0000	16.89	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	15.22	0.6759	10.29	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	30.5114	70.18	_____
REPAIR & MAINTENANCE	acre	32.57	1.0000	32.57	_____
INTEREST ON OP. CAP.	acre	14.70	1.0000	14.70	_____

TOTAL DIRECT EXPENSES				750.51	_____
RETURNS ABOVE DIRECT EXPENSES				21.69	_____
TOTAL FIXED EXPENSES				147.46	_____

TOTAL SPECIFIED EXPENSES				897.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-125.77	_____

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

Table 18.C Estimated resource use for field operations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

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

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

Table 18.D Estimated costs for field operations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.17	3.50	3.50
Field Cultivate Fld	32'		2.49	1.66	2.70			0.36	7.21	9.10
Harrow - Folding	40'		1.03	0.55	1.12			0.14	2.84	2.32
App by Air (5 gal)	appl	7.00						0.25	7.25	7.25
Glyphosate 3lbs a.e	oz	6.72						0.24	6.96	6.96
2,4-D Amine 4	pt	5.46						0.19	5.65	5.65
Grain Drill	24'		2.09	2.49	2.99			0.20	7.77	7.83
Rice Seed Provisia	lb	70.20						1.84	72.04	72.04
Rice Seed Trt/Insect	lbseed	18.85						0.49	19.34	19.34
Roller/Cultipacker	30'		1.33	0.58	1.44			0.09	3.44	2.74
App by Air (5 gal)	appl	7.00						0.18	7.18	7.18
Glyphosate 3lbs a.e	oz	4.48						0.12	4.60	4.60
Command 3ME	pt	16.09						0.42	16.51	16.51
Sharpen	oz	11.32						0.30	11.62	11.62
MSO	pt	1.78						0.05	1.83	1.83
Class Act NG	pt	1.22						0.03	1.25	1.25
Seed Levees										
Rice Seed Provisia	lb	12.96						0.34	13.30	13.30
Rice Seed Trt/Insect	lbseed	3.48						0.09	3.57	3.57
App by Air (5 gal)	appl	7.00						0.18	7.18	7.18
Provisia	oz	12.87						0.34	13.21	13.21
Aim	oz	5.68						0.15	5.83	5.83
Permit	oz	15.92						0.42	16.34	16.34
Crop Oil Conc.(Pet.)	pt	6.00						0.16	6.16	6.16
App Fert by Air	cwt	7.50						0.16	7.66	7.66
Amm Sulfate (21% N)	cwt	8.73						0.19	8.92	8.92
DAP	cwt	11.32						0.25	11.57	11.57
Rice Consultant	acre	8.00						0.18	8.18	8.18
App Fert by Air	cwt	18.75						0.41	19.16	19.16
Urea, Solid (46% N)	cwt	50.55						1.11	51.66	51.66
NBPT	pt	5.98						0.13	6.11	6.11
App by Air (10 gal)	appl	9.00						0.20	9.20	9.20
Provisia	oz	12.87						0.28	13.15	13.15
Crop Oil Conc.(Pet.)	pt	6.00						0.13	6.13	6.13
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	3.50						0.06	3.56	3.56
Regiment	oz	10.67						0.19	10.86	10.86
Dyne-A-Pak	pt	1.36						0.02	1.38	1.38
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	11.25						0.20	11.45	11.45
Urea, Solid (46% N)	cwt	30.33						0.53	30.86	30.86
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air (5 gal)	appl	7.00						0.09	7.09	7.09
Stratego	pt	27.82						0.37	28.19	28.19
Surfactant	pt	0.53						0.01	0.54	0.54
App by Air (3 gal)	appl	8.25						0.11	8.36	8.36
Warrior ZT	oz	7.71						0.10	7.81	7.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09			0.19	21.55	34.03
Grain Cart Rice	700 bu		0.29	0.19	0.32			0.01	0.81	0.74
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.48	55.08	55.08
Dry Rice	bu	62.40						0.55	62.95	62.95
Disk Heavy	28'		4.03	3.33	4.37			0.05	11.78	12.51
Flood Irr.	acre	2.25	52.15	14.27	22.69			1.84	93.20	78.19
TOTALS		583.73	70.18	32.57	49.33	0.00	14.70	750.51	147.46	897.97

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

Fertilization decisions should be based on soil tests.

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

Table 18.E Estimated monthly income and expense flows per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	772.20	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	66.36	12.87	10.67	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.49	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	1.36	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	12.24	5.44	6.34	6.34	10.78	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	15.71	13.12	13.12	13.12	7.56	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.15	7.95	2.04	2.04	9.85	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.05	3.62	1.38	0.96	1.29	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	236.25	168.83	79.99	73.77	146.48	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-236.25	-168.83	-79.99	-73.77	625.72	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-269.66	-438.49	-518.48	-592.25	33.47	21.69

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 18.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee rice
 Flood irrigated, 27 ac-in., Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-401 -549	-382 -530	-363 -510	-344 -491	-324 -472	-305 -452	-286 -433	-266 -414	-247 -394	-228 -375	-208 -356
60	93.60	bu	-355 -503	-332 -480	-309 -456	-286 -433	-263 -410	-239 -387	-216 -364	-193 -341	-170 -317	-147 -294	-124 -271
70	109.20	bu	-309 -457	-282 -430	-255 -403	-228 -376	-201 -349	-174 -322	-147 -294	-120 -267	-93 -240	-66 -213	-39 -186
80	124.80	bu	-263 -411	-232 -380	-201 -349	-170 -318	-140 -287	-109 -256	-78 -225	-47 -194	-16 -163	14 -133	45 -102
90	140.40	bu	-217 -364	-182 -330	-147 -295	-113 -260	-78 -225	-43 -191	-8 -156	25 -121	60 -86	95 -52	130 -17
100	156.00	bu	-171 -318	-132 -280	-94 -241	-55 -202	-16 -164	21 -125	60 -87	98 -48	137 -9	176 28	214 67
110	171.60	bu	-125 -272	-82 -230	-40 -187	2 -145	44 -102	87 -60	129 -17	172 24	214 67	256 109	299 152
120	187.20	bu	-79 -226	-32 -180	13 -133	59 -87	106 -41	152 5	198 51	245 97	291 144	337 190	384 236
130	202.80	bu	-33 -180	17 -130	67 -80	117 -29	167 20	217 70	268 120	318 170	368 221	418 271	468 321
140	218.40	bu	13 -134	67 -80	121 -26	175 27	229 81	283 135	337 189	391 244	445 298	499 352	553 406
150	234.00	bu	59 -88	117 -30	175 27	232 85	290 143	348 201	406 259	464 317	522 375	580 432	638 490

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

Table 19.A Estimated costs per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Provisia	oz	0.83	31.0000	25.73	_____
Aim	oz	5.68	1.0000	5.68	_____
Permit	oz	21.22	0.7500	15.92	_____
Regiment	oz	42.66	0.2500	10.67	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.08	77.0000	83.16	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	3.55	0.5000	1.78	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
Dyne-A-Pak	pt	5.45	0.2500	1.36	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.5281	8.04	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	5.8180	13.38	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	18.7364	43.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.47	1.0000	8.47	_____
Tractors	acre	3.52	1.0000	3.52	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	13.46	1.0000	13.46	_____
INTEREST ON OP. CAP.	acre	14.55	1.0000	14.55	_____
TOTAL DIRECT EXPENSES				740.67	_____
FIXED EXPENSES					
Implements	acre	20.35	1.0000	20.35	_____
Tractors	acre	23.87	1.0000	23.87	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.78	1.0000	74.78	_____
TOTAL FIXED EXPENSES				148.79	_____
TOTAL SPECIFIED EXPENSES				889.46	_____

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

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

Table 19.B Summary of estimated costs and returns per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	156.0000	772.20	_____

TOTAL INCOME				772.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	102.08	1.0000	102.08	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	105.49	1.0000	105.49	_____
ADJUVANTS	acre	16.89	1.0000	16.89	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	15.22	0.7041	10.72	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	27.4990	63.24	_____
REPAIR & MAINTENANCE	acre	32.47	1.0000	32.47	_____
INTEREST ON OP. CAP.	acre	14.55	1.0000	14.55	_____

TOTAL DIRECT EXPENSES				740.67	_____
RETURNS ABOVE DIRECT EXPENSES				31.53	_____
TOTAL FIXED EXPENSES				148.79	_____

TOTAL SPECIFIED EXPENSES				889.46	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-117.26	_____

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

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

Table 19.C Estimated resource use for field operations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

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

Table 19.D Estimated costs for field operations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70			0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12			0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00						0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72						0.24	6.96		6.96
2,4-D Amine 4	pt	5.46						0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99			0.20	7.77	7.83	15.60
Rice Seed Provisia	lb	70.20						1.84	72.04		72.04
Rice Seed Trt/Insect	lbseed	18.85						0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44			0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00						0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48						0.12	4.60		4.60
Command 3ME	pt	16.09						0.42	16.51		16.51
Sharpen	oz	11.32						0.30	11.62		11.62
MSO	pt	1.78						0.05	1.83		1.83
Class Act NG	pt	1.22						0.03	1.25		1.25
Seed Levees											
Rice Seed Provisia	lb	12.96						0.34	13.30		13.30
Rice Seed Trt/Insect	lbseed	3.48						0.09	3.57		3.57
App by Air (5 gal)	appl	7.00						0.18	7.18		7.18
Provisia	oz	12.87						0.34	13.21		13.21
Aim	oz	5.68						0.15	5.83		5.83
Permit	oz	15.92						0.42	16.34		16.34
Crop Oil Conc.(Pet.)	pt	6.00						0.16	6.16		6.16
App Fert by Air	cwt	7.50						0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73						0.19	8.92		8.92
DAP	cwt	11.32						0.25	11.57		11.57
Rice Consultant	acre	8.00						0.18	8.18		8.18
App Fert by Air	cwt	18.75						0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55						1.11	51.66		51.66
NBPT	pt	5.98						0.13	6.11		6.11
App by Air (10 gal)	appl	9.00						0.20	9.20		9.20
Provisia	oz	12.87						0.28	13.15		13.15
Crop Oil Conc.(Pet.)	pt	6.00						0.13	6.13		6.13
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.50						0.06	3.56		3.56
Regiment	oz	10.67						0.19	10.86		10.86
Dyne-A-Pak	pt	1.36						0.02	1.38		1.38
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	11.25						0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33						0.53	30.86		30.86
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air (5 gal)	appl	7.00						0.09	7.09		7.09
Stratego	pt	27.82						0.37	28.19		28.19
Surfactant	pt	0.53						0.01	0.54		0.54
App by Air (3 gal)	appl	8.25						0.11	8.36		8.36
Warrior ZT	oz	7.71						0.10	7.81		7.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09			0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32			0.01	0.81	0.74	1.55
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.48	55.08		55.08
Dry Rice	bu	62.40						0.55	62.95		62.95
Disk Heavy	28'		4.03	3.33	4.37			0.05	11.78	12.51	24.29
Flood Irr.	acre	10.17	45.21	14.17	12.12			1.69	83.36	79.52	162.88
TOTALS		591.65	63.24	32.47	38.76	0.00	14.55	740.67	148.79	889.46	

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

Fertilization decisions should be based on soil tests.

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

Table 19.E Estimated monthly income and expense flows per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	772.20	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	66.36	12.87	10.67	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.49	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	1.36	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	10.08	2.72	3.62	3.62	10.53	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	14.28	11.24	11.24	11.24	7.69	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	5.21	7.88	1.97	1.97	9.90	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	6.17	3.52	1.29	0.89	1.28	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	240.76	164.06	75.23	69.03	146.40	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-240.76	-164.06	-75.23	-69.03	625.80	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-274.17	-438.23	-513.46	-582.49	43.31	31.53

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 19.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-392 -540	-372 -521	-353 -502	-334 -482	-314 -463	-295 -444	-276 -425	-256 -405	-237 -386	-218 -367	-199 -347
60	93.60	bu	-345 -494	-322 -471	-299 -448	-276 -425	-253 -402	-230 -378	-206 -355	-183 -332	-160 -309	-137 -286	-114 -263
70	109.20	bu	-299 -448	-272 -421	-245 -394	-218 -367	-191 -340	-164 -313	-137 -286	-110 -259	-83 -232	-56 -205	-29 -178
80	124.80	bu	-253 -402	-222 -371	-191 -340	-161 -309	-130 -278	-99 -248	-68 -217	-37 -186	-6 -155	24 -124	55 -93
90	140.40	bu	-207 -356	-172 -321	-138 -286	-103 -252	-68 -217	-33 -182	0 -147	35 -113	70 -78	105 -43	139 -8
100	156.00	bu	-161 -310	-122 -271	-84 -233	-45 -194	-7 -155	31 -117	70 -78	108 -40	147 -1	185 37	224 75
110	171.60	bu	-115 -264	-72 -221	-30 -179	12 -136	54 -94	96 -51	139 -9	181 33	224 75	266 118	309 160
120	187.20	bu	-69 -218	-22 -171	23 -125	69 -79	116 -32	162 13	208 59	255 106	301 152	347 198	394 245
130	202.80	bu	-23 -171	27 -121	77 -71	127 -21	177 28	227 78	277 129	328 179	378 229	428 279	478 329
140	218.40	bu	22 -125	76 -71	131 -17	185 36	239 90	293 144	347 198	401 252	455 306	509 360	563 414
150	234.00	bu	69 -79	126 -21	184 36	242 93	300 151	358 209	416 267	474 325	532 383	590 441	648 499

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

Table 20.A Estimated costs per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	4.5000	31.50	_____
App by Air (10 gal)	appl	9.00	1.0000	9.00	_____
App by Air (3 gal)	appl	5.50	1.5000	8.25	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.46	0.5000	8.73	_____
DAP	cwt	22.64	0.5000	11.32	_____
Urea, Solid (46% N)	cwt	20.22	4.0000	80.88	_____
NBPT	pt	7.97	0.7500	5.98	_____
FUNGICIDES					
Stratego	pt	23.43	1.1875	27.82	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.73	2.0000	5.46	_____
Command 3ME	pt	16.09	1.0000	16.09	_____
Sharpen	oz	5.66	2.0000	11.32	_____
Provisia	oz	0.83	31.0000	25.73	_____
Aim	oz	5.68	1.0000	5.68	_____
Permit	oz	21.22	0.7500	15.92	_____
Regiment	oz	42.66	0.2500	10.67	_____
INSECTICIDES					
Warrior ZT	oz	2.57	3.0000	7.71	_____
SEED/PLANTS					
Rice Seed Provisia	lb	1.08	77.0000	83.16	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	3.55	0.5000	1.78	_____
Class Act NG	pt	2.44	0.5000	1.22	_____
Crop Oil Conc. (Pet.)	pt	3.00	4.0000	12.00	_____
Dyne-A-Pak	pt	5.45	0.2500	1.36	_____
Surfactant	pt	5.31	0.1000	0.53	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	5.0000	37.50	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	15.22	0.4228	6.44	_____
Harvesters	hour	15.22	0.1760	2.68	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL					
Tractors	gal	2.30	4.8970	11.26	_____
Harvesters	gal	2.30	2.9444	6.77	_____
Flood Irr.	gal	2.30	15.4779	35.60	_____
REPAIR & MAINTENANCE					
Implements	acre	8.28	1.0000	8.28	_____
Tractors	acre	3.00	1.0000	3.00	_____
Harvesters	acre	7.02	1.0000	7.02	_____
Flood Irr.	acre	11.46	1.0000	11.46	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	_____
TOTAL DIRECT EXPENSES				715.02	_____
FIXED EXPENSES					
Implements	acre	19.08	1.0000	19.08	_____
Tractors	acre	20.40	1.0000	20.40	_____
Harvesters	acre	29.79	1.0000	29.79	_____
Flood Irr.	acre	74.44	1.0000	74.44	_____
TOTAL FIXED EXPENSES				143.71	_____
TOTAL SPECIFIED EXPENSES				858.73	_____

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

Table 20.B Summary of estimated costs and returns per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.95	156.0000	772.20	_____

TOTAL INCOME				772.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.75	1.0000	48.75	_____
FERTILIZERS	acre	106.91	1.0000	106.91	_____
FUNGICIDES	acre	27.82	1.0000	27.82	_____
HERBICIDES	acre	102.08	1.0000	102.08	_____
INSECTICIDES	acre	7.71	1.0000	7.71	_____
SEED/PLANTS	acre	105.49	1.0000	105.49	_____
ADJUVANTS	acre	16.89	1.0000	16.89	_____
CUSTOM FERTILIZE	acre	37.50	1.0000	37.50	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	15.22	0.5988	9.12	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	15.21	0.5389	8.20	_____
DIESEL FUEL	gal	2.30	23.3194	53.63	_____
REPAIR & MAINTENANCE	acre	29.76	1.0000	29.76	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	_____

TOTAL DIRECT EXPENSES				715.02	_____
RETURNS ABOVE DIRECT EXPENSES				57.18	_____
TOTAL FIXED EXPENSES				143.71	_____

TOTAL SPECIFIED EXPENSES				858.73	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-86.53	_____

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

Fertilization decisions should be based on soil tests.

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

Table 20.C Estimated resource use for field operations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Warrior ZT	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

Fertilization decisions should be based on soil tests.

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

Table 20.D Estimated costs for field operations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.17	3.50		3.50
Field Cultivate Fld	32'		2.49	1.66	2.70			0.36	7.21	9.10	16.31
Harrow - Folding	40'		1.03	0.55	1.12			0.14	2.84	2.32	5.16
App by Air (5 gal)	appl	7.00						0.25	7.25		7.25
Glyphosate 3lbs a.e	oz	6.72						0.24	6.96		6.96
2,4-D Amine 4	pt	5.46						0.19	5.65		5.65
Grain Drill	24'		2.09	2.49	2.99			0.20	7.77	7.83	15.60
Rice Seed Provisia	lb	70.20						1.84	72.04		72.04
Rice Seed Trt/Insect	lbseed	18.85						0.49	19.34		19.34
Roller/Cultipacker	30'		1.33	0.58	1.44			0.09	3.44	2.74	6.18
App by Air (5 gal)	appl	7.00						0.18	7.18		7.18
Glyphosate 3lbs a.e	oz	4.48						0.12	4.60		4.60
Command 3ME	pt	16.09						0.42	16.51		16.51
Sharpen	oz	11.32						0.30	11.62		11.62
MSO	pt	1.78						0.05	1.83		1.83
Class Act NG	pt	1.22						0.03	1.25		1.25
Seed Levees											
Rice Seed Provisia	lb	12.96						0.34	13.30		13.30
Rice Seed Trt/Insect	lbseed	3.48						0.09	3.57		3.57
App by Air (5 gal)	appl	7.00						0.18	7.18		7.18
Provisia	oz	12.87						0.34	13.21		13.21
Aim	oz	5.68						0.15	5.83		5.83
Permit	oz	15.92						0.42	16.34		16.34
Crop Oil Conc.(Pet.)	pt	6.00						0.16	6.16		6.16
App Fert by Air	cwt	7.50						0.16	7.66		7.66
Amm Sulfate (21% N)	cwt	8.73						0.19	8.92		8.92
DAP	cwt	11.32						0.25	11.57		11.57
Rice Consultant	acre	8.00						0.18	8.18		8.18
App Fert by Air	cwt	18.75						0.41	19.16		19.16
Urea, Solid (46% N)	cwt	50.55						1.11	51.66		51.66
NBPT	pt	5.98						0.13	6.11		6.11
App by Air (10 gal)	appl	9.00						0.20	9.20		9.20
Provisia	oz	12.87						0.28	13.15		13.15
Crop Oil Conc.(Pet.)	pt	6.00						0.13	6.13		6.13
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.50						0.06	3.56		3.56
Regiment	oz	10.67						0.19	10.86		10.86
Dyne-A-Pak	pt	1.36						0.02	1.38		1.38
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	11.25						0.20	11.45		11.45
Urea, Solid (46% N)	cwt	30.33						0.53	30.86		30.86
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air (5 gal)	appl	7.00						0.09	7.09		7.09
Stratego	pt	27.82						0.37	28.19		28.19
Surfactant	pt	0.53						0.01	0.54		0.54
App by Air (3 gal)	appl	8.25						0.11	8.36		8.36
Warrior ZT	oz	7.71						0.10	7.81		7.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
Header - Draper (SL)	25' Rigid		6.77	9.50	5.09			0.19	21.55	34.03	55.58
Grain Cart Rice	700 bu		0.29	0.19	0.32			0.01	0.81	0.74	1.55
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.48	55.08		55.08
Dry Rice	bu	62.40						0.55	62.95		62.95
Disk Heavy	28'		4.03	3.33	4.37			0.05	11.78	12.51	24.29
Flood Irr.	acre		35.60	11.46	9.53			1.12	57.71	74.44	132.15
TOTALS			581.48	53.63	29.76	36.17	0.00	13.98	715.02	143.71	858.73

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

Fertilization decisions should be based on soil tests.

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

Table 20.E Estimated monthly income and expense flows per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	772.20	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	14.00	9.00	3.50	15.25	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.58	30.33	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.18	0.00	66.36	12.87	10.67	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.71	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.49	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	9.00	6.00	1.36	0.53	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.25	11.25	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.82	0.00	0.00	0.00	0.00	0.00	7.15	3.18	4.08	4.08	9.49	4.37
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.52	0.00	0.00	0.00	0.00	0.00	10.91	9.37	9.37	9.37	7.06	4.03
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	0.00	4.24	7.37	1.46	1.46	9.69	3.33
INTEREST ON OP. CAP.	0.67	0.00	0.00	0.00	0.68	0.00	5.70	3.48	1.26	0.87	1.27	0.05
TOTAL DIRECT EXPENSES	13.55	0.00	0.00	0.00	19.86	0.00	222.85	162.10	73.28	67.09	144.51	11.78
NET INCOME	-13.55	0.00	0.00	0.00	-19.86	0.00	-222.85	-162.10	-73.28	-67.09	627.69	-11.78
NET INCOME TO DATE	-13.55	-13.55	-13.55	-13.55	-33.41	-33.41	-256.26	-418.36	-491.64	-558.73	68.96	57.18

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

Fertilization decisions should be based on soil tests.

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

* Lease costs are based on hourly usage costs.

Table 20.F Estimated returns for various price/yield combinations, per acre
 Provisia straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.71	3.96	4.20	4.45	4.70	4.95	5.19	5.44	5.69	5.94	6.18
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-366 -510	-347 -490	-327 -471	-308 -452	-289 -432	-269 -413	-250 -394	-231 -375	-211 -355	-192 -336	-173 -317
60	93.60	bu	-320 -464	-297 -440	-273 -417	-250 -394	-227 -371	-204 -348	-181 -325	-158 -301	-134 -278	-111 -255	-88 -232
70	109.20	bu	-274 -417	-247 -390	-220 -363	-193 -336	-166 -309	-139 -282	-112 -255	-85 -228	-57 -201	-30 -174	-3 -147
80	124.80	bu	-228 -371	-197 -340	-166 -310	-135 -279	-104 -248	-73 -217	-42 -186	-11 -155	19 -124	49 -93	80 -62
90	140.40	bu	-181 -325	-147 -290	-112 -256	-77 -221	-42 -186	-8 -151	26 -117	61 -82	96 -47	130 -12	165 21
100	156.00	bu	-135 -279	-97 -240	-58 -202	-20 -163	18 -125	57 -86	95 -47	134 -9	173 29	211 67	250 106
110	171.60	bu	-89 -233	-47 -190	-4 -148	37 -106	80 -63	122 -21	165 21	207 63	250 106	292 148	334 191
120	187.20	bu	-43 -187	2 -141	49 -94	95 -48	141 -2	188 44	234 90	280 136	327 183	373 229	419 275
130	202.80	bu	2 -141	52 -91	102 -40	153 9	203 59	253 109	303 159	353 210	404 260	454 310	504 360
140	218.40	bu	48 -95	102 -41	156 12	210 67	264 121	318 175	372 229	426 283	481 337	535 391	589 445
150	234.00	bu	94 -49	152 8	210 66	268 124	326 182	384 240	442 298	500 356	558 414	615 472	673 530

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

APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2019

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (250-299 hp)	265 hp	339,000	300	8	13.64	13.51	35.46	35.31	84.28	151.94	236.23
Combine (300-349 hp)	325 hp	362,000	300	8	16.73	13.51	43.49	37.70	94.71	162.25	256.97
Combine (350-399 hp)	355 hp	391,000	300	8	18.27	13.51	47.50	40.72	101.74	175.25	276.99
Combine (400-449 hp)	425 hp	412,000	300	8	21.87	13.51	56.87	42.91	113.30	184.66	297.97
Combine (450-499hp)	475 hp	434,000	300	8	24.44	13.51	63.56	45.20	122.28	194.52	316.81
Tractor(20-39hp)CB	MFWD 30	25,500	600	8	1.54	13.51	4.01	0.79	18.32	5.29	23.61
Tractor(20-39hp)RB	MFWD 30	20,400	600	8	1.54	13.51	4.01	0.63	18.16	4.23	22.39
Tractor(40-59hp)CB	2WD 50	29,400	600	8	2.57	13.51	6.69	0.91	21.12	6.10	27.22
Tractor(40-59hp)CB	MFWD 50	39,500	600	8	2.57	13.51	6.69	1.23	21.43	8.19	29.63
Tractor(40-59hp)RB	2WD 50	22,900	600	8	2.57	13.51	6.69	0.71	20.91	4.75	25.67
Tractor(40-59hp)RB	MFWD 50	27,800	600	8	2.57	13.51	6.69	0.86	21.07	5.77	26.84
Tractor(60-89hp)CB	2WD 75	52,800	600	8	3.86	13.51	10.03	1.65	25.19	10.95	36.15
Tractor(60-89hp)CB	MFWD 75	62,500	600	8	3.86	13.51	10.03	1.95	25.50	12.97	38.47
Tractor(60-89hp)RB	2WD 75	38,600	600	8	3.86	13.51	10.03	1.20	24.75	8.01	32.76
Tractor(60-89hp)RB	MFWD 75	40,100	600	8	3.86	13.51	10.03	1.25	24.80	8.32	33.12
Tractor(90-119hp)CB	2WD 105	69,200	600	8	5.40	13.51	14.05	2.16	29.72	14.36	44.08
Tractor(90-119hp)CB	MFWD 105	83,000	600	8	5.40	13.51	14.05	2.59	30.15	17.22	47.38
Tractor(90-119hp)RB	2WD 105	61,200	600	8	5.40	13.51	14.05	1.91	29.47	12.70	42.17
Tractor(90-119hp)RB	MFWD 105	67,500	600	8	5.40	13.51	14.05	2.10	29.67	14.01	43.68
Tractor(120-139hp)CB	2WD 130	103,000	600	8	6.69	13.51	17.39	3.21	34.12	21.37	55.50
Tractor(120-139hp)CB	MFWD 130	114,000	600	8	6.69	13.51	17.39	3.56	34.47	23.66	58.13
Tractor(140-159hp)	2WD 150	109,000	600	8	7.72	13.51	20.07	3.40	36.99	22.62	59.61
Tractor(140-159hp)CB	MFWD 150	130,000	600	8	7.72	13.51	20.07	4.06	37.64	26.98	64.63
Tractor(160-179hp)CB	MFWD 170	148,000	600	8	8.75	13.51	22.75	4.62	40.88	31.94	72.83
Tractor(180-199hp)CB	MFWD 190	175,000	600	8	9.77	13.51	25.42	5.46	44.40	37.77	82.17
Tractor(200-249hp)CB	MFWD 225	191,000	600	8	11.58	13.51	30.11	5.96	49.59	41.22	90.81
Tractor(250-349hp)CB	4WD 300	286,000	600	8	15.44	13.51	40.14	8.93	62.59	61.73	124.32
Tractor(250-349hp)CB	MFWD 300	278,000	600	8	15.44	13.51	40.14	8.68	62.34	60.00	122.34
Tractor(250-349hp)CB	Track 300	317,000	600	8	15.44	13.51	40.14	9.90	63.56	68.42	131.98
Tractor(350-449hp)	Track 400	420,000	600	8	20.58	13.51	53.53	13.12	80.16	90.65	170.81
Tractor(350-449hp)CB	4WD 400	328,000	600	8	20.58	13.51	53.53	10.25	77.29	70.79	148.08
Tractor(450-550hp)CB	4WD 500	394,000	600	8	25.73	13.51	66.91	12.31	92.73	85.04	177.77
Tractor(450-550hp)CB	Track 500	444,000	600	8	25.73	13.51	66.91	13.87	94.29	95.83	190.13
Utility Vehicle	800 CC	12,200	200	8	0.70	13.51	1.75	1.90	17.16	8.20	25.36
Utility Vehicle	900 CC	15,800	200	8	1.00	13.51	2.50	2.46	18.47	10.62	29.10

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, 2019

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	5.81	8.62	10.79	25.23	46.44	71.68
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.81	12.07	14.13	32.02	60.83	92.86
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.88	8.07	9.61	21.57	41.35	62.92
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.92	10.36	15.85	31.15	68.23	99.38
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.88	8.18	12.51	24.59	53.86	78.46
Cotton Picker/Module	4R-38 (365)	536,000	200	8	20.58	0.257	5.81	13.79	21.58	41.20	92.89	134.10
Cotton Picker/Module	6R-30 (500)	776,000	200	8	25.73	0.218	4.92	14.60	26.46	45.99	113.86	159.85
Cotton Picker/Module	6R-38 (500)	777,000	200	8	25.73	0.172	3.88	11.52	20.91	36.33	90.01	126.35
Dry Applicator SP	70'300cuft	347,000	350	8	16.98	0.015	0.27	0.66	0.28	1.22	2.01	3.23
Sprayer 600-750gal	60' 175hp	208,000	350	8	9.00	0.017	0.31	0.41	0.19	0.92	1.40	2.33
Sprayer 600-825gal	80' 175hp	210,000	350	8	11.81	0.013	0.23	0.40	0.14	0.79	1.06	1.85
Sprayer 600-825gal	90' 250hp	288,000	350	8	12.73	0.011	0.21	0.38	0.18	0.78	1.30	2.08
Sprayer 800gal	100' 250hp	303,000	350	8	14.15	0.010	0.19	0.38	0.17	0.75	1.23	1.98
Sprayer 800gal	80' 250hp	255,000	350	8	12.86	0.013	0.23	0.44	0.18	0.86	1.29	2.15
Sprayer 1000-1400gal	90' 275hp	289,000	350	8	14.15	0.010	0.19	0.38	0.16	0.74	1.17	1.91
Sprayer 1000gal	100' 300hp	328,000	350	8	15.44	0.010	0.19	0.42	0.18	0.80	1.33	2.13
Sprayer 1200+gal	120' 300hp	332,000	350	8	15.44	0.008	0.15	0.35	0.15	0.66	1.12	1.79

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 3. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost		
			dollars	hours	years	hr/ac	-----\$/acre-----							
Bed-Rip/Disk Fold.	8R-38	MFWD 190	48,700	300	20	0.073	1.11	1.64	0.17	0.43	3.36	0.96	2.93	7.26
Bed-Rip/Disk Fold.	12R-30	MFWD 225	67,900	300	20	0.061	0.93	1.64	0.20	0.43	3.22	1.13	2.97	7.32
Bed-Rip/Disk Fold.	12R-38	MFWD 225	67,900	300	20	0.046	0.70	1.23	0.15	0.32	2.41	0.84	2.23	5.49
Bed-Rip/Disk Rigid	4R-30	MFWD 190	21,400	300	20	0.184	2.81	4.15	0.19	1.09	8.26	1.06	7.42	16.76
Bed-Rip/Disk Rigid	4R-38	MFWD 190	21,400	300	20	0.146	2.23	3.30	0.15	0.86	6.55	0.84	5.89	13.30
Bed-Rip/Disk Rigid	6R-30	MFWD 190	29,800	300	20	0.123	1.87	2.77	0.18	0.72	5.55	0.99	4.95	11.50
Bed-Rip/Disk Rigid	6R-38	MFWD 190	39,800	300	20	0.097	1.48	2.18	0.19	0.57	4.43	1.04	3.91	9.39
Bed-Rip/Disk Rigid	8R-30	MFWD 190	39,800	300	20	0.139	2.11	3.12	0.27	0.82	6.33	1.49	5.58	13.42
Bed-Rip/Disk Rigid	8R-38	MFWD 190	29,800	300	20	0.073	1.11	1.64	0.10	0.43	3.29	0.58	2.93	6.82
Bed-Subsoil Fold	8R-38	MFWD 225	48,700	150	12	0.080	1.22	2.15	1.42	0.57	5.37	2.71	3.89	11.98
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	67,900	150	12	0.053	0.81	1.43	1.31	0.38	3.95	2.51	2.59	9.06
Bed-Subsoil Fold	12R-38	MFWD 225	67,900	150	12	0.053	0.81	1.43	1.31	0.38	3.95	2.51	2.59	9.06
Bed-Subsoil Rigid	4R-30	MFWD 225	21,400	150	12	0.204	3.10	5.44	1.57	1.44	11.58	3.01	9.86	24.45
Bed-Subsoil Rigid	4R-38	MFWD 225	21,400	150	12	0.160	2.44	4.28	1.24	1.14	9.11	2.37	7.76	19.25
Bed-Subsoil Rigid	6R-30	MFWD 225	29,800	150	12	0.136	2.07	3.62	1.46	0.96	8.13	2.79	6.57	17.50
Bed-Subsoil Rigid	6R-38	MFWD 225	29,800	150	12	0.107	1.63	2.86	1.15	0.76	6.42	2.20	5.19	13.82
Bed-Subsoil Rigid	8R-30	MFWD 225	39,800	150	12	0.102	1.55	2.72	1.46	0.72	6.46	2.80	4.93	14.20
Bed-Subsoil Rigid	8R-38	MFWD 225	39,800	150	12	0.080	1.22	2.15	1.16	0.57	5.11	2.21	3.89	11.22
Bed/Disk (Hipper)	4R-38	MFWD 150	9,200	160	10	0.147	2.24	2.62	0.33	0.64	5.85	0.97	4.22	11.05
Bed/Disk (Hipper)	6R-38	MFWD 170	15,200	160	10	0.098	1.50	1.98	0.37	0.47	4.34	1.07	3.25	8.67
Bed/Disk (Hipper)	8R-30	MFWD 190	19,500	160	10	0.093	1.42	2.10	0.45	0.55	4.54	1.31	3.76	9.62
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	37,400	160	10	0.049	0.75	1.10	0.46	0.29	2.61	1.32	1.98	5.92
Bed/Disk (Hipper)	12R-30	MFWD 225	34,500	160	10	0.062	0.95	1.66	0.53	0.44	3.59	1.54	3.01	8.16
Bed/Disk (Hipper)	12R-38	MFWD 225	37,400	160	10	0.049	0.75	1.31	0.46	0.35	2.87	1.32	2.38	6.58
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	27,200	160	10	0.074	1.12	1.66	0.50	0.43	3.73	1.44	2.97	8.16
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	21,000	160	10	0.074	1.12	1.66	0.38	0.43	3.62	1.11	2.97	7.71
Bed/Lister-Roll-Fo	8R-38	MFWD 190	24,300	160	10	0.095	1.45	2.15	0.58	0.56	4.76	1.67	3.85	10.29
Bed/Lister-Roll-Fo	12R-30	MFWD 225	36,175	160	10	0.080	1.23	2.15	0.73	0.57	4.69	2.10	3.90	10.69
Bed/Lister-Roll-Fo	12R-38	MFWD 225	35,700	160	10	0.063	0.97	1.70	0.56	0.45	3.69	1.63	3.08	8.41
Bed/Lister-Roll-Fo	16R-30	MFWD 225	40,400	160	10	0.060	0.92	1.61	0.61	0.43	3.58	1.76	2.92	8.27
Bed/Lister-Roll-Ri	8R-38	MFWD 190	24,300	160	10	0.095	1.45	2.15	0.58	0.56	4.76	1.67	3.85	10.29
Blade-Box	6'-7'	MFWD 105	1,620	200	20	0.020	0.30	0.24	0.01	0.04	0.61	0.01	0.28	0.91
Blade-Box	8'-10'	MFWD 105	3,830	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'-7'	MFWD 105	1,330	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	8'-10'	MFWD 105	4,100	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-38(250)	MFWD 190	30,500	200	10	0.257	3.92	5.79	1.96	1.52	13.20	4.37	10.36	27.94
Boll Buggy	4R-38(350)	MFWD 190	30,500	200	10	0.257	3.92	5.79	1.96	1.52	13.20	4.37	10.36	27.94
Boll Buggy	4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.62	3.87	1.31	1.01	8.82	2.92	6.92	18.67
Boll Buggy	6R-30(355)	MFWD 190	30,500	200	10	0.218	3.32	4.90	1.66	1.28	11.18	3.70	8.77	23.65
Boll Buggy	6R-38(355)	MFWD 190	30,500	200	10	0.172	2.62	3.87	1.31	1.01	8.82	2.92	6.92	18.67
Chisel Plow-Folding	24'	MFWD 190	42,200	150	12	0.076	1.16	1.71	1.16	0.45	4.49	2.22	3.07	9.79
Chisel Plow-Folding	32'	MFWD 225	54,200	150	12	0.057	0.87	1.53	1.13	0.40	3.95	2.15	2.78	8.90
Chisel Plow-Folding	42'	MFWD 225	65,100	150	12	0.044	0.66	1.17	1.03	0.31	3.18	1.97	2.12	7.28
Chisel Plow-Folding	50'	MFWD 225	85,200	150	10	0.036	0.56	0.98	1.36	0.26	3.17	2.41	1.78	7.37
Chisel Plow-Folding	61'	MFWD 225	97,700	150	12	0.030	0.46	0.80	1.06	0.21	2.55	2.04	1.46	6.05
Chisel Plow-Rigid	10'	MFWD 170	7,790	150	12	0.184	2.81	3.72	0.52	0.89	7.94	0.99	6.09	15.03
Chisel Plow-Rigid	15'	2WD 130	14,700	150	12	0.123	1.87	1.89	0.65	0.42	4.85	1.24	2.76	8.86
Chisel Plow-Rigid	20'	MFWD 225	12,000	150	12	0.102	1.56	2.73	0.44	0.72	5.47	0.84	4.95	11.28
Cultivate	4R-30	2WD 105	14,600	150	10	0.206	3.13	2.56	0.80	0.44	6.95	2.30	2.92	12.18
Cultivate	4R-38	2WD 105	14,200	150	10	0.162	2.47	2.01	0.61	0.31	5.42	1.76	2.06	9.25
Cultivate	6R-30	MFWD 150	18,500	150	10	0.137	2.09	2.44	0.67	0.60	5.81	1.94	3.93	11.69
Cultivate	6R-38	MFWD 150	19,300	150	10	0.108	1.65	1.92	0.55	0.47	4.61	1.60	3.10	9.32
Cultivate	8R-30	MFWD 190	24,200	150	10	0.103	1.56	2.31	0.66	0.60	5.16	1.91	4.14	11.22
Cultivate	8R-38	MFWD 190	27,300	150	10	0.073	1.12	1.65	0.53	0.43	3.74	1.54	2.96	8.25
Cultivate	8R-38 2x1	MFWD 190	39,300	150	10	0.054	0.82	1.22	0.56	0.32	2.93	1.63	2.18	6.75
Cultivate	12R-30	MFWD 225	45,600	150	10	0.068	1.04	1.83	0.83	0.48	4.20	2.40	3.31	9.92
Cultivate	12R-38	MFWD 225	44,600	150	10	0.054	0.82	1.44	0.64	0.38	3.30	1.85	2.62	7.77
Cultivate	16R-30	MFWD 225	58,400	150	10	0.051	0.78	1.37	0.80	0.36	3.32	2.30	2.48	8.12
Cultivate & Post	4R-30	2WD 105	21,900	150	10	0.220	4.34	2.73	1.28	0.42	8.79	3.69	2.80	15.28
Cultivate & Post	4R-38	2WD 105	21,600	150	10	0.173	3.42	2.15	0.99	0.33	6.90	2.86	2.20	11.98
Cultivate & Post	6R-30	MFWD 150	25,900	150	10	0.146	2.89	2.60	1.01	0.64	7.15	2.91	4.19	14.26
Cultivate & Post	6R-38	MFWD 150	26,600	150	10	0.115	2.28	2.05	0.82	0.50	5.67	2.36	3.31	11.34
Cultivate & Post	8R-30	MFWD 190	31,500	150	10	0.110	2.17	2.47	0.92	0.64	6.22	2.65	4.42	13.29
Cultivate & Post	8R-38	MFWD 190	34,700	150	10	0.086	1.71	1.95	0.80	0.51	4.99	2.31	3.49	10.79
Cultivate & Post	8R-38 2x1	MFWD 190	47,900	150	10	0.057	1.14	1.30	0.73	0.34	3.52	2.12	2.32	7.97
Cultivate & Post	12R-30	MFWD 225	52,900	150	10	0.073	1.44	1.95	1.03	0.52	4.95	2.97	3.53	11.46
Cultivate & Post	12R-38	MFWD 225	53,200	150	10	0.057	1.14	1.54	0.82	0.41	3.91	2.36	2.79	9.07
Cultivate & Post	16R-30	MFWD 225	61,700	150	10	0.055	1.08	1.46	0.90	0.39	3.84	2.60	2.65	9.10
Disk & Incorporate	14'	2WD 130	33,200	200	10	0.149	2.95	2.30	1.49	0.51	7.26	2.85	3.36	13.48
Disk & Incorporate	20'	MFWD 190	75,700	180	10	0.092	1.40	2.07	2.33	0.54	6.36	4.47	3.71	14.55
Disk & Incorporate	24'	MFWD 190	51,800	200	10	0.087	1.72	1.96	1.35	0.51	5.56	2.59	3.50	11.66
Disk & Incorporate	28'	MFWD 225	61,200	200	10	0.074	1.47	1.99	1.37	0.53	5.37	2.63	3.61	11.62
Disk & Incorporate	32'	MFWD 225	66,900	200	10	0.065	1.29	1.74	1.31	0.46	4.81	2.51	3.16	10.49
Disk Harrow	14'	2WD 130	25,900	180	10	0.140	2.13	2.15	1.00	0.48	5.78	2.32	3.15	11.26
Disk Harrow	20'	MFWD 190	68,400	180	10	0.098	1.49	2.20	1.86	0.58	6.14	4.29	3.94	14.38
Disk Harrow	24'	MFWD 190	44,400	180	10	0.081	1.24	1.84	1.00	0.48	4.57	2.32	3.28	10.19
Disk Harrow	28'	MFWD 225	53,800	180	10	0.070	1.06	1.86	1.04	0.49	4.48	2.41	3.38	10.27
Disk Harrow	32'	MFWD 225	59,500	180	10	0.061	0.93	1.63	1.01	0.43	4.01	2.33	2.96	9.31

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Disk Harrow	42'	MFWD 225	98,700	180	10	0.046	0.71	1.24	1.28	0.33	3.57	2.94	2.25	8.77
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.13	1.24	0.65	0.15	4.18	1.49	1.02	6.71
Disk Heavy	14'	MFWD 150	25,900	180	10	0.145	2.22	2.59	1.05	0.63	6.50	2.41	4.17	13.09
Disk Heavy	20'	MFWD 190	68,400	180	10	0.097	1.48	2.18	1.84	0.57	6.09	4.25	3.91	14.25
Disk Heavy	28'	MFWD 225	53,800	180	10	0.075	1.15	2.01	1.13	0.53	4.83	2.60	3.65	11.08
Disk Ripper	15'	MFWD 225	49,200	180	10	0.136	2.07	3.62	1.86	0.96	8.52	4.28	6.57	19.38
Ditcher		2WD 130	6,100	200	10	0.020	0.30	0.30	0.04	0.06	0.72	0.07	0.44	1.24
Ditcher (1m/160a)		2WD 130	6,100	200	10	0.009	0.14	0.14	0.02	0.03	0.34	0.03	0.21	0.58
Fert Appl (Liquid)	4R-38	MFWD 150	12,900	150	8	0.154	3.05	2.74	1.33	0.67	7.80	1.63	4.42	13.86
Fert Appl (Liquid)	6R-30	MFWD 170	18,500	150	8	0.130	2.58	2.63	1.61	0.63	7.47	1.97	4.31	13.76
Fert Appl (Liquid)	6R-38	MFWD 170	18,500	150	8	0.103	2.04	2.08	1.27	0.50	5.89	1.56	3.40	10.86
Fert Appl (Liquid)	8R-30	MFWD 190	18,400	150	8	0.098	1.93	2.20	1.20	0.58	5.93	1.47	3.94	11.35
Fert Appl (Liquid)	8R-38	MFWD 190	19,000	150	8	0.077	1.53	1.74	0.98	0.45	4.72	1.20	3.12	9.04
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	21,600	150	8	0.051	1.02	1.16	0.74	0.30	3.23	0.91	2.07	6.22
Fert Appl (Liquid)	12R-30	MFWD 225	23,100	150	8	0.078	1.55	2.09	1.20	0.55	5.41	1.48	3.79	10.68
Fert Appl (Liquid)	12R-38	MFWD 225	21,600	150	8	0.051	1.02	1.37	0.74	0.36	3.50	0.91	2.49	6.91
Field Cult & Inc	42'	MFWD 225	67,100	100	10	0.037	0.74	1.00	0.63	0.26	2.65	2.91	1.82	7.39
Field Cult & Inc	50'	MFWD 225	81,500	100	10	0.031	0.62	0.84	0.64	0.22	2.34	2.97	1.53	6.84
Field Cult & Inc Fld	24'	MFWD 170	37,900	100	10	0.066	1.30	1.33	0.62	0.32	3.58	2.88	2.17	8.64
Field Cult & Inc Fld	32'	MFWD 190	51,500	100	10	0.049	0.97	1.11	0.63	0.29	3.02	2.93	1.99	7.95
Field Cult & Inc Rdg	12'	2WD 150	19,600	100	10	0.132	2.61	2.34	0.64	0.44	6.05	2.97	2.91	11.94
Field Cultivate Fld	24'	MFWD 170	30,600	100	10	0.062	0.94	1.25	0.47	0.30	2.97	2.18	2.05	7.21
Field Cultivate Fld	32'	MFWD 190	42,900	100	10	0.046	0.71	1.04	0.50	0.27	2.53	2.30	1.87	6.71
Field Cultivate Fld	42'	MFWD 225	58,400	100	10	0.035	0.54	0.94	0.51	0.25	2.25	2.38	1.71	6.36
Field Cultivate Fld	50'	MFWD 225	67,800	100	10	0.029	0.45	0.79	0.50	0.21	1.96	2.32	1.44	5.73
Field Cultivate Rdg	12'	2WD 150	12,300	100	10	0.124	1.89	2.20	0.38	0.41	4.90	1.75	2.74	9.41
Grain Cart Corn	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.56	0.17	0.14	1.27	0.33	1.01	2.63
Grain Cart Corn	700 bu	MFWD 190	37,300	200	12	0.025	0.38	0.56	0.25	0.14	1.35	0.48	1.01	2.86
Grain Cart Corn	1000 bu	MFWD 225	54,700	200	12	0.025	0.38	0.67	0.37	0.17	1.61	0.71	1.22	3.54
Grain Cart Rice	500 bu	MFWD 190	25,700	200	12	0.062	0.95	1.40	0.43	0.36	3.16	0.83	2.51	6.50
Grain Cart Rice	700 bu	MFWD 190	37,300	200	12	0.055	0.83	1.23	0.55	0.32	2.95	1.06	2.21	6.22
Grain Cart Rice	1000 bu	MFWD 190	54,700	200	12	0.045	0.69	1.03	0.67	0.27	2.67	1.29	1.84	5.81
Grain Cart Soybean	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.57	0.17	0.15	1.28	0.33	1.02	2.65
Grain Cart Soybean	700 bu	MFWD 190	37,300	200	12	0.021	0.32	0.47	0.21	0.12	1.14	0.40	0.85	2.40
Grain Cart Soybean	1000 bu	MFWD 190	54,700	200	12	0.021	0.32	0.47	0.31	0.12	1.24	0.60	0.85	2.69
Grain Cart Wht/Sor	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.57	0.17	0.15	1.28	0.33	1.02	2.65
Grain Cart Wht/Sor	700 bu	MFWD 190	37,300	200	12	0.021	0.32	0.47	0.21	0.12	1.14	0.40	0.85	2.40
Grain Cart Wht/Sor	1000 bu	MFWD 190	54,700	200	12	0.021	0.32	0.47	0.31	0.12	1.24	0.60	0.85	2.69
Grain Drill	10'	2WD 130	28,000	150	8	0.188	4.57	2.90	1.97	0.64	10.10	4.13	4.23	18.48
Grain Drill	12'	2WD 130	27,500	150	8	0.157	3.81	2.41	1.62	0.54	8.39	3.38	3.53	15.31
Grain Drill	15'	MFWD 150	33,100	150	8	0.125	3.05	2.23	1.56	0.54	7.39	3.26	3.59	14.25
Grain Drill	20'	MFWD 170	39,400	150	8	0.094	2.28	1.89	1.39	0.45	6.03	2.91	3.10	12.05
Grain Drill	24'	MFWD 190	65,600	150	8	0.078	1.90	1.76	1.93	0.46	6.07	4.03	3.15	13.26
Grain Drill	30'	MFWD 225	63,800	150	8	0.062	1.52	1.67	1.50	0.44	5.15	3.14	3.03	11.32
Grain Drill	35'	MFWD 225	91,000	150	8	0.053	1.30	1.43	1.83	0.38	4.96	3.84	2.60	11.40
Grain Drill & Pre	10'	2WD 130	35,400	150	8	0.203	4.93	3.12	2.69	0.69	11.45	5.63	4.56	21.64
Grain Drill & Pre	12'	2WD 130	34,800	150	8	0.169	4.10	2.60	2.20	0.58	9.50	4.61	3.80	17.92
Grain Drill & Pre	15'	MFWD 150	40,400	150	8	0.135	3.28	2.40	2.05	0.59	8.33	4.28	3.87	16.49
Grain Drill & Pre	20'	MFWD 170	46,700	150	8	0.101	2.46	2.04	1.77	0.49	6.77	3.71	3.34	13.84
Grain Drill & Pre	24'	MFWD 190	73,000	150	8	0.084	2.05	1.90	2.31	0.49	6.77	4.84	3.40	15.01
Grain Drill & Pre	30'	MFWD 225	71,200	150	8	0.067	1.64	1.80	1.80	0.48	5.73	3.77	3.26	12.77
Grain Drill & Pre	35'	MFWD 225	98,300	150	8	0.058	1.40	1.54	2.13	0.41	5.50	4.47	2.80	12.77
Grain Drill & Pre T	8R-38	MFWD 225	51,900	150	8	0.062	1.52	1.67	1.22	0.44	4.86	2.55	3.03	10.46
Harrow - Folding	24'	MFWD 190	13,700	200	10	0.064	0.98	1.45	0.31	0.38	3.13	0.50	2.60	6.24
Harrow - Folding	30'	MFWD 190	14,800	200	10	0.051	0.78	1.16	0.26	0.30	2.52	0.44	2.08	5.04
Harrow - Folding	40'	MFWD 190	20,200	200	10	0.038	0.59	0.87	0.27	0.22	1.96	0.45	1.56	3.97
Harrow - Folding	48'	MFWD 225	24,900	200	10	0.032	0.49	0.86	0.28	0.22	1.86	0.46	1.56	3.89
Header - Corn	6R-30	265 hp	50,800	300	8	0.170	2.59	5.34	2.16	6.24	16.33	3.53	26.49	46.36
Header - Corn	6R-38	265 hp	51,400	300	8	0.134	2.04	4.21	1.72	4.92	12.91	2.82	20.91	36.65
Header - Corn	8R-30	265 hp	62,000	300	8	0.127	1.94	4.00	1.97	4.68	12.61	3.23	19.86	35.71
Header - Corn	8R-38	325 hp	67,000	300	8	0.100	1.53	3.88	1.69	4.02	11.14	2.76	17.09	30.99
Header - Corn	12R-20	325 hp	102,000	300	8	0.127	1.94	4.91	3.25	5.09	15.20	5.32	21.61	42.15
Header - Corn	12R-30	325 hp	103,000	300	8	0.085	1.29	3.27	2.19	3.39	10.16	3.58	14.41	28.15
Header - Draper (CL)	25' Rigid	265 hp	61,400	300	8	0.203	3.09	6.37	2.85	7.44	19.76	4.88	31.59	56.24
Header - Draper (CL)	30' Rigid	325 hp	71,500	300	8	0.169	2.57	6.51	2.77	6.75	18.61	4.74	28.64	52.00
Header - Draper (CL)	36' Rigid	355 hp	75,800	300	8	0.141	2.14	5.92	2.44	5.80	16.32	4.18	24.62	45.13
Header - Draper (CL)	40' Rigid	425 hp	80,300	300	8	0.126	1.93	6.38	2.33	5.61	16.27	3.99	23.84	44.10
Header - Draper (SL)	25' Rigid	325 hp	61,400	300	8	0.176	2.67	6.77	2.47	7.02	18.94	4.23	29.79	52.97
Header - Draper (SL)	30' Rigid	325 hp	71,500	300	8	0.146	2.23	5.64	2.40	5.85	16.13	4.10	24.82	45.06
Header - Draper (SL)	36' Rigid	355 hp	75,800	300	8	0.122	1.86	5.13	2.12	5.02	14.14	3.63	21.33	39.11
Header - Drapper	40' Rigid	425 hp	80,300	300	8	0.110	1.67	5.53	2.02	4.86	14.10	3.46	20.66	38.22
Header -RiceStrp(CL)	20'	265 hp	50,000	300	8	0.253	3.86	7.96	3.17	9.30	24.30	5.18	39.49	68.98
Header -RiceStrp(CL)	24'	325 hp	55,400	300	8	0.211	3.21	8.13	2.92	8.43	22.72	4.78	35.80	63.32
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.41	6.10	2.41	6.32	17.26	3.94	26.85	48.05
Header -RiceStrp(SL)	20'	265 hp	50,000	300	8	0.220	3.34	6.90	2.75	8.06	21.06	4.49	34.22	59.78
Header -RiceStrp(SL)	24'	325 hp	55,400	300	8	0.183	2.79	7.05	2.53	7.31	19.69	4.14	31.03	54.88
Header -RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	2.09	5.29	2.09	5.48	14.95	3.41	23.27	41.65

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---	Total Direct	---Fixed---	Total Cost
			dollars	hours	years	hr/acre				\$/acre		
Header -Soybean	22' Flex	265 hp	33,500	300	8	0.116	1.76	3.64	0.97	4.25	10.63	1.58 18.06 30.29
Header -Soybean	25' Flex	325 hp	35,900	300	8	0.102	1.55	3.93	0.91	4.07	10.47	1.49 17.29 29.27
Header -Soybean	30' Flex	325 hp	42,400	300	8	0.085	1.29	3.27	0.90	3.39	8.87	1.47 14.41 24.75
Header -Soybean	35' Flex	355 hp	48,700	300	8	0.072	1.11	3.06	0.88	3.00	8.06	1.45 12.74 22.26
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.76	3.64	0.57	4.25	10.24	0.93 18.06 29.24
Header Wheat/Sorghum	25' Rigid	325 hp	21,000	300	8	0.102	1.55	3.93	0.53	4.07	10.09	0.87 17.29 28.27
Header Wheat/Sorghum	30' Rigid	325 hp	25,700	300	8	0.085	1.29	3.27	0.54	3.39	8.51	0.89 14.41 23.82
Land Plane	50'x16'	MFWD 190	10,800	200	10	0.151	2.30	3.41	0.32	0.89	6.94	0.94 6.09 13.97
Levee Pull & Seed	8 Blade	MFWD 170	9,000	100	10	0.003	0.05	0.07	0.00	0.01	0.14	0.03 0.11 0.30
Levee Pull (1m/80a)	8 blade	MFWD 170	8,160	100	10	0.003	0.05	0.07	0.00	0.01	0.14	0.03 0.11 0.30
Levee Splitter (1/80)	32"	MFWD 150	8,160	100	10	0.004	0.06	0.07	0.00	0.01	0.16	0.03 0.11 0.32
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	6.25	5.79	2.23	1.52	15.81	4.97 10.36 31.15
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	6.25	5.79	2.23	1.52	15.81	4.97 10.36 31.15
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	4.18	3.87	1.49	1.01	10.57	3.32 6.92 20.82
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	5.29	4.90	1.89	1.28	13.39	4.21 8.77 26.37
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	4.18	3.87	1.49	1.01	10.57	3.32 6.92 20.82
NT Grain Drill	10'	2WD 130	34,100	150	8	0.235	5.72	3.62	3.01	0.81	13.17	6.30 5.29 24.77
NT Grain Drill	12'	2WD 130	46,100	150	8	0.163	3.97	2.51	2.82	0.56	9.88	5.91 3.67 19.47
NT Grain Drill	15'	MFWD 150	55,500	150	8	0.130	3.17	2.32	2.72	0.57	8.80	5.69 3.74 18.24
NT Grain Drill	20'	MFWD 170	65,100	150	8	0.098	2.38	1.97	2.39	0.47	7.23	5.01 3.23 15.48
NT Grain Drill	24'	MFWD 190	90,400	150	8	0.081	1.98	1.84	2.77	0.48	7.08	5.79 3.28 16.17
NT Grain Drill	30'	MFWD 225	103,000	150	8	0.065	1.58	1.74	2.52	0.46	6.32	5.28 3.16 14.77
NT Grain Drill & Pre	10'	2WD 130	41,500	150	8	0.211	5.13	3.25	3.29	0.72	12.41	6.88 4.75 24.04
NT Grain Drill & Pre	12'	2WD 130	5,340	150	8	0.176	4.28	2.71	0.35	0.60	7.95	0.73 3.96 12.65
NT Grain Drill & Pre	15'	MFWD 150	62,900	150	8	0.141	3.42	2.50	3.32	0.61	9.87	6.95 4.03 20.85
NT Grain Drill & Pre	20'	MFWD 170	72,500	150	8	0.105	2.56	2.12	2.87	0.51	8.08	6.01 3.48 17.58
NT Grain Drill & Pre	24'	MFWD 190	97,800	150	8	0.088	2.14	1.98	3.23	0.52	7.87	6.75 3.54 18.17
NT Grain Drill & Pre	30'	MFWD 225	110,700	150	8	0.070	1.71	1.87	2.92	0.50	7.01	6.11 3.40 16.53
NT Plant&Pre-Folding	8R-38	MFWD 170	67,100	150	8	0.083	2.03	1.68	2.10	0.40	6.22	4.39 2.75 13.37
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	99,600	150	8	0.055	1.35	1.12	2.07	0.26	4.82	4.34 1.83 11.00
NT Plant&Pre-Folding	12R-20	MFWD 190	83,300	150	8	0.105	2.56	2.37	3.30	0.62	8.87	6.90 4.25 20.03
NT Plant&Pre-Folding	12R-30	MFWD 190	89,600	150	8	0.070	1.71	1.58	2.36	0.41	6.08	4.95 2.83 13.86
NT Plant&Pre-Folding	12R-38	MFWD 190	996,000	150	8	0.055	1.35	1.25	20.79	0.32	23.72	43.46 2.23 69.42
NT Plant&Pre-Folding	16R-30	MFWD 190	129,000	150	8	0.052	1.28	1.18	2.55	0.31	5.34	5.34 2.12 12.81
NT Plant&Pre-Folding	23R-15	MFWD 190	163,000	150	8	0.073	1.78	1.65	4.48	0.43	8.35	9.38 2.95 20.69
NT Plant&Pre-Folding	24R-20	MFWD 190	182,000	150	8	0.052	1.28	1.18	3.60	0.31	6.39	7.54 2.12 16.06
NT Plant&Pre-Folding	24R-30	MFWD 190	208,000	150	8	0.035	0.85	0.79	2.75	0.20	4.60	5.74 1.41 11.77
NT Plant&Pre-Folding	31R-15	MFWD 225	194,000	150	8	0.054	1.32	1.45	3.97	0.38	7.14	8.31 2.63 18.09
NT Plant&Pre-Folding	32R-15	MFWD 225	210,000	150	8	0.052	1.28	1.40	4.16	0.37	7.23	8.70 2.55 18.48
NT Plant&Pre-Rigid	4R-30	2WD 130	34,600	150	8	0.211	5.13	3.25	2.74	0.72	11.86	5.73 4.75 22.35
NT Plant&Pre-Rigid	4R-38	2WD 130	35,600	150	8	0.166	4.04	2.56	2.22	0.57	9.40	4.64 3.74 17.79
NT Plant&Pre-Rigid	6R-30	MFWD 150	43,700	150	8	0.141	3.42	2.50	2.31	0.61	8.85	4.83 4.03 17.72
NT Plant&Pre-Rigid	6R-38	MFWD 150	42,900	150	8	0.111	2.70	1.97	1.79	0.48	6.95	3.74 3.18 13.88
NT Plant&Pre-Rigid	8R-30	MFWD 170	54,300	150	8	0.105	2.56	2.12	2.15	0.51	7.36	4.50 3.48 15.35
NT Plant&Pre-Rigid	8R-38	MFWD 170	51,700	150	8	0.083	2.03	1.68	1.62	0.40	5.73	3.38 2.75 11.88
NT Plant&Pre-Rigid	11R-15	MFWD 170	63,600	150	8	0.143	3.49	2.89	3.43	0.69	10.51	7.17 4.74 22.43
NT Plant&Pre-Rigid	11R-20	MFWD 170	62,900	150	8	0.115	2.80	2.32	2.72	0.55	8.41	5.69 3.80 17.92
NT Plant&Pre-Rigid	12R-20	MFWD 190	65,900	150	8	0.105	2.56	2.37	2.61	0.62	8.18	5.46 4.25 17.90
NT Plant&Pre-Rigid	12R-30	MFWD 190	79,300	150	8	0.070	1.71	1.58	2.09	0.41	5.81	4.38 2.83 13.02
NT Plant&Pre-Rigid	15R-15	MFWD 190	80,900	150	8	0.113	2.74	2.54	3.43	0.66	9.39	7.17 4.54 21.11
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	154,000	150	8	0.055	1.35	1.48	3.21	0.39	6.44	6.71 2.68 15.85
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	123,000	150	8	0.083	2.03	2.22	3.85	0.59	8.70	8.06 4.03 20.80
NT Plant-Folding	8R-38	MFWD 170	59,700	150	8	0.077	1.88	1.56	1.73	0.37	5.56	3.63 2.55 11.75
NT Plant-Folding	8R-38 2x1	MFWD 170	91,000	150	8	0.051	1.25	1.04	1.76	0.25	4.30	3.68 1.70 9.70
NT Plant-Folding	12R-20	MFWD 190	75,900	150	8	0.098	2.38	2.20	2.79	0.58	7.96	5.84 3.94 17.75
NT Plant-Folding	12R-30	MFWD 190	81,000	150	8	0.065	1.58	1.47	1.98	0.38	5.43	4.15 2.63 12.22
NT Plant-Folding	12R-38	MFWD 190	91,000	150	8	0.051	1.25	1.16	1.76	0.30	4.48	3.68 2.07 10.25
NT Plant-Folding	16R-30	MFWD 190	120,000	150	8	0.049	1.19	1.10	2.20	0.29	4.79	4.61 1.97 11.38
NT Plant-Folding	23R-15	MFWD 190	155,000	150	8	0.068	1.65	1.53	3.96	0.40	7.55	8.28 2.74 18.58
NT Plant-Folding	24R-20	MFWD 190	174,000	150	8	0.049	1.19	1.10	3.20	0.29	5.79	6.69 1.97 14.46
NT Plant-Folding	24R-30	MFWD 190	194,000	150	8	0.032	0.79	0.73	2.38	0.19	4.10	4.97 1.31 10.40
NT Plant-Folding	31R-15	MFWD 225	185,000	150	8	0.050	1.23	1.35	3.52	0.36	6.46	7.36 2.45 16.27
NT Plant-Folding	32R-15	MFWD 225	201,000	150	8	0.049	1.19	1.30	3.70	0.34	6.55	7.73 2.37 16.65
NT Plant-Rigid	4R-30	2WD 130	27,200	150	8	0.196	4.76	3.02	2.00	0.67	10.47	4.18 4.41 19.07
NT Plant-Rigid	4R-38	2WD 130	28,200	150	8	0.154	3.75	2.38	1.63	0.53	8.30	3.41 3.47 15.19
NT Plant-Rigid	6R-30	MFWD 150	36,300	150	8	0.130	3.17	2.32	1.78	0.57	7.86	3.72 3.74 15.33
NT Plant-Rigid	6R-38	MFWD 150	35,600	150	8	0.103	2.51	1.83	1.38	0.45	6.17	2.88 2.95 12.01
NT Plant-Rigid	8R-30	MFWD 170	46,900	150	8	0.098	2.38	1.97	1.72	0.47	6.56	3.61 3.23 13.41
NT Plant-Rigid	8R-38	MFWD 170	44,300	150	8	0.077	1.88	1.56	1.28	0.37	5.11	2.69 2.55 10.36
NT Plant-Rigid	11R-15	MFWD 170	56,200	150	8	0.133	3.24	2.68	2.81	0.64	9.39	5.88 4.40 19.68
NT Plant-Rigid	11R-20	MFWD 170	55,500	150	8	0.107	2.60	2.16	2.23	0.51	7.52	4.66 3.53 15.72
NT Plant-Rigid	12R-20	MFWD 190	58,600	150	8	0.098	2.38	2.20	2.15	0.58	7.33	4.51 3.94 15.78
NT Plant-Rigid	12R-30	MFWD 190	70,700	150	8	0.065	1.58	1.47	1.73	0.38	5.18	3.62 2.63 11.44
NT Plant-Rigid	15R-15	MFWD 190	72,300	150	8	0.105	2.55	2.36	2.84	0.62	8.38	5.95 4.22 18.55
NT Plant-TwinRow	12R-30/40	MFWD 225	145,000	150	8	0.051	1.25	1.37	2.81	0.36	5.80	5.87 2.49 14.17
NT Plant-TwinRow	8R-30/40	MFWD 225	115,000	150	8	0.077	1.88	2.06	3.34	0.55	7.85	6.99 3.74 18.59
Peanut Cond. & Lifter	6-Row	MFWD 190	14,400	300	20	0.100	1.52	2.24	0.24	0.59	4.60	0.40 4.01 9.02
Peanut Conditioner	6-Row	MFWD 190	16,900	300	20	0.100	1.52	2.24	0.33	0.59	4.69	0.42 4.01 9.14
Peanut Dig/Invertor	4R-30	MFWD 190	32,500	300	15	0.235	3.58	5.30	1.90	1.39	12.19	2.51 9.47 24.18
Peanut Dig/Invertor	4R-38	MFWD 190	32,500	300	15	0.186	2.83	4.18	1.50	1.09	9.62	1.98 7.48 19.09

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	---Fixed---		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Peanut Dig/Invertor	6R-38	MFWD 190	46,500	300	15	0.124	1.88	2.79	1.01	0.73	6.42	1.89	4.98	13.30
Peanut Dump Cart	6-Row	MFWD 190	52,400	300	20	0.310	4.71	6.97	0.94	1.83	14.46	4.38	12.45	31.31
Peanut Harvester	4R-30	MFWD 225	150,000	300	20	0.849	12.93	22.64	7.22	6.02	48.83	32.18	41.02	122.04
Peanut Harvester	4R-38	MFWD 225	150,000	300	20	0.934	14.22	24.89	7.94	6.62	53.69	36.62	45.11	135.42
Peanut Harvester	6R-38	MFWD 225	165,000	300	20	0.625	9.51	16.64	4.98	4.43	35.57	26.94	30.16	92.68
Peanut Lifter	6-Row	MFWD 225	7,160	300	20	0.100	1.52	2.66	0.14	0.70	5.04	0.18	4.82	10.05
Peanut Plt&Pre Fold.	12R-38	MFWD 190	88,900	150	8	0.080	1.95	1.80	2.68	0.47	6.91	5.60	3.23	15.75
Peanut Plt&Pre Rigid	8R-30	MFWD 190	47,100	150	8	0.152	3.70	3.43	2.69	0.90	10.74	5.64	6.14	22.52
Peanut Plt&Pre Rigid	8R-38	MFWD 190	44,600	150	8	0.120	2.93	2.71	2.01	0.71	8.38	4.22	4.85	17.45
Peanut Plt&Pre Twin	8R-30/40	MFWD 190	114,000	150	8	0.120	2.93	2.71	5.16	0.71	11.52	10.79	4.85	27.17
Pipe Spool 160ac	1/4m roll	2WD 130	5,400	15	12	0.003	0.10	0.04	0.00	0.01	0.17	0.11	0.07	0.35
Pipe Trailer 1m/160a	30'	2WD 130	2,700	100	15	0.003	0.19	0.05	0.00	0.01	0.26	0.00	0.08	0.35
Plant & Pre-Folding	8R-38	MFWD 170	59,900	150	8	0.080	1.94	1.61	1.80	0.38	5.75	3.76	2.64	12.17
Plant & Pre-Folding	8R-38 2x1	MFWD 170	88,900	150	8	0.053	1.29	1.07	1.78	0.25	4.41	3.72	1.76	9.89
Plant & Pre-Folding	12R-20	MFWD 190	72,600	150	8	0.101	2.46	2.28	2.76	0.59	8.11	5.77	4.08	17.97
Plant & Pre-Folding	12R-30	MFWD 190	78,900	150	8	0.067	1.64	1.52	2.00	0.39	5.56	4.18	2.72	12.47
Plant & Pre-Folding	12R-38	MFWD 190	88,900	150	8	0.053	1.29	1.20	1.78	0.31	4.59	3.72	2.14	10.46
Plant & Pre-Folding	16R-30	MFWD 190	115,000	150	8	0.050	1.23	1.14	2.18	0.29	4.86	4.57	2.04	11.48
Plant & Pre-Folding	23R-15	MFWD 190	143,000	150	8	0.070	1.71	1.58	3.78	0.41	7.49	7.90	2.83	18.23
Plant & Pre-Folding	24R-20	MFWD 190	161,000	150	8	0.050	1.23	1.14	3.06	0.29	5.73	6.40	2.04	14.18
Plant & Pre-Folding	24R-30	MFWD 190	186,000	150	8	0.033	0.82	0.76	2.36	0.19	4.14	4.93	1.36	10.43
Plant & Pre-Folding	31R-15	MFWD 225	166,000	150	8	0.052	1.27	1.39	3.26	0.37	6.31	6.82	2.53	15.66
Plant & Pre-Folding	32R-15	MFWD 225	181,000	150	8	0.050	1.23	1.35	3.44	0.36	6.39	7.20	2.45	16.04
Plant & Pre-Rigid	4R-30	2WD 130	31,000	150	8	0.203	4.93	3.12	2.36	0.69	11.11	4.93	4.56	20.61
Plant & Pre-Rigid	4R-38	2WD 130	32,000	150	8	0.159	3.88	2.46	1.91	0.54	8.81	4.01	3.59	16.41
Plant & Pre-Rigid	6R-30	MFWD 150	38,300	150	8	0.135	3.28	2.40	1.94	0.59	8.22	4.06	3.87	16.16
Plant & Pre-Rigid	6R-38	MFWD 150	37,600	150	8	0.106	2.59	1.89	1.50	0.46	6.46	3.14	3.05	12.67
Plant & Pre-Rigid	8R-30	MFWD 170	47,100	150	8	0.101	2.46	2.04	1.79	0.49	6.79	3.74	3.34	13.88
Plant & Pre-Rigid	8R-38	MFWD 170	44,600	150	8	0.080	1.94	1.61	1.34	0.38	5.29	2.80	2.64	10.74
Plant & Pre-Rigid	11R-15	MFWD 170	53,800	150	8	0.148	3.59	2.98	2.99	0.71	10.29	6.25	4.88	21.42
Plant & Pre-Rigid	11R-20	MFWD 170	53,000	150	8	0.110	2.69	2.23	2.20	0.53	7.67	4.60	3.65	15.93
Plant & Pre-Rigid	12R-20	MFWD 190	55,200	150	8	0.101	2.46	2.28	2.10	0.59	7.45	4.39	4.08	15.92
Plant & Pre-Rigid	12R-30	MFWD 190	68,600	150	8	0.067	1.64	1.52	1.74	0.39	5.30	3.63	2.72	11.66
Plant & Pre-Rigid	15R-15	MFWD 190	67,500	150	8	0.108	2.63	2.44	2.74	0.64	8.46	5.74	4.36	18.58
Plant & Pre-TwinRow	12R-30/40	MFWD 225	143,000	150	8	0.053	1.29	1.42	2.86	0.37	5.96	5.98	2.57	14.53
Plant & Pre-TwinRow	8R-30/40	MFWD 225	116,000	150	8	0.080	1.94	2.13	3.49	0.56	8.14	7.29	3.87	19.32
Plant - Folding	8R-38	MFWD 170	52,600	150	8	0.074	1.80	1.49	1.47	0.36	5.14	3.07	2.45	10.66
Plant - Folding	8R-38 2x1	MFWD 170	80,200	150	8	0.049	1.20	0.99	1.49	0.24	3.93	3.11	1.63	8.69
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.28	2.12	2.30	0.55	7.27	4.81	3.78	15.88
Plant - Folding	12R-30	MFWD 190	70,300	150	8	0.062	1.52	1.41	1.65	0.37	4.96	3.46	2.52	10.95
Plant - Folding	12R-38	MFWD 190	80,200	150	8	0.049	1.20	1.11	1.49	0.29	4.10	3.11	1.99	9.21
Plant - Folding	16R-30	MFWD 190	10,600	150	8	0.047	1.14	1.06	0.18	0.27	2.67	0.39	1.89	4.95
Plant - Folding	23R-15	MFWD 190	134,000	150	8	0.065	1.58	1.47	3.29	0.38	6.73	6.87	2.63	16.24
Plant - Folding	24R-20	MFWD 190	152,000	150	8	0.047	1.14	1.06	2.68	0.27	5.17	5.61	1.89	12.68
Plant - Folding	24R-30	MFWD 190	178,000	150	8	0.031	0.76	0.70	2.09	0.18	3.75	4.38	1.26	9.40
Plant - Folding	31R-15	MFWD 225	157,000	150	8	0.048	1.18	1.29	2.86	0.34	5.69	5.99	2.35	14.04
Plant - Folding	32R-15	MFWD 225	173,000	150	8	0.047	1.14	1.25	3.05	0.33	5.79	6.39	2.27	14.46
Plant - Rigid	4R-30	2WD 130	23,600	150	8	0.188	4.57	2.90	1.66	0.64	9.79	3.48	4.23	17.52
Plant - Rigid	4R-38	2WD 130	24,700	150	8	0.148	3.60	2.28	1.37	0.51	7.77	2.87	3.33	13.98
Plant - Rigid	6R-30	MFWD 150	30,900	150	8	0.125	3.05	2.23	1.45	0.54	7.29	3.04	3.59	13.93
Plant - Rigid	6R-38	MFWD 150	30,200	150	8	0.099	2.40	1.76	1.12	0.43	5.73	2.34	2.83	10.91
Plant - Rigid	8R-30	MFWD 170	39,800	150	8	0.094	2.28	1.89	1.40	0.45	6.05	2.94	3.10	12.10
Plant - Rigid	8R-38	MFWD 170	37,200	150	8	0.074	1.80	1.49	1.03	0.36	4.71	2.17	2.45	9.33
Plant - Rigid	11R-15	MFWD 170	46,400	150	8	0.137	3.34	2.77	2.39	0.66	9.17	5.00	4.53	18.71
Plant - Rigid	11R-20	MFWD 170	45,700	150	8	0.103	2.50	2.07	1.76	0.49	6.84	3.69	3.39	13.92
Plant - Rigid	12R-20	MFWD 190	47,900	150	8	0.094	2.28	2.12	1.69	0.55	6.66	3.54	3.78	13.99
Plant - Rigid	12R-30	MFWD 190	60,000	150	8	0.062	1.52	1.41	1.41	0.37	4.72	2.95	2.52	10.20
Plant - Rigid	15R-15	2WD 150	58,900	150	8	0.094	2.28	1.67	2.08	0.31	6.36	4.35	2.08	12.79
Plant - TwinRow	12R-30/40	MFWD 225	134,000	150	8	0.049	1.20	1.32	2.49	0.35	5.37	5.21	2.39	12.97
Plant - TwinRow	8R-30/40	MFWD 225	108,000	150	8	0.074	1.80	1.98	3.01	0.52	7.34	6.30	3.59	17.24
Roller/Cultipacker	20'	MFWD 150	15,800	300	12	0.074	1.13	1.32	0.27	0.32	3.06	0.41	2.13	5.62
Roller/Cultipacker	30'	MFWD 170	19,400	300	12	0.049	0.75	1.00	0.22	0.24	2.22	0.34	1.64	4.21
Roller/Cultipacker	38'	MFWD 225	21,800	300	12	0.039	0.59	1.04	0.20	0.27	2.12	0.30	1.89	4.32
Roller/Stubble	20'	2WD 50	13,800	300	12	0.074	1.13	0.44	0.24	0.05	1.87	0.36	0.32	2.56
Roller/Stubble	32'	MFWD 225	23,300	300	12	0.046	0.71	1.24	0.25	0.33	2.54	0.38	2.25	5.17
Rotary Cutter	7'	MFWD 130	5,280	185	10	0.168	2.56	2.59	0.72	0.65	6.53	0.55	4.29	11.38
Rotary Cutter	12'	2WD 150	12,100	185	10	0.098	1.49	1.74	0.96	0.33	4.53	0.73	2.16	7.43
Rotary Cutter-Flex	15'	MFWD 150	22,100	185	10	0.078	1.19	1.39	1.40	0.34	4.34	1.07	2.24	7.66
Rotary Cutter-Flex	20'	MFWD 150	29,900	185	10	0.058	0.89	1.04	1.42	0.25	3.62	1.09	1.68	6.41
Row Cond & Inc-Fold.	26'	MFWD 190	28,500	100	10	0.063	1.25	1.42	0.45	0.37	3.50	2.07	2.55	8.13
Row Cond & Inc-Fold.	38'	MFWD 225	38,200	100	10	0.043	0.85	1.15	0.41	0.30	2.73	1.90	2.09	6.73
Row Cond & Inc-Rigid	13'	2WD 130	16,900	100	10	0.126	2.50	1.95	0.53	0.43	5.43	2.46	2.85	10.75
Row Cond & Inc-Rigid	21'	2WD 170	20,800	100	10	0.078	1.55	1.58	0.40	0.29	3.83	1.87	1.98	7.70
Row Cond & Inc-Rigid	26'	MFWD 190	24,000	100	10	0.026	0.52	0.59	0.15	0.15	1.44	0.73	1.06	3.24
Row Cond Folding	26'	MFWD 225	21,100	100	10	0.059	0.90	1.59	0.31	0.42	3.23	1.44	2.88	7.57
Row Cond Folding	38'	MFWD 225	29,600	100	10	0.040	0.62	1.08	0.30	0.28	2.30	1.39	1.97	5.66
Row Cond Rigid	13'	2WD 130	9,540	100	10	0.119	1.81	1.83	0.28	0.41	4.35	1.31	2.68	8.34
Row Cond Rigid	21'	2WD 170	13,400	100	10	0.073	1.12	1.48	0.24	0.27	3.13	1.13	1.87	6.14
Row Cond Rigid	26'	MFWD 190	16,700	100	10	0.059	0.90	1.34	0.24	0.35	2.85	1.14	2.40	6.40
Row Cond./Roll-Fold.	26'	MFWD 190	19,800	160	10	0.072	1.09	1.62	0.35	0.42	3.50	1.02	2.89	7.42

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---	Total Imp.	P.U. Direct	--Fixed-- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	-----\$/acre-----							
Row Cond./Roll-Fold.	40'	MFWD 225	26,700	160	10	0.046	0.71	1.24	0.31	0.33	2.60	0.89	2.26	5.77
Spin Spreader	5 ton	MFWD 190	12,900	100	8	0.042	1.02	0.94	0.30	0.24	2.52	0.66	1.69	4.87
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.14	0.40	0.08	0.49	6.12	0.11	2.10	8.34
Spray (ATV)	20'	800 CC	1,690	200	8	0.084	1.67	0.13	0.06	0.16	2.02	0.08	0.68	2.80
Spray (Band)	27' Fold	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Band)	40' Fold	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Band)	50' Fold	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Band)	60' Fold	MFWD 170	15,600	200	8	0.028	0.55	0.56	0.20	0.13	1.46	0.26	0.92	2.66
Spray (Bcast/HB)	13' Rigid	MFWD 150	6,900	200	8	0.130	2.57	2.31	0.42	0.56	5.87	0.55	3.72	10.14
Spray (Bcast/HB)	20' Rigid	MFWD 150	8,100	200	8	0.084	1.67	1.50	0.32	0.37	3.86	0.42	2.42	6.70
Spray (Bcast/HB)	27' Fold	MFWD 170	15,400	200	8	0.062	1.23	1.26	0.45	0.30	3.25	0.59	2.06	5.91
Spray (Bcast/HB)	27' Rigid	MFWD 170	9,800	200	8	0.062	1.23	1.26	0.28	0.30	3.09	0.37	2.06	5.53
Spray (Bcast/HB)	30' Fold	MFWD 170	18,930	200	8	0.056	1.11	1.13	0.50	0.27	3.02	0.65	1.85	5.53
Spray (Bcast/HB)	40' Fold	MFWD 170	22,000	200	8	0.042	0.83	0.85	0.43	0.20	2.32	0.57	1.39	4.29
Spray (Broadcast)	27'	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Broadcast)	40'	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Broadcast)	50'	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Broadcast)	60'	MFWD 170	15,600	200	8	0.028	0.55	0.56	0.20	0.13	1.46	0.26	0.92	2.66
Spray (Direct/Hood)	8R-30	MFWD 170	20,400	200	8	0.084	1.67	1.70	0.80	0.40	4.59	1.05	2.78	8.44
Spray (Direct/Hood)	8R-38	MFWD 170	21,900	200	8	0.066	1.32	1.34	0.68	0.32	3.67	0.89	2.20	6.78
Spray (Direct/Hood)	12R-30	MFWD 170	25,300	200	8	0.056	1.11	1.13	0.66	0.27	3.19	0.87	1.85	5.92
Spray (Direct/Hood)	12R-38	MFWD 170	27,100	200	8	0.044	0.87	0.89	0.56	0.21	2.55	0.73	1.46	4.76
Spray (Direct/Layby)	8R-30	MFWD 170	11,300	200	8	0.084	1.67	1.70	0.44	0.40	4.23	0.58	2.78	7.60
Spray (Direct/Layby)	8R-38	MFWD 170	11,300	200	8	0.066	1.32	1.34	0.35	0.32	3.34	0.46	2.20	6.01
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	14,900	200	8	0.044	0.87	0.89	0.31	0.21	2.30	0.40	1.46	4.17
Spray (Direct/Layby)	12R-30	MFWD 170	14,900	200	8	0.056	1.11	1.13	0.39	0.27	2.91	0.51	1.85	5.29
Spray (Direct/Layby)	12R-38	MFWD 170	14,900	200	8	0.044	0.87	0.89	0.31	0.21	2.30	0.40	1.46	4.17
Spray (Direct/Layby)	16R-20	MFWD 225	22,300	200	8	0.062	1.23	1.66	0.65	0.44	4.00	0.85	3.02	7.88
Spray (Levee Leaper)	50'	MFWD 225	13,200	200	8	0.033	0.66	0.90	0.20	0.24	2.01	0.27	1.63	3.92
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.55	0.75	0.53	0.20	2.04	0.70	1.36	4.11
Spray (Pull Type)	80'	MFWD 225	52,500	200	8	0.021	0.41	0.56	0.52	0.15	1.65	0.68	1.02	3.35
Spray (Pull Type)	90'	2WD 50	53,200	200	8	0.018	0.37	0.11	0.46	0.01	0.96	0.61	0.08	1.66
Spray (Pull Type)	120'	MFWD 225	80,900	200	8	0.014	0.27	0.37	0.53	0.10	1.28	0.69	0.68	2.66
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.67	1.90	0.16	0.49	4.23	0.21	3.40	7.85
Spray (Spot)	27'	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Spot)	40'	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Spot)	50'	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Spot)	60'	MFWD 225	15,600	200	8	0.028	0.55	0.75	0.20	0.20	1.71	0.26	1.36	3.34
Stalk Shredder	14'	MFWD 150	14,500	200	10	0.117	1.79	2.09	1.49	0.51	5.89	0.98	3.37	10.25
Stalk Shredder Flex	20'	MFWD 150	30,200	200	10	0.082	1.25	1.46	2.18	0.36	5.26	1.43	2.35	9.05
Stalk Shredder-Flail	12'	MFWD 150	20,500	200	10	0.137	2.09	2.44	2.46	0.60	7.60	1.62	3.93	13.15
Stalk Shredder-Flail	15'	MFWD 150	23,800	200	10	0.110	1.67	1.95	2.29	0.48	6.39	1.50	3.14	11.05
Stalk Shredder-Flail	18'	MFWD 150	28,900	200	10	0.091	1.39	1.62	2.31	0.40	5.74	1.52	2.62	9.88
Stalk Shredder-Flail	20'	MFWD 150	30,100	200	10	0.082	1.25	1.46	2.17	0.36	5.25	1.42	2.35	9.04
Stalk Shredder-Flail	25'	MFWD 150	45,300	200	10	0.066	1.00	1.17	2.61	0.28	5.08	1.71	1.88	8.68
Subsoiler	3 shank	MFWD 190	5,920	100	15	0.204	3.10	4.59	0.40	1.20	9.31	1.11	8.21	18.64
Subsoiler	4 shank	MFWD 225	9,830	100	15	0.153	2.33	4.09	0.50	1.08	8.02	1.38	7.41	16.82
Subsoiler	5 shank	MFWD 225	13,900	100	15	0.122	1.86	3.25	0.56	0.86	6.55	1.56	5.90	14.02
Subsoiler low-till	6 shank	MFWD 225	15,300	100	15	0.102	1.55	2.72	0.52	0.72	5.52	1.43	4.93	11.89
Subsoiler low-till	8 shank	MFWD 225	22,000	100	15	0.076	1.16	2.03	0.56	0.54	4.30	1.54	3.69	9.55

Notes:

Labor: Includes labor from Power unit plus additional labor from the implement.

Total Direct: Does not include interest on operating capital.

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2020

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Artisan	oz	0.23
Agri-Dex	pt	2.43	Avaris	oz	1.65
AMS SuperMax	pt	3.81	Avicta Complete Bean	oz	3.65
Class Act NG	pt	2.44	Bravo Weather Stick	pt	6.35
Crop Oil Conc. (Pet.)	pt	3.00	Captan 50 WP	lb	4.28
Crop Oil Conc. (Veg.)	pt	3.22	Convoy	oz	0.78
Dyne-A-Pak	pt	5.45	Cotton Seed Trt.	acre	20.00
Fire-Zone	pt	3.07	CruiserMaxx	oz	4.18
Herbimax	pt	3.48	Echo	oz	0.41
Induce	pt	3.41	Elatus	oz	2.94
Class Act NG	pt	2.44	Headline EC	oz	2.63
MSO	pt	3.55	Miravis Top	oz	1.27
Penetrator Plus	pt	2.70	Prior Xemium	oz	4.53
Surfactant	pt	5.31	Propimax EC	pt	11.69
CLEANING			Prosaro	oz	2.45
Cleaning Peanuts	ton	18.00	Provost Optimum	lb	1.64
CROP CONSULTANT			Quadris	oz	1.63
Corn Consultant	acre	6.00	Quadris Top	oz	2.33
Cotton Consultant	acre	8.00	Quadris Top SBX	oz	2.36
Peanut Consultant	acre	9.25	Quilt	pt	17.06
Rice Consultant	acre	8.00	Quilt XCEL	pt	23.43
Sorghum Consultant	acre	6.00	Stratego	pt	23.43
Soybeans Consultant	acre	6.50	Stratego YLD	oz	3.51
Wheat Consultant	acre	5.50	Tebuconazole	oz	0.49
CUSTOM FERTILIZE			Tilt 3.6 EC	oz	0.72
App Fert by Air	cwt	7.50	Tilt/ Bravo SE	oz	1.00
App Fert by Air (Mi)	appl	7.50	Trivapro	oz	1.53
Custom Apply Fert	acre	7.50	GINNING		
CUSTOM LIME			Gin & Haul	lb	0.11
Lime (Spread)	ton	43.00	GROWTH REGULATORS		
CUSTOM PLANT			Mepex	oz	0.07
Custom Plant	acre	7.50	Mepichlor 4.2%	oz	0.08
Custom Plant Air	cwt	7.50	Mepiquat Chloride	oz	0.10
CUSTOM SPRAY			Mepstar 6	oz	0.39
App by Air (3 gal)	appl	5.50	Palisade	oz	1.28
App by Air (5 gal)	appl	7.00	Pentia	oz	0.85
App by Air (10 gal)	appl	9.00	Pix Ultra	oz	0.21
Custom Spray Ground	acre	7.00	Stance	oz	1.23
DRYING			Veto	oz	0.06
Dry Corn	bu	0.19	HARVEST AIDS		
Dry Grain Sorghum	cwt	0.25	Adios	oz	0.93
Dry Peanuts	ton	24.00	Aim 2EC	oz	5.68
Dry Rice	bu	0.40	Boll Buster	oz	0.18
ERADICATION FEE			Def/Folex	pt	8.61
Eradication	acre	1.00	Defol 5	gal	6.54
FERTILIZERS			Display	oz	10.13
Agrotain Ultra	pt	8.36	Ethephon 6E	pt	2.90
Amm Sulfate (21% N)	cwt	17.46	Finish 6	pt	9.37
Boron Plus	pt	4.52	Folex 6EC	pt	8.61
DAP	cwt	22.64	Freefall SC	oz	1.18
Fert 10-34-0	cwt	24.78	Ginstar EC	pt	21.44
Fert 10-34-0	gal	2.90	Gramoxone SL	oz	0.17
Fert 11-37-0	cwt	29.40	Sharpen	oz	5.66
Fert 41-0-0-4	cwt	18.60	Sodium Chlorate 5L	gal	6.54
Lime	ton	32.97	SuperBoll	oz	0.19
NBPT	pt	7.97	Thidiazuron 4lb	oz	1.18
Phosphorus (46% P2O5)	cwt	18.11	Tribufos 6lb	pt	8.61
Potash (60% K2O)	cwt	27.50	Vacate	oz	1.60
Sulfur Plus	pt	2.62	HAULING		
UAN (32% N)	cwt	13.62	Haul Corn	bu	0.23
UAN (32%)	gal	1.51	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	cwt	12.55	Haul Rice	bu	0.35
UAN + Sulfur (28%)	gal	1.39	Haul Sorghum	bu	0.25
Urea, Solid (46% N)	cwt	20.22	Haul Soybeans	bu	0.27
Zinc Plus	pt	2.99	Haul Wheat	bu	0.26
FUNGICIDES			HERBICIDES		
Abound	oz	0.98	2,4-D Ester	pt	3.28
Alfa Guard	lb	1.82	2,4-D Amine 4	pt	2.73
Approach Prima	pt	31.96	AAtrex 4L	pt	2.24
Apron Maxx RTA	oz	1.66			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2020 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Accent Q	oz	17.67	Halomax	oz	19.90
Acuron	oz	2.22	Harmony Extra SG	oz	13.81
Aim	oz	5.68	Helmet	oz	4.15
Anthem Flex	oz	2.67	Hero	pt	25.77
Anthem Maxx	oz	4.90	Huskie	oz	0.84
Armezon Pro	oz	1.16	Impact	oz	1.24
Atrazine 4L	pt	2.09	Intimidator	oz	0.59
Atrazine 90DF	lb	7.52	Leadoff	oz	5.15
Authority First	oz	4.50	League	oz	4.51
Authority Elite	pt	14.03	Lexar	pt	7.67
Authority Maxx	lb	49.72	Liberty 280	oz	0.49
Authority MTZ	lb	32.08	Loyant	oz	2.21
Avatar	pt	7.87	Makaze	oz	0.14
Avenger	pt	9.89	Metolachlor	pt	4.87
Axial XL	oz	1.21	Metribuzin 4L	pt	9.30
Axiom	oz	1.84	Metribuzin 75	lb	18.75
Banvel	pt	15.04	MSMA	pt	3.97
Barrage	pt	5.43	Newpath	oz	3.73
Basagran	pt	5.43	Oberon	oz	3.75
Boundary	pt	8.84	Obey	oz	0.91
Brake	oz	1.72	Osprey	oz	3.24
Broadaxe	pt	16.41	Outlook	pt	16.38
Broadhead	lb	58.21	Panther Pro	oz	3.35
Bucaneer Plus	pt	2.37	Parallel	pt	4.64
Bucril	pt	4.28	Paraquat	oz	0.19
Butyrac 200 (2,4-DB)	pt	3.49	Parazone 3SL	oz	0.19
Cadre	oz	3.10	Permit	oz	21.22
Canopy	oz	2.13	Permit Plus	oz	20.60
Caparol	pt	4.59	PowerFlex	oz	6.71
Capreno	oz	4.75	Prefix	pt	5.69
Cinch	pt	16.06	Provisia	oz	0.83
Cinch ATZ	pt	5.20	Prowl 3.3 EC	pt	5.30
Clarity	pt	11.60	Python WDG	oz	15.10
Classic	oz	14.02	Quelex	oz	7.00
Clearpath	lb	57.57	RealmQ	oz	4.66
Clethomine 2E	oz	0.50	RebelEx	oz	2.68
Clincher SF	oz	2.32	Reflex	pt	5.87
Cobra	oz	1.71	Regiment	oz	42.66
Command 3ME	pt	16.09	Resicore	oz	0.55
Corvus	oz	6.65	Resource	oz	1.72
Cotoran	pt	5.85	RiceBeaux	pt	5.79
Cotton Pro	pt	3.75	Riceshot	pt	3.92
Declare	oz	1.64	Ricestar HT	pt	24.04
Dicamba	pt	5.66	Ringside	pt	4.17
Direx	pt	3.01	Roundup Power Max	oz	0.20
Diuron	pt	3.53	Roundup PowerMax	pt	3.20
Dual II Magnum	pt	12.63	Roundup PowerMax ii	oz	0.20
Dual Magnum	pt	10.26	Roundup Pro	pt	0.20
Duet	pt	5.39	Scepter 70 DG	oz	4.50
Endigo	oz	1.80	Select Max	pt	10.87
Engenia	oz	0.83	Sencor/Tricor.Metrib	oz	5.45
Envive	oz	0.53	Sequence	pt	5.16
Envoke	oz	106.65	Sharpen	oz	5.66
Facet L	pt	13.61	Sinister	pt	14.61
Fierce	oz	7.44	Sonic	oz	4.63
Fierce XLT	oz	6.66	Stalwart	pt	3.95
Finesse	oz	14.38	Stam 80 EDF	lb	9.32
Firestorm	pt	5.97	Stam M4	qt	7.91
First Rate	oz	40.12	Staple LX	oz	1.95
Flexstar	pt	9.11	Storm	pt	11.58
Flexstar GT	pt	4.44	Strada	oz	6.65
Fusilade DX	oz	1.06	Strada Pro	oz	6.86
Gambit	oz	16.96	Strada XT2	pt	3.20
Glyphosate 3lbs a.e	pt	2.16	Superwham	qt	9.27
Glyphosate 3lbs a.e	oz	0.14	Suprend	lb	10.14
Goal 2XL	pt	7.77	SureStart II	oz	0.67
Gramoxone SL 2.0	oz	0.17	Surveil	oz	0.72
Grandstand R	pt	18.26	Synchrony XP	oz	11.72
Grasp	oz	12.03	Tempest	oz	1.84
Grasp Xtra	oz	1.68	Touchdown Total	qt	5.23
Halex GT	pt	6.24			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2020 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Treflan	pt	3.37	Lambda	oz	1.71
Trifluralin	pt	3.36	Lannate LV	pt	9.85
Triflurex	pt	3.66	Macho	oz	0.53
Ultra Blazer	pt	10.69	Malathion 5E	pt	8.16
Valor EZ	oz	4.43	Malathion 8E	pt	5.50
Valor SX	oz	4.28	Mustang Max	oz	1.33
Valor XLT	oz	4.90	Nuprid 4F	oz	0.89
Vamos	pt	6.49	Orthene 90	lb	15.98
Verdict	oz	1.72	Permethrin	oz	0.63
Veritas	pt	7.49	Portal XLO	oz	0.88
Villain	pt	5.24	Pounce 25WP	lb	18.08
Volunteer	pt	10.63	Prevathon	oz	1.12
Warrant	pt	4.02	Radiant	oz	6.28
XtendiMax	oz	0.49	Sevin 4F	pt	6.22
Zidua DF	oz	8.23	Sevin XLR Plus	qt	15.09
Zidua SC	oz	5.75	Sivanto Prime	oz	2.54
INOCULANT			Straffer Max	oz	9.61
Inoculant -Soybean	acre	1.55	Tempest	oz	1.82
Optimize LIFT	oz	0.51	Transform WG	oz	7.38
INSECTICIDES			Up-Cyde	oz	0.43
Abamectin .15EC	oz	1.67	Warrior ZT	oz	2.57
Acephate 90%	lb	7.17	Zeal	oz	17.50
Acephate 90SP	lb	7.59	IRRIGATION SUPPLIES		
Admire Pro	oz	1.33	Roll-Out Pipe	ft	0.24
Agri-Mek	oz	2.96	SEED/PLANTS		
Asana .66 XL	oz	0.48	Corn Seed BtRR	thous	3.50
Avenger	oz	0.70	Corn Seed RR2	thous	3.50
Baythroid XL	oz	1.06	Corn Seed VT2P	thous	3.62
Belt	oz	7.50	Corn Seed Op Leptra	thous	4.39
Besiege	oz	1.93	Cotton Seed B3XF	thous	2.32
Bidrin 8EC	oz	1.28	Cotton Seed W3FE	thous	2.37
Bifenthrin	oz	0.82	Cot.Seed B3XF/W3FE	thous	2.34
Bifenture 2EC	oz	0.81	Peanut Seed	lb	0.84
Brigade EC	pt	14.70	Rice Clearfield	lb	0.95
Capture LFR	oz	2.36	Rice Clrfld Hyb Trt	lb	6.10
Centric 40WG	oz	4.89	Rice Conv Hyb Trt	lb	6.15
Cypermethrin	oz	0.55	Rice Seed CF (Levees)	lb	0.95
Declare	oz	1.87	Rice Seed CFH (Levee)	lb	2.67
Diamond .83EC	oz	1.31	Rice Seed Conv.	lb	0.28
Dimethoate 4E	pt	5.37	Rice Seed Cv (Levees)	lb	0.28
Dimilin 2L	oz	1.91	Rice Seed CvH (Levee)	lb	1.93
Force 3G	lb	7.23	Rice Seed Provisia	lb	1.08
Gaucho 600	oz	2.36	Rice Seed Trt/Insect	lbseed	0.29
Imidacloprid 4F	oz	0.62	Sorghum Concept+ Po	lb	3.96
Imidan 70 WSB	oz	0.71	Soybean Seed LL	lb	1.27
IncidentalPestTrt \$8	acre	8.00	Soybean Seed RR2	lb	1.39
IncidentalPestTrt \$15	acre	15.00	Soybean Seed RR2X	lb	1.32
IncidentalPestTrt \$22	acre	22.00	Wheat Seed Private	lb	0.24
IncidentalPestTrt \$30	acre	30.00	SOIL TEST		
Intrepid 2F	oz	2.15	Soil Test	acre	10.00
Intruder 70WSP	oz	9.05	SURVEY & MARK LEVEES		
Karate Z	oz	2.48	Survey & Mark Levees	acre	4.50

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2020

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	2.30
Gasoline	gal	2.20
INTEREST RATES		
Short-term	%	5.25
Intermediate-term	%	6.25

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2020

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	15.22
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)	
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2020

Crop	uni	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '20	4.06	-0.20	3.86	2.35	3.86
Cotton Lint	lb	Dec '20	0.6447	-0.0158	0.628	0.52	0.6289
Cottonseed	lb						0.10 ^f
Grain Sorghum	bu				3.67	2.27	3.67
Peanuts	ton				400.00	370.00	400.00
Soybeans	bu	Nov '20	9.62	-0.02	9.60	6.41	9.60
Rice	bu	Nov '20	5.32	-0.37	4.95	3.20	4.95
Wheat	bu	Jul '20	4.39	-0.15	4.24	3.35	4.24

- ^a Average of the daily closing futures contract prices during the first 5 trading days in October 2019 for the stated contract months.
- ^b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2019 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.
- ^c The forward contract price for corn, cotton, rice, soybeans and wheat is the futures contract price plus the basis. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The forward contract price for peanuts is an estimate from a poll of Extension Peanut Marketing Specialists.
- ^d Average Mississippi County CCC Loan Rate for 2019 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2018 Farm-stored Loan Rate for long grain rough rice. National 2019 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.
- ^e Price used in MSU Extension Service Planning Budgets.
- ^f Cottonseed price is the average marketing year price over the years 2008-2018.

Appendix Table 8. Estimated costs for field operations, per acre
 Contour levee rice flood irrigation system
 80-acre system, 33 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.32	0.11	0.24		0.02	0.69	0.68	1.37
Survey & Mark Levees	acre	4.50					0.12	4.62		4.62
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.86	0.28	0.65		0.05	1.84	1.81	3.65
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30		0.02	0.84	0.67	1.51
IRRIGATE LABOR	hour				0.68		0.02	0.70		0.70
Install Gates										
IRRIGATE LABOR	hour				2.72		0.07	2.79		2.79
Apply Water										
IRRIGATE LABOR	hour				6.80		0.18	6.98		6.98
Apply Water										
IRRIGATE LABOR	hour				6.80		0.15	6.95		6.95
Apply Water										
IRRIGATE LABOR	hour				6.80		0.12	6.92		6.92
Apply Water										
IRRIGATE LABOR	hour				6.80		0.09	6.89		6.89
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80)	32"		0.67	0.21	0.51		0.01	1.40	1.41	2.81
Tear Down Levees										
Levee Splitter (1/80)	32"		0.25	0.08	0.19			0.52	0.53	1.05
Land Forming (\$113)	each								9.05	9.05
Levee Gates	each								0.67	0.67
Well & Pump, Flood	each			5.91			0.13	6.04	19.72	25.76
Engine, Rice CL, 75	each								18.68	18.68
May Irrigation	ac-in		11.24	1.43			0.33	13.00		13.00
June Irrigation	ac-in		16.86	2.15			0.42	19.43		19.43
July Irrigation	ac-in		16.86	2.15			0.33	19.34		19.34
August Irrigation	ac-in		16.86	2.15			0.25	19.26		19.26
TOTALS		4.50	64.32	14.59	33.85	0.00	2.33	119.59	53.22	172.81

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

Appendix Table 9. Estimated costs for field operations, per acre
 Straight levee rice flood irrigation system
 80-acre system, 27 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Survey & Mark Levees	acre	2.25					0.06	2.31		2.31
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.65	0.21	0.49		0.04	1.39	1.36	2.75
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30		0.02	0.84	0.67	1.51
IRRIGATE LABOR	hour				0.68		0.02	0.70		0.70
Install Gates										
IRRIGATE LABOR	hour				1.36		0.04	1.40		1.40
Apply Water										
IRRIGATE LABOR	hour				4.53		0.12	4.65		4.65
Apply Water										
IRRIGATE LABOR	hour				4.53		0.10	4.63		4.63
Apply Water										
IRRIGATE LABOR	hour				4.53		0.08	4.61		4.61
Apply Water										
IRRIGATE LABOR	hour				4.53		0.06	4.59		4.59
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80)	32"		0.50	0.16	0.38		0.01	1.05	1.05	2.10
Land Forming (\$450)	each								36.04	36.04
Levee Gates	each								0.67	0.67
Well & Pump, Flood	each			5.91			0.13	6.04	19.72	25.76
Engine, Rice SL, 75	each								18.68	18.68
May Irrigation	ac-in		11.24	1.75			0.34	13.33		13.33
June Irrigation	ac-in		13.12	2.04			0.33	15.49		15.49
July Irrigation	ac-in		13.12	2.04			0.27	15.43		15.43
August Irrigation	ac-in		13.12	2.04			0.20	15.36		15.36
TOTALS		2.25	52.15	14.27	22.69	0.00	1.84	93.20	78.19	171.39

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

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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Survey & Mark Levees	acre	2.25						0.06	2.31	2.31
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.65	0.21	0.49			0.04	1.39	1.36
Butt Levees										
Blade-Box	6'-7'		0.40	0.12	0.30			0.02	0.84	0.67
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Ditcher (1m/160a)			0.19	0.07	0.14			0.01	0.41	0.34
Roll-Out Pipe	ft	7.92						0.21	8.13	8.13
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.10	0.42			0.02	0.79	0.88
Install Gates										
IRRIGATE LABOR	hour				1.36			0.04	1.40	1.40
Apply Water										
IRRIGATE LABOR	hour				1.81			0.05	1.86	1.86
Apply Water										
IRRIGATE LABOR	hour				1.81			0.04	1.85	1.85
Apply Water										
IRRIGATE LABOR	hour				1.81			0.03	1.84	1.84
Apply Water										
IRRIGATE LABOR	hour				1.81			0.02	1.83	1.83
Remove Gates										
IRRIGATE LABOR	hour				0.45				0.45	0.45
Tear Down Levees										
Levee Splitter (1/80	32"		0.50	0.16	0.38			0.01	1.05	1.05
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.13	0.05	0.21				0.39	0.44
Land Forming (\$450)	each								36.04	36.04
Levee Gates	each								0.34	0.34
Well & Pump, Flood	each			5.91				0.13	6.04	19.72
Engine, Mult In Rice	each								18.68	18.68
May Irrigation	ac-in		9.37	1.64				0.29	11.30	11.30
June Irrigation	ac-in		11.24	1.97				0.29	13.50	13.50
July Irrigation	ac-in		11.24	1.97				0.23	13.44	13.44
August Irrigation	ac-in		11.24	1.97				0.17	13.38	13.38
TOTALS		10.17	45.21	14.17	12.12	0.00	1.69	83.36	79.52	162.88

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

Appendix Table 11. Estimated costs for field operations, per acre
 Straight levee rice - zero grade flood irrigation
 80-acre system, 19 ac-in., Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Set Up Engine									
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46
Apply Water									
IRRIGATE LABOR	hour				2.27		0.06	2.33	2.33
Apply Water									
IRRIGATE LABOR	hour				2.27		0.05	2.32	2.32
Apply Water									
IRRIGATE LABOR	hour				2.27		0.04	2.31	2.31
Apply Water									
IRRIGATE LABOR	hour				2.27		0.03	2.30	2.30
Land Forming (\$450)	each							36.04	36.04
Well & Pump, Flood	each			5.91			0.13	6.04	19.72
Engine, Rice SL, 75	each							18.68	18.68
May Irrigation	ac-in		7.49	1.17			0.23	8.89	8.89
June Irrigation	ac-in		9.37	1.46			0.24	11.07	11.07
July Irrigation	ac-in		9.37	1.46			0.19	11.02	11.02
August Irrigation	ac-in		9.37	1.46			0.14	10.97	10.97
TOTALS		0.00	35.60	11.46	9.53	0.00	1.12	57.71	74.44

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

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