

**RICE
2017
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2016-04**

October 2016

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 2017 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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Acknowledgment is made to the Mississippi State University Extension Service, the Mississippi Agricultural and Forestry Experiment Station, and the United States Agricultural Research Service staffs for the excellent cooperation that made this report possible.

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

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2017 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. The Mississippi Agricultural Statistics Service conducts a survey of producers of major field crops in Mississippi. Data collected from producers are a part of the information used in selecting the practices included in each budget.

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 survey data from producers and/or 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 2016. (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 2016 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., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.5000	35.75	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	75.0000	28.50	_____
Cruiser Maxx Rice	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv (Levees)	lb	0.38	13.6000	5.17	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.75	1.5000	5.63	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5475	7.18	_____
Harvesters	hour	13.14	0.2030	2.67	_____
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	13.13	0.5633	7.40	_____
DIESEL FUEL					
Tractors	gal	1.70	5.9886	10.20	_____
Harvesters	gal	1.70	3.3975	5.78	_____
Flood Irr.	gal	1.70	26.8827	45.69	_____
REPAIR & MAINTENANCE					
Implements	acre	8.21	1.0000	8.21	_____
Tractors	acre	3.56	1.0000	3.56	_____
Harvesters	acre	7.11	1.0000	7.11	_____
Flood Irr.	acre	12.69	1.0000	12.69	_____
INTEREST ON OP. CAP.	acre	12.20	1.0000	12.20	_____
TOTAL DIRECT EXPENSES				724.00	_____
FIXED EXPENSES					
Implements	acre	17.57	1.0000	17.57	_____
Tractors	acre	22.31	1.0000	22.31	_____
Harvesters	acre	28.05	1.0000	28.05	_____
Flood Irr.	acre	39.95	1.0000	39.95	_____
TOTAL FIXED EXPENSES				107.88	_____
TOTAL SPECIFIED EXPENSES				831.88	_____

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____

TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	54.05	1.0000	54.05	_____
ADJUVANTS	acre	10.65	1.0000	10.65	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	13.14	0.7506	9.85	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	13.13	0.5633	7.40	_____
DIESEL FUEL	gal	1.70	36.2688	61.67	_____
REPAIR & MAINTENANCE	acre	31.57	1.0000	31.57	_____
INTEREST ON OP. CAP.	acre	12.20	1.0000	12.20	_____

TOTAL DIRECT EXPENSES				724.00	_____
RETURNS ABOVE DIRECT EXPENSES				-42.28	_____
TOTAL FIXED EXPENSES				107.88	_____

TOTAL SPECIFIED EXPENSES				831.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-150.16	_____

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

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	0.3300				
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				
Cruiser Maxx Rice	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				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Cruiser Maxx Rice	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					0.6000				
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				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.01	3.31	
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	
2,4-D Amine 4	pt	5.58						0.18	5.76	
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Seed Conv.	lb	28.50						0.68	29.18	
Cruiser Maxx Rice	lbseed	17.25						0.41	17.66	
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	
Command 3ME	pt	19.34						0.46	19.80	
Sharpen	oz	10.70						0.25	10.95	
SuperMax AMS	pt	1.34						0.03	1.37	
MSO	pt	1.88						0.04	1.92	
Seed Levees										
Rice Seed Cv(Levees)	lb	5.17						0.12	5.29	
Cruiser Maxx Rice	lbseed	3.13						0.07	3.20	
Rice Consultant	acre	8.00						0.16	8.16	
App Fert by Air	cwt	7.00						0.14	7.14	
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	
DAP	cwt	12.41						0.25	12.66	
App by Air (5 gal)	appl	6.50						0.13	6.63	
Regiment	oz	26.63						0.53	27.16	
Dyne-A-Pak	pt	2.32						0.05	2.37	
App Fert by Air	cwt	17.50						0.35	17.85	
Urea, Solid (46% N)	cwt	41.95						0.83	42.78	
NBPT	pt	7.67						0.15	7.82	
Rice Management										
RICE MGT. LABOR	hour				2.72			0.05	2.77	
App by Air (5 gal)	appl	6.50						0.13	6.63	
Facet L	pt	39.92						0.79	40.71	
Permit	oz	15.44						0.31	15.75	
Crop Oil Conc.(Pet.)	pt	0.99						0.02	1.01	
App by Air (5 gal)	appl	3.25						0.05	3.30	
Clincher SF	oz	17.85						0.28	18.13	
MSO	pt	3.75						0.06	3.81	
Rice Management										
RICE MGT. LABOR	hour				4.53			0.07	4.60	
App Fert by Air	cwt	10.50						0.17	10.67	
Urea, Solid (46% N)	cwt	25.17						0.40	25.57	
Rice Management										
RICE MGT. LABOR	hour				4.53			0.05	4.58	
App by Air (5 gal)	appl	6.50						0.08	6.58	
Stratego	pt	26.81						0.32	27.13	
Surfactant	pt	0.37							0.37	
App by Air (3 gal)	appl	7.50						0.09	7.59	
Karate Z	oz	7.74						0.09	7.83	
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	
Header - Draper (CL)	25' Rigid		5.78	9.82	5.07			0.16	20.83	32.29
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	
Haul Rice	bu	54.60						0.43	55.03	
Dry Rice	bu	62.40						0.49	62.89	
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre	4.50	47.56	13.53	33.59			1.79	100.97	44.92
TOTALS		552.78	61.67	31.57	65.78	0.00	12.20	724.00	107.88	831.88

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

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	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	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	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.05	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	15.59	9.52	11.33	11.33	10.93	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	12.02	12.46	12.46	12.46	6.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.77	7.01	2.13	2.13	10.32	3.15
INTEREST ON OP. CAP.	0.38	0.00	0.00	0.00	0.60	0.00	3.20	4.58	1.37	0.88	1.14	0.05
TOTAL DIRECT EXPENSES	8.34	0.00	0.00	0.00	19.40	0.00	138.37	235.02	87.81	75.72	146.08	13.26
NET INCOME	-8.34	0.00	0.00	0.00	-19.40	0.00	-138.37	-235.02	-87.81	-75.72	535.64	-13.26
NET INCOME TO DATE	-8.34	-8.34	-8.34	-8.34	-27.74	-27.74	-166.11	-401.13	-488.94	-564.66	-29.02	-42.28

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-409 -517	-392 -500	-375 -483	-358 -466	-341 -449	-324 -432	-307 -415	-290 -397	-273 -380	-256 -363	-238 -346
60	93.60	bu	-370 -477	-349 -457	-329 -437	-308 -416	-288 -396	-267 -375	-247 -355	-226 -334	-206 -314	-185 -293	-165 -273
70	109.20	bu	-330 -438	-306 -414	-283 -390	-259 -367	-235 -343	-211 -319	-187 -295	-163 -271	-139 -247	-115 -223	-92 -199
80	124.80	bu	-291 -399	-264 -371	-236 -344	-209 -317	-182 -290	-155 -262	-127 -235	-100 -208	-73 -181	-45 -153	-18 -126
90	140.40	bu	-252 -359	-221 -329	-190 -298	-160 -267	-129 -237	-98 -206	-67 -175	-37 -145	-6 -114	24 -83	54 -53
100	156.00	bu	-212 -320	-178 -286	-144 -252	-110 -218	-76 -184	-42 -150	-8 -116	25 -81	59 -47	94 -13	128 20
110	171.60	bu	-173 -281	-135 -243	-98 -206	-60 -168	-23 -131	14 -93	51 -56	89 -18	126 18	164 56	201 93
120	187.20	bu	-134 -241	-93 -201	-52 -160	-11 -119	29 -78	70 -37	111 3	152 44	193 85	234 126	274 167
130	202.80	bu	-94 -202	-50 -158	-6 -113	38 -69	82 -25	126 18	171 63	215 107	259 151	304 196	348 240
140	218.40	bu	-55 -163	-7 -115	40 -67	87 -20	135 27	183 75	230 123	278 170	326 218	374 266	421 313
150	234.00	bu	-16 -123	35 -72	86 -21	137 29	188 80	239 131	290 182	341 233	393 285	444 336	495 387

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 2016 input prices.

Table 2.A Estimated costs per acre
 Straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.5000	35.75	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	75.0000	28.50	_____
Cruiser Maxx Rice	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv (Levees)	lb	0.38	13.6000	5.17	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4999	6.56	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.5719	9.48	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	21.9949	37.38	_____
REPAIR & MAINTENANCE					
Implements	acre	7.79	1.0000	7.79	_____
Tractors	acre	3.29	1.0000	3.29	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	11.84	1.0000	11.84	_____
TOTAL DIRECT EXPENSES				690.98	_____
FIXED EXPENSES					
Implements	acre	16.64	1.0000	16.64	_____
Tractors	acre	20.73	1.0000	20.73	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.86	1.0000	63.86	_____
TOTAL FIXED EXPENSES				125.54	_____
TOTAL SPECIFIED EXPENSES				816.52	_____

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____

TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	54.05	1.0000	54.05	_____
ADJUVANTS	acre	10.65	1.0000	10.65	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.14	0.6759	8.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	30.5114	51.87	_____
REPAIR & MAINTENANCE	acre	29.95	1.0000	29.95	_____
INTEREST ON OP. CAP.	acre	11.84	1.0000	11.84	_____

TOTAL DIRECT EXPENSES				690.98	_____
RETURNS ABOVE DIRECT EXPENSES				-9.26	_____
TOTAL FIXED EXPENSES				125.54	_____

TOTAL SPECIFIED EXPENSES				816.52	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-134.80	_____

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

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	0.3300				
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				
Cruiser Maxx Rice	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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Cruiser Maxx Rice	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					0.6000				
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				
Karate Z	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 2016 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., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.93
2,4-D Amine 4	pt	5.58						0.18	5.76	5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Seed Conv.	lb	28.50						0.68	29.18	29.18
Cruiser Maxx Rice	lbseed	17.25						0.41	17.66	17.66
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Command 3ME	pt	19.34						0.46	19.80	19.80
Sharpen	oz	10.70						0.25	10.95	10.95
MSO	pt	1.88						0.04	1.92	1.92
SuperMax AMS	pt	1.34						0.03	1.37	1.37
Seed Levees										
Rice Seed Cv (Levees)	lb	5.17						0.12	5.29	5.29
Cruiser Maxx Rice	lbseed	3.13						0.07	3.20	3.20
Rice Consultant	acre	8.00						0.16	8.16	8.16
App Fert by Air	cwt	7.00						0.14	7.14	7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	8.79
DAP	cwt	12.41						0.25	12.66	12.66
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Regiment	oz	26.63						0.53	27.16	27.16
Dyne-A-Pak	pt	2.32						0.05	2.37	2.37
App Fert by Air	cwt	17.50						0.35	17.85	17.85
Urea, Solid (46% N)	cwt	41.95						0.83	42.78	42.78
NBPT	pt	7.67						0.15	7.82	7.82
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Facet L	pt	39.92						0.79	40.71	40.71
Permit	oz	15.44						0.31	15.75	15.75
Crop Oil Conc. (Pet.)	pt	0.99						0.02	1.01	1.01
App by Air (5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.85						0.28	18.13	18.13
MSO	pt	3.75						0.06	3.81	3.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	10.50						0.17	10.67	10.67
Urea, Solid (46% N)	cwt	25.17						0.40	25.57	25.57
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Stratego	pt	26.81						0.32	27.13	27.13
Surfactant	pt	0.37							0.37	0.37
App by Air (3 gal)	appl	7.50						0.09	7.59	7.59
Karate Z	oz	7.74						0.09	7.83	7.83
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.43	55.03	55.03
Dry Rice	bu	62.40						0.49	62.89	62.89
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre	2.25	38.53	13.22	22.53			1.40	77.93	66.89
TOTALS		550.53	51.87	29.95	46.79	0.00	11.84	690.98	125.54	816.52

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

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	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	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	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.05	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	11.61	5.44	6.34	6.34	9.98	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	11.62	9.69	9.69	9.69	5.60	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.91	6.91	2.03	2.03	8.86	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	3.05	4.45	1.25	0.79	1.12	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	131.73	227.94	79.83	67.77	142.56	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-131.73	-227.94	-79.83	-67.77	539.16	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-162.93	-390.87	-470.70	-538.47	0.69	-9.26

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-376 -501	-359 -484	-342 -467	-325 -450	-308 -433	-291 -416	-274 -399	-257 -382	-240 -365	-222 -348	-205 -331
60	93.60	bu	-337 -462	-316 -442	-296 -421	-275 -401	-255 -380	-234 -360	-214 -339	-193 -319	-173 -298	-152 -278	-132 -258
70	109.20	bu	-297 -423	-273 -399	-249 -375	-226 -351	-202 -327	-178 -303	-154 -280	-130 -256	-106 -232	-82 -208	-59 -184
80	124.80	bu	-258 -383	-231 -356	-203 -329	-176 -302	-149 -274	-122 -247	-94 -220	-67 -193	-40 -165	-12 -138	14 -111
90	140.40	bu	-219 -344	-188 -313	-157 -283	-126 -252	-96 -221	-65 -191	-34 -160	-4 -129	26 -99	57 -68	87 -37
100	156.00	bu	-179 -305	-145 -271	-111 -237	-77 -202	-43 -168	-9 -134	24 -100	58 -66	92 -32	127 1	161 35
110	171.60	bu	-140 -265	-102 -228	-65 -190	-27 -153	9 -115	47 -78	84 -40	122 -3	159 34	197 71	234 109
120	187.20	bu	-101 -226	-60 -185	-19 -144	21 -103	62 -62	103 -22	144 18	185 59	226 100	267 141	308 182
130	202.80	bu	-61 -187	-17 -142	26 -98	71 -54	115 -9	159 34	204 78	248 122	292 167	337 211	381 255
140	218.40	bu	-22 -147	25 -100	73 -52	120 -4	168 43	216 90	263 138	311 186	359 233	407 281	454 329
150	234.00	bu	16 -108	68 -57	119 -6	170 44	221 95	272 147	323 198	374 249	426 300	477 351	528 402

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 2016 input prices.

Table 3.A Estimated costs per acre
 Straight levee rice
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.5000	35.75	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	75.0000	28.50	_____
Cruiser Maxx Rice	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv(Levees)	lb	0.38	13.6000	5.17	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.75	1.5000	5.63	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.5000	1.24	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.92	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8180	9.90	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	18.7364	31.85	_____
REPAIR & MAINTENANCE					
Implements	acre	7.85	1.0000	7.85	_____
Tractors	acre	3.44	1.0000	3.44	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	11.75	1.0000	11.75	_____
TOTAL DIRECT EXPENSES				683.53	_____
FIXED EXPENSES					
Implements	acre	17.09	1.0000	17.09	_____
Tractors	acre	21.67	1.0000	21.67	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.42	1.0000	63.42	_____
TOTAL FIXED EXPENSES				126.49	_____
TOTAL SPECIFIED EXPENSES				810.02	_____

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____

TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	54.05	1.0000	54.05	_____
ADJUVANTS	acre	10.90	1.0000	10.90	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.23	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	27.4990	46.76	_____
REPAIR & MAINTENANCE	acre	29.84	1.0000	29.84	_____
INTEREST ON OP. CAP.	acre	11.75	1.0000	11.75	_____

TOTAL DIRECT EXPENSES				683.53	_____
RETURNS ABOVE DIRECT EXPENSES				-1.81	_____
TOTAL FIXED EXPENSES				126.49	_____

TOTAL SPECIFIED EXPENSES				810.02	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-128.30	_____

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

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	0.3300				
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				
Cruiser Maxx Rice	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				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Cruiser Maxx Rice	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					0.6000				
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				
Karate Z	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 2016 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., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.93
2,4-D Amine 4	pt	5.58						0.18	5.76	5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Seed Conv.	lb	28.50						0.68	29.18	29.18
Cruiser Maxx Rice	lbseed	17.25						0.41	17.66	17.66
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Command 3ME	pt	19.34						0.46	19.80	19.80
Sharpen	oz	10.70						0.25	10.95	10.95
SuperMax AMS	pt	1.34						0.03	1.37	1.37
MSO	pt	1.88						0.04	1.92	1.92
Seed Levees										
Rice Seed Cv (Levees)	lb	5.17						0.12	5.29	5.29
Cruiser Maxx Rice	lbseed	3.13						0.07	3.20	3.20
Rice Consultant	acre	8.00						0.16	8.16	8.16
App Fert by Air	cwt	7.00						0.14	7.14	7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	8.79
DAP	cwt	12.41						0.25	12.66	12.66
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Regiment	oz	26.63						0.53	27.16	27.16
Dyne-A-Pak	pt	2.32						0.05	2.37	2.37
App Fert by Air	cwt	17.50						0.35	17.85	17.85
Urea, Solid (46% N)	cwt	41.95						0.83	42.78	42.78
NBPT	pt	7.67						0.15	7.82	7.82
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Facet L	pt	39.92						0.79	40.71	40.71
Permit	oz	15.44						0.31	15.75	15.75
Crop Oil Conc. (Pet.)	pt	1.24						0.02	1.26	1.26
App by Air (5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.85						0.28	18.13	18.13
MSO	pt	3.75						0.06	3.81	3.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	10.50						0.17	10.67	10.67
Urea, Solid (46% N)	cwt	25.17						0.40	25.57	25.57
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Stratego	pt	26.81						0.32	27.13	27.13
Surfactant	pt	0.37							0.37	0.37
App by Air (3 gal)	appl	7.50						0.09	7.59	7.59
Karate Z	oz	7.74						0.09	7.83	7.83
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.43	55.03	55.03
Dry Rice	bu	62.40						0.49	62.89	62.89
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre	10.50	33.42	13.11	11.89			1.31	70.23	67.84
TOTALS		559.03	46.76	29.84	36.15	0.00	11.75	683.53	126.49	810.02

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

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	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	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	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	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	7.74	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.05	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.56	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	9.40	2.72	3.62	3.62	9.71	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	10.56	8.31	8.31	8.31	5.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.97	6.84	1.96	1.96	8.90	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	3.17	4.37	1.18	0.74	1.11	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	136.89	223.94	75.59	63.55	142.41	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-136.89	-223.94	-75.59	-63.55	539.31	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-168.09	-392.03	-467.62	-531.17	8.14	-1.81

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-368 -495	-351 -478	-334 -461	-317 -444	-300 -427	-283 -410	-266 -393	-249 -376	-232 -359	-215 -342	-198 -324
60	93.60	bu	-329 -456	-309 -435	-288 -415	-268 -394	-247 -374	-227 -353	-206 -333	-186 -312	-165 -292	-145 -272	-125 -251
70	109.20	bu	-290 -416	-266 -392	-242 -369	-218 -345	-194 -321	-170 -297	-147 -273	-123 -249	-99 -225	-75 -201	-51 -178
80	124.80	bu	-250 -377	-223 -350	-196 -322	-169 -295	-141 -268	-114 -241	-87 -213	-60 -186	-32 -159	-5 -131	21 -104
90	140.40	bu	-211 -338	-180 -307	-150 -276	-119 -246	-88 -215	-58 -184	-27 -154	3 -123	33 -92	64 -61	95 -31
100	156.00	bu	-172 -298	-138 -264	-104 -230	-69 -196	-35 -162	-1 -128	32 -94	66 -60	100 -26	134 8	168 42
110	171.60	bu	-132 -259	-95 -221	-57 -184	-20 -146	17 -109	54 -71	92 -34	129 3	167 40	204 78	242 115
120	187.20	bu	-93 -220	-52 -179	-11 -138	29 -97	70 -56	110 -15	151 25	192 66	233 107	274 148	315 188
130	202.80	bu	-54 -180	-9 -136	34 -92	78 -47	123 -3	167 40	211 85	255 129	300 173	344 218	388 262
140	218.40	bu	-14 -141	32 -93	80 -45	128 1	175 49	223 97	271 144	319 192	366 240	414 288	462 335
150	234.00	bu	24 -102	75 -50	126 0	177 51	228 102	280 153	331 204	382 255	433 306	484 358	535 409

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 2016 input prices.

Table 4.A Estimated costs per acre
 Straight levee rice - zero grade
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	5.5000	35.75	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	75.0000	28.50	_____
Cruiser Maxx Rice	lbseed	0.23	75.0000	17.25	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.75	1.5000	5.63	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.5000	1.24	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4228	5.55	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	4.8970	8.33	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	15.4779	26.30	_____
REPAIR & MAINTENANCE					
Implements	acre	7.69	1.0000	7.69	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	11.08	1.0000	11.08	_____
TOTAL DIRECT EXPENSES				651.86	_____
FIXED EXPENSES					
Implements	acre	16.20	1.0000	16.20	_____
Tractors	acre	18.14	1.0000	18.14	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				121.74	_____
TOTAL SPECIFIED EXPENSES				773.60	_____

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____

TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	45.75	1.0000	45.75	_____
ADJUVANTS	acre	10.90	1.0000	10.90	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.14	0.5988	7.86	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	23.3194	39.64	_____
REPAIR & MAINTENANCE	acre	27.12	1.0000	27.12	_____
INTEREST ON OP. CAP.	acre	11.08	1.0000	11.08	_____

TOTAL DIRECT EXPENSES				651.86	_____
RETURNS ABOVE DIRECT EXPENSES				29.86	_____
TOTAL FIXED EXPENSES				121.74	_____

TOTAL SPECIFIED EXPENSES				773.60	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-91.88	_____

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

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	0.3300				
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				
Cruiser Maxx Rice	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				
SuperMax AMS	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					0.6000				
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				
Karate Z	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 2016 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., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90	13.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03	4.37
App by Air (5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93		6.93
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67	13.31
Rice Seed Conv.	lb	28.50						0.68	29.18		29.18
Cruiser Maxx Rice	lbseed	17.25						0.41	17.66		17.66
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44	5.29
App by Air (5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Command 3ME	pt	19.34						0.46	19.80		19.80
Sharpen	oz	10.70						0.25	10.95		10.95
SuperMax AMS	pt	1.34						0.03	1.37		1.37
MSO	pt	1.88						0.04	1.92		1.92
Rice Consultant	acre	8.00						0.16	8.16		8.16
App Fert by Air	cwt	7.00						0.14	7.14		7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79		8.79
DAP	cwt	12.41						0.25	12.66		12.66
App by Air (5 gal)	appl	6.50						0.13	6.63		6.63
Regiment	oz	26.63						0.53	27.16		27.16
Dyne-A-Pak	pt	2.32						0.05	2.37		2.37
App Fert by Air	cwt	17.50						0.35	17.85		17.85
Urea, Solid (46% N)	cwt	41.95						0.83	42.78		42.78
NBPT	pt	7.67						0.15	7.82		7.82
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	6.50						0.13	6.63		6.63
Facet L	pt	39.92						0.79	40.71		40.71
Permit	oz	15.44						0.31	15.75		15.75
Crop Oil Conc.(Pet.)	pt	1.24						0.02	1.26		1.26
App by Air (5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.85						0.28	18.13		18.13
MSO	pt	3.75						0.06	3.81		3.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	10.50						0.17	10.67		10.67
Urea, Solid (46% N)	cwt	25.17						0.40	25.57		25.57
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Stratego	pt	26.81						0.32	27.13		27.13
Surfactant	pt	0.37							0.37		0.37
App by Air (3 gal)	appl	7.50						0.09	7.59		7.59
Karate Z	oz	7.74						0.09	7.83		7.83
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98	46.03
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66	1.34
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.43	55.03		55.03
Dry Rice	bu	62.40						0.49	62.89		62.89
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97	20.92
Flood Irr.	acre		26.30	10.39	9.53			0.83	47.05	63.09	110.14
TOTALS		540.23	39.64	27.12	33.79	0.00	11.08	651.86	121.74	773.60	

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

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	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	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	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	45.75	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.56	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	6.63	3.18	4.08	4.08	8.74	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	8.07	6.92	6.92	6.92	5.23	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	3.99	6.33	1.45	1.45	8.69	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	2.57	4.34	1.16	0.73	1.10	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	111.25	222.47	74.13	62.10	140.76	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-111.25	-222.47	-74.13	-62.10	540.96	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-142.45	-364.92	-439.05	-501.15	39.81	29.86

Note: Cost of production estimates are based on 2016 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., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-337 -458	-320 -441	-303 -424	-286 -407	-269 -390	-252 -373	-234 -356	-217 -339	-200 -322	-183 -305	-166 -288
60	93.60	bu	-297 -419	-277 -399	-257 -378	-236 -358	-216 -337	-195 -317	-175 -296	-154 -276	-134 -256	-113 -235	-93 -215
70	109.20	bu	-258 -380	-234 -356	-210 -332	-187 -308	-163 -284	-139 -261	-115 -237	-91 -213	-67 -189	-43 -165	-19 -141
80	124.80	bu	-219 -340	-191 -313	-164 -286	-137 -259	-110 -231	-82 -204	-55 -177	-28 -150	-1 -122	26 -95	53 -68
90	140.40	bu	-179 -301	-149 -270	-118 -240	-87 -209	-57 -178	-26 -148	4 -117	34 -86	65 -56	96 -25	126 5
100	156.00	bu	-140 -262	-106 -228	-72 -194	-38 -160	-4 -125	29 -91	63 -57	98 -23	132 10	166 44	200 78
110	171.60	bu	-101 -222	-63 -185	-26 -147	11 -110	48 -72	86 -35	123 1	161 39	198 76	236 114	273 151
120	187.20	bu	-61 -183	-20 -142	19 -101	60 -60	101 -20	142 20	183 61	224 102	265 143	306 184	347 225
130	202.80	bu	-22 -144	21 -99	66 -55	110 -11	154 32	199 77	243 121	287 165	331 210	376 254	420 298
140	218.40	bu	16 -104	64 -57	112 -9	159 38	207 85	255 133	303 181	350 229	398 276	446 324	493 372
150	234.00	bu	56 -65	107 -14	158 36	209 87	260 138	311 190	362 241	414 292	465 343	516 394	567 445

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 2016 input prices.

Table 5.A Estimated costs per acre
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	65.0000	68.25	_____
Cruiser Maxx Rice	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.75	1.5000	5.63	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5757	7.55	_____
Harvesters	hour	13.14	0.2030	2.67	_____
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	0.0926	0.84	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	13.13	0.5887	7.73	_____
DIESEL FUEL					
Tractors	gal	1.70	6.3153	10.76	_____
Harvesters	gal	1.70	3.3975	5.78	_____
Flood Irr.	gal	1.70	26.8827	45.69	_____
REPAIR & MAINTENANCE					
Implements	acre	8.46	1.0000	8.46	_____
Tractors	acre	3.75	1.0000	3.75	_____
Harvesters	acre	7.11	1.0000	7.11	_____
Flood Irr.	acre	12.69	1.0000	12.69	_____
INTEREST ON OP. CAP.	acre	13.35	1.0000	13.35	_____
TOTAL DIRECT EXPENSES				758.02	_____
FIXED EXPENSES					
Implements	acre	17.87	1.0000	17.87	_____
Tractors	acre	23.52	1.0000	23.52	_____
Harvesters	acre	28.05	1.0000	28.05	_____
Flood Irr.	acre	39.95	1.0000	39.95	_____
TOTAL FIXED EXPENSES				109.39	_____
TOTAL SPECIFIED EXPENSES				867.41	_____

Note: Cost of production estimates are based on 2016 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
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____

TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.25	1.0000	45.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	98.56	1.0000	98.56	_____
ADJUVANTS	acre	17.22	1.0000	17.22	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	13.14	0.7788	10.22	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	13.13	0.5887	7.73	_____
DIESEL FUEL	gal	1.70	36.5955	62.23	_____
REPAIR & MAINTENANCE	acre	32.01	1.0000	32.01	_____
INTEREST ON OP. CAP.	acre	13.35	1.0000	13.35	_____

TOTAL DIRECT EXPENSES				758.02	_____
RETURNS ABOVE DIRECT EXPENSES				-76.30	_____
TOTAL FIXED EXPENSES				109.39	_____

TOTAL SPECIFIED EXPENSES				867.41	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-185.69	_____

Note: Cost of production estimates are based on 2016 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
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
Cruiser Maxx Rice	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
App by Air (5 gal)	appl					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	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				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.77	0.77	6.14	0.58

Note: Cost of production estimates are based on 2016 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
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.93
2,4-D Amine 4	pt	5.58						0.18	5.76	5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Clearfield	lb	68.25						1.62	69.87	69.87
Cruiser Maxx Rice	lbseed	14.95						0.36	15.31	15.31
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Command 3ME	pt	19.34						0.46	19.80	19.80
Sharpen	oz	10.70						0.25	10.95	10.95
SuperMax AMS	pt	1.34						0.03	1.37	1.37
MSO	pt	1.88						0.04	1.92	1.92
Seed Levees										
Rice Seed CF(Levees)	lb	12.60						0.30	12.90	12.90
Cruiser Maxx Rice	lbseed	2.76						0.07	2.83	2.83
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Clearpath	lb	29.77						0.71	30.48	30.48
Crop Oil Conc.(Pet.)	pt	4.94						0.12	5.06	5.06
App Fert by Air	cwt	7.00						0.14	7.14	7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	8.79
DAP	cwt	12.41						0.25	12.66	12.66
Rice Consultant	acre	8.00						0.16	8.16	8.16
App Fert by Air	cwt	17.50						0.35	17.85	17.85
Urea, Solid (46% N)	cwt	41.95						0.83	42.78	42.78
NBPT	pt	7.67						0.15	7.82	7.82
App by Air (10 gal)	appl	8.50						0.17	8.67	8.67
Newpath	oz	21.78						0.43	22.21	22.21
Crop Oil Conc.(Pet.)	pt	4.94						0.10	5.04	5.04
Aim	oz	8.40						0.17	8.57	8.57
Rice Management										
RICE MGT. LABOR	hour				2.72			0.05	2.77	2.77
App by Air (5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.85						0.28	18.13	18.13
MSO	pt	3.75						0.06	3.81	3.81
Rice Management										
RICE MGT. LABOR	hour				4.53			0.07	4.60	4.60
App Fert by Air	cwt	10.50						0.17	10.67	10.67
Urea, Solid (46% N)	cwt	25.17						0.40	25.57	25.57
Rice Management										
RICE MGT. LABOR	hour				4.53			0.05	4.58	4.58
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Stratego	pt	26.81						0.32	27.13	27.13
Surfactant	pt	0.37							0.37	0.37
App by Air (3 gal)	appl	7.50						0.09	7.59	7.59
Karate Z	oz	7.74						0.09	7.83	7.83
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (CL)	25' Rigid		5.78	9.82	5.07			0.16	20.83	32.29
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.43	55.03	55.03
Dry Rice	bu	62.40						0.49	62.89	62.89
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre	4.50	47.56	13.53	33.59			1.79	100.97	44.92
TOTALS		583.82	62.23	32.01	66.61	0.00	13.35	758.02	109.39	867.41

Note: Cost of production estimates are based on 2016 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
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

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	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	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	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	98.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	16.42	9.52	11.33	11.33	10.93	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	12.58	12.46	12.46	12.46	6.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	5.21	7.01	2.13	2.13	10.32	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.29	3.49	1.37	0.88	1.14	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	228.01	179.25	87.81	75.72	146.08	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-228.01	-179.25	-87.81	-75.72	535.64	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-259.21	-438.46	-526.27	-601.99	-66.35	-76.30

Note: Cost of production estimates are based on 2016 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
 Clearfield contour levee rice
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-443 -552	-426 -535	-409 -518	-392 -501	-375 -484	-358 -467	-341 -450	-324 -433	-307 -416	-290 -399	-272 -382
60	93.60	bu	-404 -513	-383 -493	-363 -472	-342 -452	-322 -431	-301 -411	-281 -390	-260 -370	-240 -349	-220 -329	-199 -308
70	109.20	bu	-364 -474	-340 -450	-317 -426	-293 -402	-269 -378	-245 -354	-221 -330	-197 -307	-173 -283	-149 -259	-126 -235
80	124.80	bu	-325 -434	-298 -407	-270 -380	-243 -352	-216 -325	-189 -298	-161 -271	-134 -243	-107 -216	-79 -189	-52 -162
90	140.40	bu	-286 -395	-255 -364	-224 -334	-194 -303	-163 -272	-132 -242	-102 -211	-71 -180	-40 -150	-9 -119	20 -88
100	156.00	bu	-246 -356	-212 -322	-178 -287	-144 -253	-110 -219	-76 -185	-42 -151	-8 -117	25 -83	60 -49	94 -15
110	171.60	bu	-207 -316	-169 -279	-132 -241	-94 -204	-57 -166	-19 -129	17 -91	55 -54	92 -16	130 20	167 58
120	187.20	bu	-168 -277	-127 -236	-86 -195	-45 -154	-4 -113	36 -72	77 -32	118 8	159 49	200 90	240 131
130	202.80	bu	-128 -238	-84 -193	-40 -149	4 -105	48 -60	92 -16	137 27	181 72	225 116	270 160	314 205
140	218.40	bu	-89 -198	-41 -151	6 -103	53 -55	101 -7	149 39	196 87	244 135	292 182	340 230	387 278
150	234.00	bu	-50 -159	1 -108	52 -57	103 -6	154 45	205 96	256 147	307 198	358 249	410 300	461 351

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2016 input prices.

Table 6.A Estimated costs per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	65.0000	68.25	_____
Cruiser Maxx Rice	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.93	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	0.0926	0.84	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.13	0.5643	7.41	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8986	10.04	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	21.9949	37.38	_____
REPAIR & MAINTENANCE					
Implements	acre	8.04	1.0000	8.04	_____
Tractors	acre	3.48	1.0000	3.48	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	12.84	1.0000	12.84	_____
TOTAL DIRECT EXPENSES				724.85	_____
FIXED EXPENSES					
Implements	acre	16.94	1.0000	16.94	_____
Tractors	acre	21.94	1.0000	21.94	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.86	1.0000	63.86	_____
TOTAL FIXED EXPENSES				127.05	_____
TOTAL SPECIFIED EXPENSES				851.90	_____

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____

TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.25	1.0000	45.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	98.56	1.0000	98.56	_____
ADJUVANTS	acre	17.22	1.0000	17.22	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.24	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5643	7.41	_____
DIESEL FUEL	gal	1.70	30.8381	52.43	_____
REPAIR & MAINTENANCE	acre	30.39	1.0000	30.39	_____
INTEREST ON OP. CAP.	acre	12.84	1.0000	12.84	_____

TOTAL DIRECT EXPENSES				724.85	_____
RETURNS ABOVE DIRECT EXPENSES				-43.13	_____
TOTAL FIXED EXPENSES				127.05	_____

TOTAL SPECIFIED EXPENSES				851.90	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-170.18	_____

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
Cruiser Maxx Rice	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
App by Air (5 gal)	appl					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	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				
Karate Z	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							0.70	0.70	4.12	0.56

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90	13.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03	4.37
App by Air (5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93		6.93
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67	13.31
Rice Clearfield	lb	68.25						1.62	69.87		69.87
Cruiser Maxx Rice	lbseed	14.95						0.36	15.31		15.31
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44	5.29
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
App by Air (5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Command 3ME	pt	19.34						0.46	19.80		19.80
Sharpen	oz	10.70						0.25	10.95		10.95
MSO	pt	1.88						0.04	1.92		1.92
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CF(Levees)	lb	12.60						0.30	12.90		12.90
Cruiser Maxx Rice	lbseed	2.76						0.07	2.83		2.83
App by Air (5 gal)	appl	6.50						0.15	6.65		6.65
Clearpath	lb	29.77						0.71	30.48		30.48
Crop Oil Conc.(Pet.)	pt	4.94						0.12	5.06		5.06
App Fert by Air	cwt	7.00						0.14	7.14		7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79		8.79
DAP	cwt	12.41						0.25	12.66		12.66
Rice Consultant	acre	8.00						0.16	8.16		8.16
App Fert by Air	cwt	17.50						0.35	17.85		17.85
Urea, Solid (46% N)	cwt	41.95						0.83	42.78		42.78
NBPT	pt	7.67						0.15	7.82		7.82
App by Air (10 gal)	appl	8.50						0.17	8.67		8.67
Newpath	oz	21.78						0.43	22.21		22.21
Crop Oil Conc.(Pet.)	pt	4.94						0.10	5.04		5.04
Aim	oz	8.40						0.17	8.57		8.57
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.85						0.28	18.13		18.13
MSO	pt	3.75						0.06	3.81		3.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	10.50						0.17	10.67		10.67
Urea, Solid (46% N)	cwt	25.17						0.40	25.57		25.57
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air (5 gal)	appl	6.50						0.08	6.58		6.58
Stratego	pt	26.81						0.32	27.13		27.13
Surfactant	pt	0.37							0.37		0.37
App by Air (3 gal)	appl	7.50						0.09	7.59		7.59
Karate Z	oz	7.74						0.09	7.83		7.83
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98	46.03
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66	1.34
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	54.60						0.43	55.03		55.03
Dry Rice	bu	62.40						0.49	62.89		62.89
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97	20.92
Flood Irr.	acre	2.25	38.53	13.22	22.53			1.40	77.93	66.89	144.82
TOTALS		581.57	52.43	30.39	47.62	0.00	12.84	724.85	127.05	851.90	

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	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	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	98.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	12.44	5.44	6.34	6.34	9.98	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	12.18	9.69	9.69	9.69	5.60	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	5.35	6.91	2.03	2.03	8.86	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.14	3.36	1.25	0.79	1.12	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	221.37	172.17	79.83	67.77	142.56	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-221.37	-172.17	-79.83	-67.77	539.16	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-252.57	-424.74	-504.57	-572.34	-33.18	-43.13

Note: Cost of production estimates are based on 2016 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
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-410 -537	-393 -520	-376 -503	-359 -486	-342 -469	-325 -452	-307 -435	-290 -417	-273 -400	-256 -383	-239 -366
60	93.60	bu	-370 -497	-350 -477	-330 -457	-309 -436	-289 -416	-268 -395	-248 -375	-227 -354	-207 -334	-186 -313	-166 -293
70	109.20	bu	-331 -458	-307 -434	-283 -410	-259 -387	-236 -363	-212 -339	-188 -315	-164 -291	-140 -267	-116 -243	-92 -220
80	124.80	bu	-292 -419	-264 -392	-237 -364	-210 -337	-183 -310	-155 -282	-128 -255	-101 -228	-74 -201	-46 -173	-19 -146
90	140.40	bu	-252 -379	-222 -349	-191 -318	-160 -287	-130 -257	-99 -226	-68 -195	-38 -165	-7 -134	23 -103	53 -73
100	156.00	bu	-213 -340	-179 -306	-145 -272	-111 -238	-77 -204	-43 -170	-9 -136	25 -102	59 -67	93 -33	127 0
110	171.60	bu	-174 -301	-136 -263	-99 -226	-61 -188	-24 -151	13 -113	50 -76	88 -38	125 -1	163 36	200 73
120	187.20	bu	-134 -261	-93 -221	-53 -180	-12 -139	28 -98	69 -57	110 -16	151 24	192 65	233 106	274 147
130	202.80	bu	-95 -222	-51 -178	-6 -133	37 -89	81 -45	126 -1	170 43	214 87	258 131	303 176	347 220
140	218.40	bu	-56 -183	-8 -135	39 -87	86 -40	134 7	182 55	230 103	277 150	325 198	373 246	420 293
150	234.00	bu	-16 -143	34 -92	85 -41	136 9	187 60	238 111	289 162	341 213	392 265	443 316	494 367

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 2016 input prices.

Table 7.A Estimated costs per acre
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	65.0000	68.25	_____
Cruiser Maxx Rice	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.92	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8180	9.90	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	18.7364	31.85	_____
REPAIR & MAINTENANCE					
Implements	acre	7.85	1.0000	7.85	_____
Tractors	acre	3.44	1.0000	3.44	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	12.71	1.0000	12.71	_____
TOTAL DIRECT EXPENSES				715.28	_____
FIXED EXPENSES					
Implements	acre	17.09	1.0000	17.09	_____
Tractors	acre	21.67	1.0000	21.67	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.42	1.0000	63.42	_____
TOTAL FIXED EXPENSES				126.49	_____
TOTAL SPECIFIED EXPENSES				841.77	_____

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____

TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.25	1.0000	45.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	98.56	1.0000	98.56	_____
ADJUVANTS	acre	17.22	1.0000	17.22	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.23	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	27.4990	46.76	_____
REPAIR & MAINTENANCE	acre	29.84	1.0000	29.84	_____
INTEREST ON OP. CAP.	acre	12.71	1.0000	12.71	_____

TOTAL DIRECT EXPENSES				715.28	_____
RETURNS ABOVE DIRECT EXPENSES				-33.56	_____
TOTAL FIXED EXPENSES				126.49	_____

TOTAL SPECIFIED EXPENSES				841.77	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-160.05	_____

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
Cruiser Maxx Rice	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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	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				
Karate Z	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 2016 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
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	4.37
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.71
2,4-D Amine 4	pt	5.58						0.18	5.76	6.93
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	5.76
Rice Clearfield	lb	68.25						1.62	69.87	13.31
Cruiser Maxx Rice	lbseed	14.95						0.36	15.31	69.87
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	15.31
App by Air (5 gal)	appl	6.50						0.15	6.65	2.44
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	5.29
Command 3ME	pt	19.34						0.46	19.80	6.65
Sharpen	oz	10.70						0.25	10.95	4.59
MSO	pt	1.88						0.04	1.92	19.80
SuperMax AMS	pt	1.34						0.03	1.37	10.95
Seed Levees										1.92
Rice Seed CF (Levees)	lb	12.60						0.30	12.90	1.37
Cruiser Maxx Rice	lbseed	2.76						0.07	2.83	12.90
App by Air (5 gal)	appl	6.50						0.15	6.65	2.83
Clearpath	lb	29.77						0.71	30.48	6.65
Crop Oil Conc. (Pet.)	pt	4.94						0.12	5.06	30.48
App Fert by Air	cwt	7.00						0.14	7.14	5.06
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	7.14
DAP	cwt	12.41						0.25	12.66	8.79
Rice Consultant	acre	8.00						0.16	8.16	12.66
App Fert by Air	cwt	17.50						0.35	17.85	8.16
Urea, Solid (46% N)	cwt	41.95						0.83	42.78	17.85
NBPT	pt	7.67						0.15	7.82	42.78
App by Air (10 gal)	appl	8.50						0.17	8.67	7.82
Newpath	oz	21.78						0.43	22.21	8.67
Crop Oil Conc. (Pet.)	pt	4.94						0.10	5.04	22.21
Aim	oz	8.40						0.17	8.57	5.04
Rice Management										8.57
RICE MGT. LABOR	hour				0.91			0.02	0.93	
App by Air (5 gal)	appl	3.25						0.05	3.30	0.93
Clincher SF	oz	17.85						0.28	18.13	3.30
MSO	pt	3.75						0.06	3.81	18.13
Rice Management										3.81
RICE MGT. LABOR	hour				1.81			0.03	1.84	
App Fert by Air	cwt	10.50						0.17	10.67	1.84
Urea, Solid (46% N)	cwt	25.17						0.40	25.57	10.67
Rice Management										25.57
RICE MGT. LABOR	hour				1.81			0.02	1.83	
App by Air (5 gal)	appl	6.50						0.08	6.58	1.83
Stratego	pt	26.81						0.32	27.13	6.58
Surfactant	pt	0.37							0.37	27.13
App by Air (3 gal)	appl	7.50						0.09	7.59	0.37
Karate Z	oz	7.74						0.09	7.83	7.59
Rice Management										7.83
RICE MGT. LABOR	hour				1.81			0.01	1.82	
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	1.82
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	27.98
Handling & Storage										0.66
HAND LABOR	hour				2.27			0.02	2.29	1.34
Haul Rice	bu	54.60						0.43	55.03	2.29
Dry Rice	bu	62.40						0.49	62.89	55.03
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	62.89
Flood Irr.	acre	10.50	33.42	13.11	11.89			1.31	70.23	10.97
TOTALS		589.82	46.76	29.84	36.15	0.00	12.71	715.28	126.49	841.77

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	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	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	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	7.74	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	98.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	9.40	2.72	3.62	3.62	9.71	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	10.56	8.31	8.31	8.31	5.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.97	6.84	1.96	1.96	8.90	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.22	3.28	1.18	0.74	1.11	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	224.66	167.92	75.59	63.55	142.41	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-224.66	-167.92	-75.59	-63.55	539.31	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-255.86	-423.78	-499.37	-562.92	-23.61	-33.56

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-400 -527	-383 -510	-366 -493	-349 -476	-332 -458	-315 -441	-298 -424	-281 -407	-264 -390	-247 -373	-230 -356
60	93.60	bu	-361 -487	-340 -467	-320 -446	-299 -426	-279 -406	-259 -385	-238 -365	-218 -344	-197 -324	-177 -303	-156 -283
70	109.20	bu	-322 -448	-298 -424	-274 -400	-250 -376	-226 -353	-202 -329	-178 -305	-154 -281	-131 -257	-107 -233	-83 -209
80	124.80	bu	-282 -409	-255 -381	-228 -354	-200 -327	-173 -300	-146 -272	-119 -245	-91 -218	-64 -191	-37 -163	-9 -136
90	140.40	bu	-243 -369	-212 -339	-181 -308	-151 -277	-120 -247	-89 -216	-59 -185	-28 -155	2 -124	32 -93	63 -63
100	156.00	bu	-203 -330	-169 -296	-135 -262	-101 -228	-67 -194	-33 -160	0 -125	34 -91	68 -57	102 -23	136 10
110	171.60	bu	-164 -291	-127 -253	-89 -216	-52 -178	-14 -141	22 -103	60 -66	97 -28	135 8	172 46	210 83
120	187.20	bu	-125 -251	-84 -210	-43 -170	-2 -129	38 -88	79 -47	120 -6	161 34	201 75	242 116	283 157
130	202.80	bu	-85 -212	-41 -168	2 -123	46 -79	91 -35	135 9	179 53	224 97	268 142	312 186	357 230
140	218.40	bu	-46 -173	1 -125	48 -77	96 -29	144 17	191 65	239 113	287 160	335 208	382 256	430 304
150	234.00	bu	-7 -133	43 -82	94 -31	146 19	197 70	248 121	299 172	350 224	401 275	452 326	503 377

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 2016 input prices.

Table 8.A Estimated costs per acre
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	65.0000	68.25	_____
Cruiser Maxx Rice	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4228	5.55	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	4.8970	8.33	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	15.4779	26.30	_____
REPAIR & MAINTENANCE					
Implements	acre	7.69	1.0000	7.69	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	12.23	1.0000	12.23	_____
TOTAL DIRECT EXPENSES				692.10	_____
FIXED EXPENSES					
Implements	acre	16.20	1.0000	16.20	_____
Tractors	acre	18.14	1.0000	18.14	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				121.74	_____
TOTAL SPECIFIED EXPENSES				813.84	_____

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____

TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.25	1.0000	45.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	98.56	1.0000	98.56	_____
ADJUVANTS	acre	17.22	1.0000	17.22	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.14	0.5988	7.86	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	23.3194	39.64	_____
REPAIR & MAINTENANCE	acre	27.12	1.0000	27.12	_____
INTEREST ON OP. CAP.	acre	12.23	1.0000	12.23	_____

TOTAL DIRECT EXPENSES				692.10	_____
RETURNS ABOVE DIRECT EXPENSES				-10.38	_____
TOTAL FIXED EXPENSES				121.74	_____

TOTAL SPECIFIED EXPENSES				813.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-132.12	_____

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
Cruiser Maxx Rice	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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	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				
Karate Z	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 2016 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
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.93
2,4-D Amine 4	pt	5.58						0.18	5.76	5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Clearfield	lb	68.25						1.62	69.87	69.87
Cruiser Maxx Rice	lbseed	14.95						0.36	15.31	15.31
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Command 3ME	pt	19.34						0.46	19.80	19.80
Sharpen	oz	10.70						0.25	10.95	10.95
MSO	pt	1.88						0.04	1.92	1.92
SuperMax AMS	pt	1.34						0.03	1.37	1.37
Seed Levees										
Rice Seed CF (Levees)	lb	12.60						0.30	12.90	12.90
Cruiser Maxx Rice	lbseed	2.76						0.07	2.83	2.83
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Clearpath	lb	29.77						0.71	30.48	30.48
Crop Oil Conc. (Pet.)	pt	4.94						0.12	5.06	5.06
App Fert by Air	cwt	7.00						0.14	7.14	7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	8.79
DAP	cwt	12.41						0.25	12.66	12.66
Rice Consultant	acre	8.00						0.16	8.16	8.16
App Fert by Air	cwt	17.50						0.35	17.85	17.85
Urea, Solid (46% N)	cwt	41.95						0.83	42.78	42.78
NBPT	pt	7.67						0.15	7.82	7.82
App by Air (10 gal)	appl	8.50						0.17	8.67	8.67
Newpath	oz	21.78						0.43	22.21	22.21
Crop Oil Conc. (Pet.)	pt	4.94						0.10	5.04	5.04
Aim	oz	8.40						0.17	8.57	8.57
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.85						0.28	18.13	18.13
MSO	pt	3.75						0.06	3.81	3.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	10.50						0.17	10.67	10.67
Urea, Solid (46% N)	cwt	25.17						0.40	25.57	25.57
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air (5 gal)	appl	6.50						0.08	6.58	6.58
Stratego	pt	26.81						0.32	27.13	27.13
Surfactant	pt	0.37							0.37	0.37
App by Air (3 gal)	appl	7.50						0.09	7.59	7.59
Karate Z	oz	7.74						0.09	7.83	7.83
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.43	55.03	55.03
Dry Rice	bu	62.40						0.49	62.89	62.89
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre		26.30	10.39	9.53			0.83	47.05	63.09
TOTALS		579.32	39.64	27.12	33.79	0.00	12.23	692.10	121.74	813.84

Note: Cost of production estimates are based on 2016 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
 Clearfield straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	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	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	98.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	6.63	3.18	4.08	4.08	8.74	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	8.07	6.92	6.92	6.92	5.23	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	3.99	6.33	1.45	1.45	8.69	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	4.81	3.25	1.16	0.73	1.10	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	207.51	166.45	74.13	62.10	140.76	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-207.51	-166.45	-74.13	-62.10	540.96	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-238.71	-405.16	-479.29	-541.39	-0.43	-10.38

Note: Cost of production estimates are based on 2016 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
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
			PRODUCT PRICE										
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-377	-360	-343	-326	-309	-292	-275	-258	-241	-224	-207
			-499	-482	-465	-448	-431	-414	-396	-379	-362	-345	-328
60	93.60	bu	-338	-317	-297	-276	-256	-235	-215	-194	-174	-154	-133
			-459	-439	-418	-398	-378	-357	-337	-316	-296	-275	-255
70	109.20	bu	-298	-274	-251	-227	-203	-179	-155	-131	-107	-84	-60
			-420	-396	-372	-348	-325	-301	-277	-253	-229	-205	-181
80	124.80	bu	-259	-232	-204	-177	-150	-123	-95	-68	-41	-14	13
			-381	-353	-326	-299	-272	-244	-217	-190	-163	-135	-108
90	140.40	bu	-220	-189	-158	-128	-97	-66	-36	-5	25	55	86
			-341	-311	-280	-249	-219	-188	-157	-127	-96	-65	-35
100	156.00	bu	-180	-146	-112	-78	-44	-10	23	57	91	125	160
			-302	-268	-234	-200	-166	-132	-98	-63	-29	4	38
110	171.60	bu	-141	-103	-66	-28	8	46	83	120	158	195	233
			-263	-225	-188	-150	-113	-75	-38	-0	36	74	111
120	187.20	bu	-102	-61	-20	20	61	102	143	184	225	265	306
			-223	-182	-142	-101	-60	-19	21	62	103	144	185
130	202.80	bu	-62	-18	25	70	114	158	203	247	291	336	380
			-184	-140	-95	-51	-7	37	81	125	169	214	258
140	218.40	bu	-23	24	71	119	167	215	262	310	358	406	453
			-145	-97	-49	-2	45	93	141	188	236	284	332
150	234.00	bu	15	67	118	169	220	271	322	373	424	476	527
			-105	-54	-3	47	98	149	200	252	303	354	405

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 2016 input prices.

Table 9.A Estimated costs per acre
 Clearfield hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	5.30	23.0000	121.90	_____
Rice Seed CFH(Levee)	lb	1.77	4.2500	7.52	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc.(Pet.)	pt	2.47	4.0000	9.88	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
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	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4999	6.56	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.5719	9.48	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	21.9949	37.38	_____
REPAIR & MAINTENANCE					
Implements	acre	7.79	1.0000	7.79	_____
Tractors	acre	3.29	1.0000	3.29	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	13.14	1.0000	13.14	_____
TOTAL DIRECT EXPENSES				724.64	_____
FIXED EXPENSES					
Implements	acre	16.64	1.0000	16.64	_____
Tractors	acre	20.73	1.0000	20.73	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.86	1.0000	63.86	_____
TOTAL FIXED EXPENSES				125.54	_____
TOTAL SPECIFIED EXPENSES				850.18	_____

Note: Cost of production estimates are based on 2016 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 hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____

TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	38.75	1.0000	38.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	130.40	1.0000	130.40	_____
ADJUVANTS	acre	16.85	1.0000	16.85	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.14	0.6759	8.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	30.5114	51.87	_____
REPAIR & MAINTENANCE	acre	29.95	1.0000	29.95	_____
INTEREST ON OP. CAP.	acre	13.14	1.0000	13.14	_____

TOTAL DIRECT EXPENSES				724.64	_____
RETURNS ABOVE DIRECT EXPENSES				18.26	_____
TOTAL FIXED EXPENSES				125.54	_____

TOTAL SPECIFIED EXPENSES				850.18	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-107.28	_____

Note: Cost of production estimates are based on 2016 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 hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Cruiser Maxx Rice	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	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Karate Z	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	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
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 2016 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 hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90	13.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03	4.37
App by Air (5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93		6.93
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67	13.31
Rice Clrfld Hyb Trt	lb	121.90						2.90	124.80		124.80
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44	5.29
App by Air (5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Command 3ME	pt	19.34						0.46	19.80		19.80
Sharpen	oz	10.70						0.25	10.95		10.95
MSO	pt	1.88						0.04	1.92		1.92
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CFH (Levee)	lb	7.52						0.18	7.70		7.70
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00		1.00
App by Air (5 gal)	appl	6.50						0.15	6.65		6.65
Clearpath	lb	29.77						0.71	30.48		30.48
Crop Oil Conc. (Pet.)	pt	4.94						0.12	5.06		5.06
App Fert by Air	cwt	7.00						0.14	7.14		7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79		8.79
DAP	cwt	12.41						0.25	12.66		12.66
Rice Consultant	acre	8.00						0.16	8.16		8.16
App Fert by Air	cwt	18.69						0.37	19.06		19.06
Urea, Solid (46% N)	cwt	44.80						0.89	45.69		45.69
NBPT	pt	8.18						0.16	8.34		8.34
App by Air (10 gal)	appl	8.50						0.17	8.67		8.67
Newpath	oz	21.78						0.43	22.21		22.21
Crop Oil Conc. (Pet.)	pt	4.94						0.10	5.04		5.04
Aim	oz	8.40						0.17	8.57		8.57
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air (5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.85						0.28	18.13		18.13
MSO	pt	3.75						0.06	3.81		3.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	7.00						0.11	7.11		7.11
Urea, Solid (46% N)	cwt	16.78						0.27	17.05		17.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air (3 gal)	appl	7.50						0.09	7.59		7.59
Karate Z	oz	7.74						0.09	7.83		7.83
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98	46.03
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66	1.34
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	59.50						0.47	59.97		59.97
Dry Rice	bu	68.00						0.54	68.54		68.54
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97	20.92
Flood Irr.	acre	2.25	38.53	13.22	22.53			1.40	77.93	66.89	144.82
TOTALS		582.89	51.87	29.95	46.79	0.00	13.14	724.64	125.54	850.18	

Note: Cost of production estimates are based on 2016 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 hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	130.40	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	11.61	5.44	6.34	6.34	9.98	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	11.62	9.69	9.69	9.69	5.60	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.91	6.91	2.03	2.03	8.86	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.85	3.45	1.06	0.39	1.21	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	252.09	176.81	67.75	33.69	153.15	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-252.09	-176.81	-67.75	-33.69	589.75	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-283.29	-460.10	-527.85	-561.54	28.21	18.26

Note: Cost of production estimates are based on 2016 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 hybrid straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-381 -507	-363 -488	-344 -470	-326 -451	-307 -433	-288 -414	-270 -395	-251 -377	-233 -358	-214 -340	-196 -321
60	102.00	bu	-338 -464	-316 -442	-294 -419	-272 -397	-249 -375	-227 -353	-205 -330	-182 -308	-160 -286	-138 -263	-116 -241
70	119.00	bu	-296 -421	-270 -395	-244 -369	-218 -343	-192 -317	-166 -291	-140 -265	-114 -239	-88 -213	-62 -187	-36 -161
80	136.00	bu	-253 -378	-223 -349	-193 -319	-164 -289	-134 -259	-104 -230	-74 -200	-45 -170	-15 -141	14 -111	43 -81
90	153.00	bu	-210 -335	-176 -302	-143 -269	-110 -235	-76 -202	-43 -168	-9 -135	23 -101	57 -68	90 -34	123 -1
100	170.00	bu	-167 -293	-130 -255	-93 -218	-56 -181	-18 -144	18 -107	55 -70	92 -32	129 4	166 41	203 78
110	187.00	bu	-124 -250	-83 -209	-42 -168	-2 -127	38 -86	79 -45	120 -4	161 35	202 76	243 117	283 158
120	204.00	bu	-81 -207	-37 -162	7 -118	51 -73	96 -28	141 15	185 60	230 104	274 149	319 193	364 238
130	221.00	bu	-38 -164	9 -116	57 -67	106 -19	154 28	202 77	250 125	299 173	347 221	395 270	444 318
140	238.00	bu	4 -121	56 -69	108 -17	160 34	212 86	264 138	316 190	368 242	420 294	472 346	524 398
150	255.00	bu	46 -78	102 -22	158 32	214 88	269 144	325 199	381 255	436 311	492 367	548 422	604 478

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 2016 input prices.

Table 10.A Estimated costs per acre
 Clearfield hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	5.30	23.0000	121.90	_____
Rice Seed CFH(Levee)	lb	1.77	4.2500	7.52	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc.(Pet.)	pt	2.47	4.0000	9.88	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
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	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.92	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8180	9.90	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	18.7364	31.85	_____
REPAIR & MAINTENANCE					
Implements	acre	7.85	1.0000	7.85	_____
Tractors	acre	3.44	1.0000	3.44	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____
TOTAL DIRECT EXPENSES				716.94	_____
FIXED EXPENSES					
Implements	acre	17.09	1.0000	17.09	_____
Tractors	acre	21.67	1.0000	21.67	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.42	1.0000	63.42	_____
TOTAL FIXED EXPENSES				126.49	_____
TOTAL SPECIFIED EXPENSES				843.43	_____

Note: Cost of production estimates are based on 2016 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 hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____

TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	38.75	1.0000	38.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	130.40	1.0000	130.40	_____
ADJUVANTS	acre	16.85	1.0000	16.85	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.23	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	27.4990	46.76	_____
REPAIR & MAINTENANCE	acre	29.84	1.0000	29.84	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____

TOTAL DIRECT EXPENSES				716.94	_____
RETURNS ABOVE DIRECT EXPENSES				25.96	_____
TOTAL FIXED EXPENSES				126.49	_____

TOTAL SPECIFIED EXPENSES				843.43	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-100.53	_____

Note: Cost of production estimates are based on 2016 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 hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Cruiser Maxx Rice	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	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Karate Z	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	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
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 2016 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 hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	
2,4-D Amine 4	pt	5.58						0.18	5.76	
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Clrfld Hyb Trt	lb	121.90						2.90	124.80	124.80
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	
Command 3ME	pt	19.34						0.46	19.80	
Sharpen	oz	10.70						0.25	10.95	
MSO	pt	1.88						0.04	1.92	
SuperMax AMS	pt	1.34						0.03	1.37	
Seed Levees										
Rice Seed CFH (Levee)	lb	7.52						0.18	7.70	
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00	
App by Air (5 gal)	appl	6.50						0.15	6.65	
Clearpath	lb	29.77						0.71	30.48	
Crop Oil Conc. (Pet.)	pt	4.94						0.12	5.06	
App Fert by Air	cwt	7.00						0.14	7.14	
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	
DAP	cwt	12.41						0.25	12.66	
Rice Consultant	acre	8.00						0.16	8.16	
App Fert by Air	cwt	18.69						0.37	19.06	
Urea, Solid (46% N)	cwt	44.80						0.89	45.69	
NBPT	pt	8.18						0.16	8.34	
App by Air (10 gal)	appl	8.50						0.17	8.67	
Newpath	oz	21.78						0.43	22.21	
Crop Oil Conc. (Pet.)	pt	4.94						0.10	5.04	
Aim	oz	8.40						0.17	8.57	
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	
App by Air (5 gal)	appl	3.25						0.05	3.30	
Clincher SF	oz	17.85						0.28	18.13	
MSO	pt	3.75						0.06	3.81	
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	
App Fert by Air	cwt	7.00						0.11	7.11	
Urea, Solid (46% N)	cwt	16.78						0.27	17.05	
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	
App by Air (3 gal)	appl	7.50						0.09	7.59	
Karate Z	oz	7.74						0.09	7.83	
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	
Haul Rice	bu	59.50						0.47	59.97	
Dry Rice	bu	68.00						0.54	68.54	
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre	10.50	33.42	13.11	11.89			1.31	70.23	67.84
TOTALS		591.14	46.76	29.84	36.15	0.00	13.05	716.94	126.49	843.43

Note: Cost of production estimates are based on 2016 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 hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	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	7.74	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	130.40	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	9.40	2.72	3.62	3.62	9.71	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	10.56	8.31	8.31	8.31	5.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.97	6.84	1.96	1.96	8.90	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.97	3.37	0.99	0.34	1.20	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	257.25	172.56	63.51	29.47	153.00	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-257.25	-172.56	-63.51	-29.47	589.90	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-288.45	-461.01	-524.52	-553.99	35.91	25.96

Note: Cost of production estimates are based on 2016 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 hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-374 -500	-355 -482	-336 -463	-318 -444	-299 -426	-281 -407	-262 -389	-244 -370	-225 -352	-206 -333	-188 -314
60	102.00	bu	-331 -457	-308 -435	-286 -413	-264 -390	-242 -368	-219 -346	-197 -323	-175 -301	-152 -279	-130 -257	-108 -234
70	119.00	bu	-288 -414	-262 -388	-236 -362	-210 -336	-184 -310	-158 -284	-132 -258	-106 -232	-80 -206	-54 -180	-28 -154
80	136.00	bu	-245 -371	-215 -342	-186 -312	-156 -282	-126 -253	-96 -223	-67 -193	-37 -163	-7 -134	21 -104	51 -74
90	153.00	bu	-202 -329	-169 -295	-135 -262	-102 -228	-68 -195	-35 -161	-2 -128	31 -95	64 -61	98 -28	131 5
100	170.00	bu	-159 -286	-122 -249	-85 -211	-48 -174	-11 -137	25 -100	63 -63	100 -26	137 10	174 48	211 85
110	187.00	bu	-116 -243	-76 -202	-35 -161	5 -120	46 -79	87 -39	128 1	169 42	209 83	250 124	291 165
120	204.00	bu	-74 -200	-29 -155	15 -111	59 -66	104 -22	148 22	193 66	237 111	282 156	327 200	371 245
130	221.00	bu	-31 -157	17 -109	65 -61	113 -12	161 35	210 83	258 132	306 180	355 228	403 276	451 325
140	238.00	bu	11 -114	63 -62	115 -10	167 41	219 93	271 145	323 197	375 249	427 301	479 353	531 405
150	255.00	bu	54 -71	110 -16	166 39	221 95	277 150	333 206	388 262	444 318	500 373	556 429	611 485

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 2016 input prices.

Table 11.A Estimated costs per acre
 Clearfield hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	5.30	23.0000	121.90	_____
Rice Seed CFH(Levee)	lb	1.77	4.2500	7.52	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4228	5.55	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	4.8970	8.33	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	15.4779	26.30	_____
REPAIR & MAINTENANCE					
Implements	acre	7.69	1.0000	7.69	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	12.57	1.0000	12.57	_____
TOTAL DIRECT EXPENSES				693.76	_____
FIXED EXPENSES					
Implements	acre	16.20	1.0000	16.20	_____
Tractors	acre	18.14	1.0000	18.14	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				121.74	_____
TOTAL SPECIFIED EXPENSES				815.50	_____

Note: Cost of production estimates are based on 2016 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 hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____

TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	38.75	1.0000	38.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	130.40	1.0000	130.40	_____
ADJUVANTS	acre	16.85	1.0000	16.85	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.14	0.5988	7.86	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	23.3194	39.64	_____
REPAIR & MAINTENANCE	acre	27.12	1.0000	27.12	_____
INTEREST ON OP. CAP.	acre	12.57	1.0000	12.57	_____

TOTAL DIRECT EXPENSES				693.76	_____
RETURNS ABOVE DIRECT EXPENSES				49.14	_____
TOTAL FIXED EXPENSES				121.74	_____

TOTAL SPECIFIED EXPENSES				815.50	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-72.60	_____

Note: Cost of production estimates are based on 2016 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 hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Cruiser Maxx Rice	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	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Karate Z	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	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
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 2016 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 hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	
2,4-D Amine 4	pt	5.58						0.18	5.76	
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Clrfld Hyb Trt	lb	121.90						2.90	124.80	124.80
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	
Command 3ME	pt	19.34						0.46	19.80	
Sharpen	oz	10.70						0.25	10.95	
MSO	pt	1.88						0.04	1.92	
SuperMax AMS	pt	1.34						0.03	1.37	
Seed Levees										
Rice Seed CFH (Levee)	lb	7.52						0.18	7.70	
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00	
App by Air (5 gal)	appl	6.50						0.15	6.65	
Clearpath	lb	29.77						0.71	30.48	
Crop Oil Conc. (Pet.)	pt	4.94						0.12	5.06	
App Fert by Air	cwt	7.00						0.14	7.14	
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	
DAP	cwt	12.41						0.25	12.66	
Rice Consultant	acre	8.00						0.16	8.16	
App Fert by Air	cwt	18.69						0.37	19.06	
Urea, Solid (46% N)	cwt	44.80						0.89	45.69	
NBPT	pt	8.18						0.16	8.34	
App by Air (10 gal)	appl	8.50						0.17	8.67	
Newpath	oz	21.78						0.43	22.21	
Crop Oil Conc. (Pet.)	pt	4.94						0.10	5.04	
Aim	oz	8.40						0.17	8.57	
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	
App by Air (5 gal)	appl	3.25						0.05	3.30	
Clincher SF	oz	17.85						0.28	18.13	
MSO	pt	3.75						0.06	3.81	
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	
App Fert by Air	cwt	7.00						0.11	7.11	
Urea, Solid (46% N)	cwt	16.78						0.27	17.05	
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	
App by Air (3 gal)	appl	7.50						0.09	7.59	
Karate Z	oz	7.74						0.09	7.83	
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	
Haul Rice	bu	59.50						0.47	59.97	
Dry Rice	bu	68.00						0.54	68.54	
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre		26.30	10.39	9.53			0.83	47.05	63.09
TOTALS		580.64	39.64	27.12	33.79	0.00	12.57	693.76	121.74	815.50

Note: Cost of production estimates are based on 2016 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 hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	130.40	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	6.63	3.18	4.08	4.08	8.74	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	8.07	6.92	6.92	6.92	5.23	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	3.99	6.33	1.45	1.45	8.69	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.56	3.34	0.97	0.33	1.19	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	240.10	171.09	62.05	28.02	151.35	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-240.10	-171.09	-62.05	-28.02	591.55	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-271.30	-442.39	-504.44	-532.46	59.09	49.14

Note: Cost of production estimates are based on 2016 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 hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-350 -472	-332 -454	-313 -435	-295 -416	-276 -398	-258 -379	-239 -361	-220 -342	-202 -324	-183 -305	-165 -286
60	102.00	bu	-308 -429	-285 -407	-263 -385	-241 -362	-218 -340	-196 -318	-174 -296	-152 -273	-129 -251	-107 -229	-85 -206
70	119.00	bu	-265 -386	-239 -360	-213 -334	-187 -308	-161 -282	-135 -256	-109 -230	-83 -204	-57 -178	-31 -152	-5 -126
80	136.00	bu	-222 -344	-192 -314	-162 -284	-133 -254	-103 -225	-73 -195	-44 -165	-14 -136	15 -106	45 -76	74 -46
90	153.00	bu	-179 -301	-146 -267	-112 -234	-79 -200	-45 -167	-12 -134	21 -100	54 -67	87 -33	121 -0	154 33
100	170.00	bu	-136 -258	-99 -221	-62 -184	-25 -146	11 -109	49 -72	86 -35	123 1	160 38	197 75	234 113
110	187.00	bu	-93 -215	-52 -174	-12 -133	28 -92	69 -52	110 -11	151 29	192 70	233 111	274 152	314 193
120	204.00	bu	-50 -172	-6 -128	38 -83	82 -38	127 5	172 50	216 94	261 139	305 184	350 228	394 273
130	221.00	bu	-7 -129	40 -81	88 -33	136 15	185 63	233 111	281 160	330 208	378 256	426 304	474 353
140	238.00	bu	34 -86	86 -34	138 17	190 69	242 121	294 173	346 225	398 277	450 329	502 381	554 433
150	255.00	bu	77 -43	133 11	189 67	244 123	300 178	356 234	412 290	467 346	523 401	579 457	634 513

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 2016 input prices.

Table 12.A Estimated costs per acre
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.57	23.0000	128.11	_____
Rice Seed CvH (Levee)	lb	1.65	4.2500	7.01	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
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	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4999	6.56	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.5719	9.48	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	21.9949	37.38	_____
REPAIR & MAINTENANCE					
Implements	acre	7.79	1.0000	7.79	_____
Tractors	acre	3.29	1.0000	3.29	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	13.38	1.0000	13.38	_____
TOTAL DIRECT EXPENSES				744.05	_____
FIXED EXPENSES					
Implements	acre	16.64	1.0000	16.64	_____
Tractors	acre	20.73	1.0000	20.73	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.86	1.0000	63.86	_____
TOTAL FIXED EXPENSES				125.54	_____
TOTAL SPECIFIED EXPENSES				869.59	_____

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____

TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	136.10	1.0000	136.10	_____
ADJUVANTS	acre	10.28	1.0000	10.28	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.14	0.6759	8.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	30.5114	51.87	_____
REPAIR & MAINTENANCE	acre	29.95	1.0000	29.95	_____
INTEREST ON OP. CAP.	acre	13.38	1.0000	13.38	_____

TOTAL DIRECT EXPENSES				744.05	_____
RETURNS ABOVE DIRECT EXPENSES				-1.15	_____
TOTAL FIXED EXPENSES				125.54	_____

TOTAL SPECIFIED EXPENSES				869.59	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-126.69	_____

**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
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH(Levee)	lb					4.2500				
Cruiser Maxx Rice	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					0.6000				
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	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Karate Z	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	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
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 2016 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
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.93
2,4-D Amine 4	pt	5.58						0.18	5.76	5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Conv Hyb Trt	lb	128.11						3.04	131.15	131.15
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Command 3ME	pt	19.34						0.46	19.80	19.80
Sharpen	oz	10.70						0.25	10.95	10.95
MSO	pt	1.88						0.04	1.92	1.92
SuperMax AMS	pt	1.34						0.03	1.37	1.37
Seed Levees										
Rice Seed CvH (Levee)	lb	7.01						0.17	7.18	7.18
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00	1.00
App Fert by Air	cwt	7.00						0.14	7.14	7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	8.79
DAP	cwt	12.41						0.25	12.66	12.66
Rice Consultant	acre	8.00						0.16	8.16	8.16
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Regiment	oz	26.63						0.53	27.16	27.16
Dyne-A-Pak	pt	2.32						0.05	2.37	2.37
App Fert by Air	cwt	18.69						0.37	19.06	19.06
Urea, Solid (46% N)	cwt	44.80						0.89	45.69	45.69
NBPT	pt	8.18						0.16	8.34	8.34
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Facet L	pt	39.92						0.79	40.71	40.71
Permit	oz	15.44						0.31	15.75	15.75
Crop Oil Conc. (Pet.)	pt	0.99						0.02	1.01	1.01
App by Air (5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.85						0.28	18.13	18.13
MSO	pt	3.75						0.06	3.81	3.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	7.00						0.11	7.11	7.11
Urea, Solid (46% N)	cwt	16.78						0.27	17.05	17.05
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air (3 gal)	appl	7.50						0.09	7.59	7.59
Karate Z	oz	7.74						0.09	7.83	7.83
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	59.50						0.47	59.97	59.97
Dry Rice	bu	68.00						0.54	68.54	68.54
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre	2.25	38.53	13.22	22.53			1.40	77.93	66.89
TOTALS		602.06	51.87	29.95	46.79	0.00	13.38	744.05	125.54	869.59

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	136.10	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	11.61	5.44	6.34	6.34	9.98	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	11.62	9.69	9.69	9.69	5.60	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.91	6.91	2.03	2.03	8.86	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.00	4.54	1.06	0.39	1.21	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	215.73	232.58	67.75	33.69	153.15	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-215.73	-232.58	-67.75	-33.69	589.75	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-246.93	-479.51	-547.26	-580.95	8.80	-1.15

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee rice
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-401 -526	-382 -508	-364 -489	-345 -471	-326 -452	-308 -433	-289 -415	-271 -396	-252 -378	-234 -359	-215 -341
60	102.00	bu	-358 -483	-336 -461	-313 -439	-291 -417	-269 -394	-246 -372	-224 -350	-202 -327	-180 -305	-157 -283	-135 -261
70	119.00	bu	-315 -441	-289 -415	-263 -389	-237 -363	-211 -337	-185 -311	-159 -285	-133 -259	-107 -233	-81 -207	-55 -180
80	136.00	bu	-272 -398	-242 -368	-213 -338	-183 -309	-153 -279	-124 -249	-94 -219	-64 -190	-34 -160	-5 -130	24 -100
90	153.00	bu	-229 -355	-196 -321	-162 -288	-129 -254	-96 -221	-62 -188	-29 -154	4 -121	37 -87	71 -54	104 -20
100	170.00	bu	-186 -312	-149 -275	-112 -238	-75 -200	-38 -163	-1 -126	35 -89	73 -52	110 -15	147 21	184 59
110	187.00	bu	-144 -269	-103 -228	-62 -187	-21 -146	19 -106	60 -65	101 -24	142 16	182 57	223 98	264 139
120	204.00	bu	-101 -226	-56 -182	-11 -137	32 -92	77 -48	121 -3	166 40	210 85	255 129	300 174	344 219
130	221.00	bu	-58 -183	-9 -135	38 -87	86 -38	134 9	183 57	231 105	279 154	328 202	376 250	424 299
140	238.00	bu	-15 -140	36 -88	88 -36	140 15	192 67	244 119	296 171	348 223	400 275	452 327	504 379
150	255.00	bu	27 -98	83 -42	138 13	194 69	250 124	306 180	361 236	417 291	473 347	528 403	584 459

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 2016 input prices.

Table 13.A Estimated costs per acre
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.57	23.0000	128.11	_____
Rice Seed CvH (Levee)	lb	1.65	4.2500	7.01	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
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	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.92	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8180	9.90	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	18.7364	31.85	_____
REPAIR & MAINTENANCE					
Implements	acre	7.85	1.0000	7.85	_____
Tractors	acre	3.44	1.0000	3.44	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	13.29	1.0000	13.29	_____
TOTAL DIRECT EXPENSES				736.35	_____
FIXED EXPENSES					
Implements	acre	17.09	1.0000	17.09	_____
Tractors	acre	21.67	1.0000	21.67	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.42	1.0000	63.42	_____
TOTAL FIXED EXPENSES				126.49	_____
TOTAL SPECIFIED EXPENSES				862.84	_____

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____

TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	136.10	1.0000	136.10	_____
ADJUVANTS	acre	10.28	1.0000	10.28	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.23	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	27.4990	46.76	_____
REPAIR & MAINTENANCE	acre	29.84	1.0000	29.84	_____
INTEREST ON OP. CAP.	acre	13.29	1.0000	13.29	_____

TOTAL DIRECT EXPENSES				736.35	_____
RETURNS ABOVE DIRECT EXPENSES				6.55	_____
TOTAL FIXED EXPENSES				126.49	_____

TOTAL SPECIFIED EXPENSES				862.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-119.94	_____

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH(Levee)	lb					4.2500				
Cruiser Maxx Rice	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					0.6000				
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	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Karate Z	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	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
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 2016 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
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.93
2,4-D Amine 4	pt	5.58						0.18	5.76	5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Conv Hyb Trt	lb	128.11						3.04	131.15	131.15
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Command 3ME	pt	19.34						0.46	19.80	19.80
Sharpen	oz	10.70						0.25	10.95	10.95
MSO	pt	1.88						0.04	1.92	1.92
SuperMax AMS	pt	1.34						0.03	1.37	1.37
Seed Levees										
Rice Seed CvH(Levee)	lb	7.01						0.17	7.18	7.18
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00	1.00
App Fert by Air	cwt	7.00						0.14	7.14	7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	8.79
DAP	cwt	12.41						0.25	12.66	12.66
Rice Consultant	acre	8.00						0.16	8.16	8.16
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Regiment	oz	26.63						0.53	27.16	27.16
Dyne-A-Pak	pt	2.32						0.05	2.37	2.37
App Fert by Air	cwt	18.69						0.37	19.06	19.06
Urea, Solid (46% N)	cwt	44.80						0.89	45.69	45.69
NBPT	pt	8.18						0.16	8.34	8.34
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Facet L	pt	39.92						0.79	40.71	40.71
Permit	oz	15.44						0.31	15.75	15.75
Crop Oil Conc.(Pet.)	pt	0.99						0.02	1.01	1.01
App by Air (5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.85						0.28	18.13	18.13
MSO	pt	3.75						0.06	3.81	3.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	7.00						0.11	7.11	7.11
Urea, Solid (46% N)	cwt	16.78						0.27	17.05	17.05
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air (3 gal)	appl	7.50						0.09	7.59	7.59
Karate Z	oz	7.74						0.09	7.83	7.83
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	59.50						0.47	59.97	59.97
Dry Rice	bu	68.00						0.54	68.54	68.54
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre	10.50	33.42	13.11	11.89			1.31	70.23	67.84
TOTALS		610.31	46.76	29.84	36.15	0.00	13.29	736.35	126.49	862.84

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	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	7.74	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	136.10	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	9.40	2.72	3.62	3.62	9.71	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	10.56	8.31	8.31	8.31	5.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.97	6.84	1.96	1.96	8.90	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.12	4.46	0.99	0.34	1.20	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	220.89	228.33	63.51	29.47	153.00	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-220.89	-228.33	-63.51	-29.47	589.90	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-252.09	-480.42	-543.93	-573.40	16.50	6.55

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee multi inlet rice
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-393 -519	-374 -501	-356 -482	-337 -464	-319 -445	-300 -427	-282 -408	-263 -389	-244 -371	-226 -352	-207 -334
60	102.00	bu	-350 -477	-328 -454	-306 -432	-283 -410	-261 -387	-239 -365	-216 -343	-194 -321	-172 -298	-150 -276	-127 -254
70	119.00	bu	-307 -434	-281 -408	-255 -382	-229 -356	-203 -330	-177 -304	-151 -278	-125 -252	-99 -226	-73 -200	-47 -174
80	136.00	bu	-264 -391	-235 -361	-205 -331	-175 -302	-146 -272	-116 -242	-86 -213	-56 -183	-27 -153	2 -123	32 -94
90	153.00	bu	-222 -348	-188 -315	-155 -281	-121 -248	-88 -214	-54 -181	-21 -147	11 -114	45 -81	78 -47	112 -14
100	170.00	bu	-179 -305	-142 -268	-104 -231	-67 -194	-30 -157	6 -119	43 -82	80 -45	117 -8	155 28	192 65
110	187.00	bu	-136 -262	-95 -221	-54 -181	-13 -140	27 -99	67 -58	108 -17	149 23	190 64	231 104	272 145
120	204.00	bu	-93 -219	-48 -175	-4 -130	40 -86	84 -41	129 2	174 47	218 92	263 136	307 181	352 225
130	221.00	bu	-50 -177	-2 -128	46 -80	94 -32	142 16	190 64	239 112	287 160	335 209	384 257	432 305
140	238.00	bu	-7 -134	44 -82	96 -30	148 21	200 73	252 125	304 177	356 229	408 281	460 333	512 385
150	255.00	bu	35 -91	90 -35	146 20	202 75	258 131	313 187	369 242	425 298	480 354	536 410	592 465

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 2016 input prices.

Table 14.A Estimated costs per acre
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.57	23.0000	128.11	_____
Rice Seed CvH (Levee)	lb	1.65	4.2500	7.01	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4228	5.55	_____
Harvesters	hour	13.14	0.1760	2.31	_____
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	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	4.8970	8.33	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	15.4779	26.30	_____
REPAIR & MAINTENANCE					
Implements	acre	7.69	1.0000	7.69	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	12.81	1.0000	12.81	_____
TOTAL DIRECT EXPENSES				713.17	_____
FIXED EXPENSES					
Implements	acre	16.20	1.0000	16.20	_____
Tractors	acre	18.14	1.0000	18.14	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				121.74	_____
TOTAL SPECIFIED EXPENSES				834.91	_____

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____

TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	136.10	1.0000	136.10	_____
ADJUVANTS	acre	10.28	1.0000	10.28	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.14	0.5988	7.86	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	23.3194	39.64	_____
REPAIR & MAINTENANCE	acre	27.12	1.0000	27.12	_____
INTEREST ON OP. CAP.	acre	12.81	1.0000	12.81	_____

TOTAL DIRECT EXPENSES				713.17	_____
RETURNS ABOVE DIRECT EXPENSES				29.73	_____
TOTAL FIXED EXPENSES				121.74	_____

TOTAL SPECIFIED EXPENSES				834.91	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-92.01	_____

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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	0.3300				
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				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH(Levee)	lb					4.2500				
Cruiser Maxx Rice	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					0.6000				
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	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air (3 gal)	appl			1.50	Jul	1.5000				
Karate Z	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	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
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 2016 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
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air (5 gal)	appl	6.50						0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.93
2,4-D Amine 4	pt	5.58						0.18	5.76	5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Conv Hyb Trt	lb	128.11						3.04	131.15	131.15
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air (5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Command 3ME	pt	19.34						0.46	19.80	19.80
Sharpen	oz	10.70						0.25	10.95	10.95
MSO	pt	1.88						0.04	1.92	1.92
SuperMax AMS	pt	1.34						0.03	1.37	1.37
Seed Levees										
Rice Seed CvH (Levee)	lb	7.01						0.17	7.18	7.18
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00	1.00
App Fert by Air	cwt	7.00						0.14	7.14	7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	8.79
DAP	cwt	12.41						0.25	12.66	12.66
Rice Consultant	acre	8.00						0.16	8.16	8.16
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Regiment	oz	26.63						0.53	27.16	27.16
Dyne-A-Pak	pt	2.32						0.05	2.37	2.37
App Fert by Air	cwt	18.69						0.37	19.06	19.06
Urea, Solid (46% N)	cwt	44.80						0.89	45.69	45.69
NBPT	pt	8.18						0.16	8.34	8.34
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air (5 gal)	appl	6.50						0.13	6.63	6.63
Facet L	pt	39.92						0.79	40.71	40.71
Permit	oz	15.44						0.31	15.75	15.75
Crop Oil Conc. (Pet.)	pt	0.99						0.02	1.01	1.01
App by Air (5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.85						0.28	18.13	18.13
MSO	pt	3.75						0.06	3.81	3.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	7.00						0.11	7.11	7.11
Urea, Solid (46% N)	cwt	16.78						0.27	17.05	17.05
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air (3 gal)	appl	7.50						0.09	7.59	7.59
Karate Z	oz	7.74						0.09	7.83	7.83
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	59.50						0.47	59.97	59.97
Dry Rice	bu	68.00						0.54	68.54	68.54
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre		26.30	10.39	9.53			0.83	47.05	63.09
TOTALS		599.81	39.64	27.12	33.79	0.00	12.81	713.17	121.74	834.91

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	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	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	136.10	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	6.63	3.18	4.08	4.08	8.74	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	8.07	6.92	6.92	6.92	5.23	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	3.99	6.33	1.45	1.45	8.69	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	4.71	4.43	0.97	0.33	1.19	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	203.74	226.86	62.05	28.02	151.35	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-203.74	-226.86	-62.05	-28.02	591.55	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-234.94	-461.80	-523.85	-551.87	39.68	29.73

Note: Cost of production estimates are based on 2016 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
 Conventional hybrid straight levee-zero grade rice
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			3.27	3.49	3.71	3.93	4.15	4.37	4.58	4.80	5.02	5.24	5.46
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-370 -492	-351 -473	-333 -454	-314 -436	-296 -417	-277 -399	-258 -380	-240 -362	-221 -343	-203 -324	-184 -306
60	102.00	bu	-327 -449	-305 -426	-282 -404	-260 -382	-238 -360	-216 -337	-193 -315	-171 -293	-149 -270	-126 -248	-104 -226
70	119.00	bu	-284 -406	-258 -380	-232 -354	-206 -328	-180 -302	-154 -276	-128 -250	-102 -224	-76 -198	-50 -172	-24 -146
80	136.00	bu	-241 -363	-212 -333	-182 -304	-152 -274	-122 -244	-93 -214	-63 -185	-33 -155	-4 -125	25 -96	55 -66
90	153.00	bu	-198 -320	-165 -287	-132 -253	-98 -220	-65 -186	-31 -153	1 -120	35 -86	68 -53	102 -19	135 13
100	170.00	bu	-155 -277	-118 -240	-81 -203	-44 -166	-7 -129	29 -92	66 -54	104 -17	141 19	178 56	215 93
110	187.00	bu	-113 -234	-72 -194	-31 -153	9 -112	50 -71	91 -30	132 10	172 51	213 92	254 132	295 173
120	204.00	bu	-70 -192	-25 -147	18 -102	63 -58	108 -13	152 30	197 75	241 120	286 164	330 209	375 253
130	221.00	bu	-27 -149	20 -100	69 -52	117 -4	165 44	214 92	262 140	310 188	358 237	407 285	455 333
140	238.00	bu	15 -106	67 -54	119 -2	171 49	223 101	275 153	327 205	379 257	431 309	483 361	535 413
150	255.00	bu	58 -63	114 -7	169 48	225 103	281 159	336 215	392 270	448 326	504 382	559 438	615 493

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 2016 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, 2017

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	323,000	300	8	13.64	13.14	23.18	33.64	69.97	132.75	202.73
Combine (300-349 hp)	325 hp	336,000	300	8	16.73	13.14	28.44	35.00	76.58	138.10	214.68
Combine (350-399 hp)	355 hp	340,000	300	8	18.27	13.14	31.05	35.41	79.61	139.74	219.36
Combine (400-449 hp)	425 hp	409,000	300	8	21.87	13.14	37.18	42.60	92.93	168.10	261.03
Combine (450-499hp)	475 hp	423,000	300	8	24.44	13.14	41.56	44.06	98.76	173.86	272.62
Tractor(20-39hp)CB	MFWD 30	28,500	600	8	1.54	13.14	2.62	0.89	16.65	5.35	22.01
Tractor(20-39hp)RB	MFWD 30	21,300	600	8	1.54	13.14	2.62	0.66	16.43	4.00	20.43
Tractor(40-59hp)CB	2WD 50	32,200	600	8	2.57	13.14	4.37	1.00	18.52	6.05	24.57
Tractor(40-59hp)CB	MFWD 50	39,100	600	8	2.57	13.14	4.37	1.22	18.73	7.35	26.08
Tractor(40-59hp)RB	2WD 50	20,900	600	8	2.57	13.14	4.37	0.65	18.16	3.93	22.09
Tractor(40-59hp)RB	MFWD 50	24,300	600	8	2.57	13.14	4.37	0.75	18.27	4.56	22.84
Tractor(60-89hp)CB	2WD 75	48,300	600	8	3.86	13.14	6.56	1.50	21.21	9.08	30.29
Tractor(60-89hp)CB	MFWD 75	54,100	600	8	3.86	13.14	6.56	1.69	21.39	10.17	31.56
Tractor(60-89hp)RB	2WD 75	34,400	600	8	3.86	13.14	6.56	1.07	20.77	6.46	27.24
Tractor(60-89hp)RB	MFWD 75	35,800	600	8	3.86	13.14	6.56	1.11	20.82	6.73	27.55
Tractor(90-119hp)CB	2WD 105	65,300	600	8	5.40	13.14	9.18	2.04	24.36	12.28	36.64
Tractor(90-119hp)CB	MFWD 105	77,400	600	8	5.40	13.14	9.18	2.41	24.74	14.55	39.30
Tractor(90-119hp)RB	2WD 105	57,600	600	8	5.40	13.14	9.18	1.80	24.12	10.83	34.95
Tractor(90-119hp)RB	MFWD 105	62,100	600	8	5.40	13.14	9.18	1.94	24.26	11.67	35.94
Tractor(120-139hp)CB	2WD 130	177,000	600	8	6.69	13.14	11.37	5.53	30.04	33.28	63.33
Tractor(120-139hp)CB	MFWD 130	123,000	600	8	6.69	13.14	11.37	3.84	28.35	23.13	51.48
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	13.14	13.12	4.46	30.73	26.89	57.62
Tractor(160-179hp)CB	MFWD 170	170,000	600	8	8.75	13.14	14.87	5.31	33.32	33.45	66.78
Tractor(180-199hp)CB	MFWD 190	186,000	600	8	9.77	13.14	16.62	5.81	35.57	36.60	72.17
Tractor(200-249hp)CB	MFWD 225	218,000	600	8	11.58	13.14	19.68	6.81	39.64	42.89	82.53
Tractor(250-349hp)CB	4WD 300	281,000	600	8	15.44	13.14	26.25	8.78	48.17	55.29	103.46
Tractor(250-349hp)CB	MFWD 300	297,000	600	8	15.44	13.14	26.25	9.28	48.67	58.44	107.11
Tractor(250-349hp)CB	Track 300	292,000	600	8	15.44	13.14	26.25	9.12	48.51	57.46	105.97
Tractor(350-449hp)	Track 400	351,000	600	8	20.58	13.14	35.00	10.96	59.11	69.07	128.18
Tractor(350-449hp)CB	4WD 400	325,000	600	8	20.58	13.14	35.00	10.15	58.29	63.95	122.25
Tractor(450-550hp)CB	4WD 500	359,000	600	8	25.73	13.14	43.75	11.21	68.10	70.64	138.75
Tractor(450-550hp)CB	Track 500	400,000	600	8	25.73	13.14	43.75	12.50	69.39	78.71	148.10
Utility Vehicle	800 CC	9,700	200	8	0.70	13.14	1.33	1.51	15.98	5.98	21.96
Utility Vehicle	900 CC	12,200	200	8	1.00	13.14	1.90	1.90	16.94	7.52	24.46
Utility Vehicle-mule	600 CC	6,500	200	8	0.50	13.14	0.95	1.01	15.10	4.00	19.11

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

CB = Cab, RB = Roll Bar

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, 2017

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	5.72	5.63	10.79	22.15	42.59	64.74
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.72	7.89	14.13	27.75	55.78	83.53
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.82	5.27	9.61	18.71	37.92	56.63
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.84	6.77	15.85	27.48	62.56	90.05
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.82	5.35	12.51	21.69	49.39	71.09
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	5.72	9.02	21.58	36.33	85.18	121.51
Cotton Picker/Modu	6R-30 (500)	744,000	200	8	25.73	0.218	4.84	9.54	25.37	39.76	100.11	139.87
Cotton Picker/Modu	6R-38 (365)	536,000	200	8	20.58	0.172	3.82	6.03	14.43	24.28	56.94	81.22
Cotton Picker/Module	6R-38 (500)	745,000	200	8	25.73	0.172	3.82	7.53	20.05	31.42	79.14	110.56
Dry Applicator SP	70'300cuft	312,000	350	8	16.98	0.015	0.26	0.43	0.25	0.95	1.66	2.61
Sprayer 600-750gal	60' 175hp	193,000	350	8	9.00	0.017	0.31	0.26	0.18	0.76	1.19	1.96
Sprayer 600-825gal	80' 175hp	202,000	350	8	11.81	0.013	0.23	0.26	0.14	0.64	0.94	1.58
Sprayer 600-825gal	90' 250hp	273,000	350	8	12.73	0.011	0.20	0.25	0.17	0.63	1.13	1.76
Sprayer 800gal	100' 250hp	261,000	350	8	14.15	0.010	0.18	0.25	0.14	0.58	0.97	1.56
Sprayer 800gal	80' 250hp	250,000	350	8	12.86	0.013	0.23	0.28	0.17	0.69	1.16	1.86
Sprayer 1000-1400gal	90' 275hp	294,000	350	8	14.15	0.010	0.18	0.25	0.16	0.60	1.09	1.70
Sprayer 1000gal	100' 300hp	308,000	350	8	15.44	0.010	0.18	0.27	0.17	0.63	1.14	1.78
Sprayer 1200+gal	120' 300hp	343,000	350	8	15.44	0.008	0.15	0.23	0.16	0.54	1.06	1.61

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost	
									Imp.	P.U.		Imp.	P.U.		
				dollars	hours	years	hr/ac	-----\$/acre-----							
Bed-Paratill	Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.06	1.59	1.58	0.55	4.78	2.75	3.46	11.00
Bed-Paratill	Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.70	1.05	1.34	0.36	3.47	2.32	2.30	8.10
Bed-Paratill	Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.70	1.05	1.34	0.36	3.47	2.32	2.30	8.10
Bed-Paratill	Rigid	4R-30	MFWD 225	13,500	150	12	0.204	2.68	4.02	0.99	1.39	9.09	1.72	8.76	19.58
Bed-Paratill	Rigid	4R-38	MFWD 225	13,500	150	12	0.160	2.11	3.16	0.78	1.09	7.16	1.36	6.90	15.42
Bed-Paratill	Rigid	6R-30	MFWD 225	19,900	150	12	0.136	1.78	2.68	0.97	0.92	6.37	1.69	5.84	13.92
Bed-Paratill	Rigid	6R-38	MFWD 225	18,800	150	12	0.107	1.41	2.11	0.73	0.73	4.99	1.26	4.61	10.87
Bed-Paratill	Rigid	8R-30	MFWD 225	25,000	150	12	0.102	1.34	2.01	0.92	0.69	4.97	1.60	4.38	10.95
Bed-Paratill	Rigid	8R-38	MFWD 225	25,000	150	12	0.080	1.06	1.59	0.72	0.55	3.93	1.26	3.46	8.65
Bed-Paratill	w/rol	4R-30	MFWD 225	17,900	150	12	0.204	2.68	4.02	1.32	1.39	9.42	2.29	8.76	20.47
Bed-Paratill	w/rol	4R-38	MFWD 225	17,900	150	12	0.160	2.11	3.16	1.03	1.09	7.41	1.80	6.90	16.12
Bed-Paratill	w/rol	6R-38	MFWD 225	25,200	150	12	0.107	1.41	2.11	0.97	0.73	5.24	1.69	4.61	11.55
Bed-Rip/Disk	Fold.	8R-38	MFWD 190	36,900	300	20	0.073	0.96	1.21	0.13	0.42	2.73	0.63	2.67	6.04
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	54,400	300	20	0.061	0.80	1.21	0.16	0.41	2.61	0.79	2.64	6.04
Bed-Rip/Disk	Fold.	12R-38	MFWD 225	54,400	300	20	0.046	0.60	0.90	0.12	0.31	1.95	0.59	1.98	4.53
Bed-Rip/Disk	Rigid	4R-30	MFWD 190	17,300	300	20	0.184	2.42	3.07	0.15	1.07	6.73	0.75	6.76	14.26
Bed-Rip/Disk	Rigid	4R-38	MFWD 190	17,300	300	20	0.146	1.92	2.43	0.12	0.85	5.34	0.60	5.37	11.32
Bed-Rip/Disk	Rigid	6R-38	MFWD 190	23,900	300	20	0.097	1.27	1.61	0.11	0.56	3.57	0.55	3.56	7.69
Bed-Rip/Disk	Rigid	8R-30	MFWD 190	31,300	300	20	0.139	1.82	2.31	0.21	0.80	5.16	1.03	5.08	11.28
Bed-Rip/Disk	Rigid	8R-38	MFWD 190	31,300	300	20	0.073	0.96	1.21	0.11	0.42	2.71	0.54	2.67	5.93
Bed-Rip/Disk	Rigid	6R-30	MFWD 190	23,900	300	20	0.123	1.61	2.04	0.14	0.71	4.53	0.69	4.51	9.74
Bed-Rip/Disk/Cond.		6-Row	MFWD 225	24,600	150	12	0.107	1.41	2.11	0.95	0.73	5.21	1.65	4.61	11.48
Bed-Rip/Disk/Cond.		8-Row	MFWD 225	32,700	150	12	0.080	1.06	1.59	0.95	0.55	4.15	1.65	3.46	9.27
Bed/Disk (Hipper)		4R-38	MFWD 150	8,800	160	10	0.147	1.93	1.93	0.32	0.65	4.86	0.85	3.97	9.69
Bed/Disk (Hipper)		6R-30	MFWD 170	15,100	160	10	0.125	1.64	1.85	0.47	0.66	4.63	1.24	4.18	10.06
Bed/Disk (Hipper)		6R-38	MFWD 170	15,100	160	10	0.098	1.29	1.46	0.37	0.52	3.66	0.98	3.30	7.94
Bed/Disk (Hipper)		8R-30	MFWD 190	17,400	160	10	0.093	1.23	1.55	0.40	0.54	3.74	1.07	3.43	8.25
Bed/Disk (Hipper)		8R-38 2x1	MFWD 190	33,600	160	10	0.049	0.64	0.82	0.41	0.28	2.16	1.09	1.80	5.07
Bed/Disk (Hipper)		12R-30	MFWD 225	30,700	160	10	0.062	0.82	1.23	0.47	0.42	2.95	1.26	2.68	6.90
Bed/Disk (Hipper)		12R-38	MFWD 225	33,600	160	10	0.049	0.64	0.97	0.41	0.33	2.37	1.09	2.11	5.58
Bed/Disk (Hipper)		16R40	MFWD 300	47,000	160	10	0.035	0.46	0.92	0.41	0.32	2.13	1.09	2.06	5.30
Bed/Disk (Hipper)Fl		8R-38	MFWD 190	20,200	160	10	0.074	0.97	1.23	0.37	0.43	3.01	0.98	2.71	6.71
Bed/Disk (Hipper)Rd		8R-38	MFWD 190	14,600	160	10	0.074	0.97	1.23	0.27	0.43	2.90	0.71	2.71	6.33
Bed/Disk w/roller		8R-30/40	MFWD 190	27,800	160	10	0.093	1.23	1.55	0.65	0.54	3.98	1.72	3.43	9.13
Bed/Disk w/roller		12R-30/40	MFWD 225	44,400	160	10	0.062	0.82	1.23	0.69	0.42	3.17	1.83	2.68	7.68
Bed/Disk w/roller		8R-38	MFWD 190	27,400	160	10	0.074	0.97	1.23	0.50	0.43	3.14	1.34	2.71	7.19
Bed/Lister		4R-38	MFWD 150	18,200	160	8	0.228	3.00	2.99	0.97	1.02	7.99	3.06	6.14	17.20
Bed/Lister		6R-38	MFWD 150	18,900	160	8	0.120	1.57	1.57	0.53	0.53	4.22	1.67	3.23	9.13
Bed/Lister		8R-30	MFWD 190	20,500	160	8	0.114	1.50	1.89	0.54	0.66	4.61	1.72	4.17	10.51
Bed/Lister		8R-38	MFWD 190	23,500	160	8	0.090	1.18	1.50	0.49	0.52	3.70	1.56	3.30	8.57
Bed/Lister		8R-38 2x1	MFWD 190	46,200	160	8	0.060	0.78	0.99	0.65	0.34	2.78	2.04	2.19	7.03
Bed/Lister		12R-38	MFWD 225	46,200	160	8	0.060	0.78	1.18	0.65	0.40	3.03	2.04	2.57	7.66
Bed/Lister		16R-30	MFWD 225	59,400	160	8	0.035	0.46	0.69	0.48	0.23	1.88	1.53	1.50	4.92
Bed/Lister		16R40	MFWD 300	82,400	160	8	0.043	0.56	1.13	0.83	0.39	2.92	2.62	2.51	8.06
Bed/Lister-Roll-Fold		8R-38	MFWD 190	24,400	160	10	0.074	0.97	1.23	0.45	0.43	3.08	1.19	2.71	6.99
Bed/Lister-Roll-Fold		12R-30	MFWD 225	29,200	160	10	0.062	0.82	1.23	0.45	0.42	2.93	1.20	2.68	6.82
Bed/Lister-Roll-Fold		12R-38	MFWD 225	33,400	160	10	0.049	0.64	0.97	0.41	0.33	2.36	1.08	2.11	5.57
Bed/Lister-Roll-Fold		16R-30	MFWD 225	34,800	160	10	0.046	0.61	0.92	0.40	0.31	2.26	1.07	2.01	5.35
Bed/Lister-Roll-Rig.		8R-38	MFWD 190	21,300	160	10	0.074	0.97	1.23	0.39	0.43	3.03	1.04	2.71	6.78
Blade-Box		6'-7'	MFWD 105	1,150	200	20	0.020	0.26	0.18	0.01	0.03	0.49	0.00	0.23	0.73
Blade-Box		8'-10'	MFWD 105	3,010	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box		12'-16'	MFWD 105	6,270	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	1,100	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	3,390	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		12'-16'	MFWD 105	6,860	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	3.38	4.28	1.96	1.49	11.13	3.99	9.43	24.56
Boll Buggy		4R-38(350)	MFWD 190	30,500	200	10	0.257	3.38	4.28	1.96	1.49	11.13	3.99	9.43	24.56
Boll Buggy		4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.26	2.86	1.31	1.00	7.44	2.67	6.30	16.42
Boll Buggy		6R-30(355)	MFWD 190	30,500	200	10	0.218	2.86	3.62	1.66	1.26	9.42	3.38	7.98	20.80
Boll Buggy		6R-38(355)	MFWD 190	30,500	200	10	0.172	2.26	2.86	1.31	1.00	7.44	2.67	6.30	16.42
Chisel Plow-Folding		24'	MFWD 190	38,000	150	12	0.076	1.00	1.27	1.04	0.44	3.76	1.82	2.79	8.38
Chisel Plow-Folding		32'	MFWD 225	49,900	150	12	0.057	0.75	1.13	1.04	0.39	3.33	1.80	2.47	7.61
Chisel Plow-Folding		42'	MFWD 225	60,600	150	12	0.044	0.57	0.86	0.96	0.29	2.70	1.67	1.88	6.26
Chisel Plow-Folding		50'	MFWD 225	79,400	150	10	0.036	0.48	0.72	1.27	0.25	2.73	2.06	1.58	6.39
Chisel Plow-Folding		61'	MFWD 225	88,400	150	12	0.030	0.39	0.59	0.96	0.20	2.16	1.67	1.30	5.14
Chisel Plow-Rigid		10'	MFWD 170	6,300	150	12	0.184	2.42	2.75	0.42	0.98	6.58	0.72	6.18	13.49
Chisel Plow-Rigid		15'	2WD 130	11,400	150	12	0.123	1.61	1.40	0.50	0.68	4.21	0.88	4.10	9.19
Chisel Plow-Rigid		20'	MFWD 225	11,300	150	12	0.102	1.34	2.02	0.41	0.69	4.49	0.72	4.40	9.62
Chisel Plow-Rigid		24'	MFWD 190	12,100	150	12	0.077	1.01	1.28	0.33	0.44	3.07	0.58	2.81	6.48
Cultivate		4R-30	2WD 105	11,900	150	10	0.206	2.71	1.89	0.65	0.42	5.68	1.72	2.53	9.94
Cultivate		4R-38	2WD 105	12,000	150	10	0.162	2.13	1.49	0.51	0.29	4.43	1.37	1.75	7.56
Cultivate		6R-30	MFWD 150	16,200	150	10	0.137	1.80	1.80	0.59	0.61	4.81	1.56	3.69	10.08
Cultivate		6R-38	MFWD 150	17,100	150	10	0.108	1.42	1.42	0.49	0.48	3.83	1.30	2.91	8.05
Cultivate		8R-30	MFWD 190	20,500	150	10	0.103	1.35	1.71	0.56	0.59	4.23	1.48	3.77	9.49
Cultivate		8R-38	MFWD 190	21,300	150	10	0.073	0.96	1.22	0.41	0.42	3.03	1.10	2.69	6.84
Cultivate		8R-38 2x1	MFWD 190	30,400	150	10	0.054	0.71	0.90	0.44	0.31	2.37	1.16	1.98	5.52
Cultivate		12R-30	MFWD 225	35,500	150	10	0.068	0.90	1.35	0.65	0.46	3.37	1.71	2.94	8.04
Cultivate		12R-38	MFWD 225	37,000	150	10	0.054	0.71	1.06	0.53	0.36	2.68	1.41	2.32	6.43

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (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-----							
Cultivate	16R-30	MFWD 225	47,300	150	10	0.051	0.67	1.01	0.65	0.35	2.69	1.71	2.21	6.62
Cultivate & Post	4R-30	2WD 105	17,300	150	10	0.220	3.88	2.02	1.01	0.39	7.31	2.68	2.38	12.38
Cultivate & Post	4R-38	2WD 105	17,400	150	10	0.173	3.06	1.59	0.80	0.31	5.76	2.12	1.87	9.76
Cultivate & Post	6R-30	MFWD 150	21,600	150	10	0.146	2.59	1.92	0.84	0.65	6.01	2.23	3.94	12.19
Cultivate & Post	6R-38	MFWD 150	22,500	150	10	0.115	2.04	1.51	0.69	0.51	4.77	1.83	3.11	9.72
Cultivate & Post	8R-30	MFWD 190	25,900	150	10	0.110	1.94	1.82	0.75	0.63	5.17	2.00	4.02	11.20
Cultivate & Post	8R-38	MFWD 190	26,700	150	10	0.086	1.53	1.44	0.61	0.50	4.10	1.63	3.18	8.92
Cultivate & Post	8R-38 2x1	MFWD 190	38,300	150	10	0.057	1.02	0.96	0.59	0.33	2.91	1.56	2.11	6.59
Cultivate & Post	10R-30	MFWD 225	31,700	150	10	0.088	1.55	1.73	0.74	0.59	4.63	1.96	3.77	10.37
Cultivate & Post	12R-30	MFWD 225	41,000	150	10	0.073	1.29	1.44	0.80	0.49	4.04	2.11	3.14	9.30
Cultivate & Post	12R-38	MFWD 225	44,800	150	10	0.057	1.02	1.13	0.69	0.39	3.24	1.82	2.48	7.55
Cultivate & Post	16R-30	MFWD 225	55,100	150	10	0.055	0.97	1.08	0.80	0.37	3.23	2.13	2.35	7.73
Disk & Incorporate	14'	2WD 130	29,800	200	10	0.149	2.64	1.70	1.33	0.82	6.51	2.35	4.98	13.85
Disk & Incorporate	20'	MFWD 190	46,000	180	10	0.092	1.21	1.53	1.41	0.53	4.70	2.49	3.38	10.58
Disk & Incorporate	24'	MFWD 190	47,900	200	10	0.087	1.54	1.45	1.25	0.50	4.75	2.20	3.19	10.16
Disk & Incorporate	28'	MFWD 225	55,900	200	10	0.074	1.32	1.47	1.25	0.50	4.56	2.20	3.21	9.98
Disk & Incorporate	32'	MFWD 225	59,300	200	10	0.065	1.15	1.28	1.16	0.44	4.05	2.05	2.80	8.91
Disk Harrow	14'	2WD 130	24,400	180	10	0.140	1.84	1.59	0.95	0.77	5.16	2.00	4.67	11.84
Disk Harrow	20'	MFWD 190	40,600	180	10	0.098	1.29	1.63	1.10	0.57	4.60	2.34	3.59	10.53
Disk Harrow	24'	MFWD 190	42,500	180	10	0.081	1.07	1.36	0.96	0.47	3.87	2.04	2.99	8.91
Disk Harrow	28'	MFWD 225	50,400	180	10	0.070	0.92	1.38	0.98	0.47	3.76	2.07	3.00	8.84
Disk Harrow	32'	MFWD 225	53,900	180	10	0.061	0.80	1.20	0.91	0.41	3.35	1.94	2.63	7.92
Disk Harrow	42'	MFWD 225	94,400	180	10	0.046	0.61	0.92	1.22	0.31	3.08	2.59	2.00	7.67
Disk Harrow 40-100hp	14'	2WD 75	14,700	180	10	0.140	1.84	0.92	0.57	0.15	3.48	1.21	0.90	5.60
Disk Heavy	14'	MFWD 150	24,400	180	10	0.145	1.91	1.91	0.98	0.65	5.47	2.09	3.92	11.49
Disk Heavy	20'	MFWD 170	40,600	180	10	0.097	1.27	1.44	1.09	0.51	4.34	2.31	3.25	9.91
Disk Heavy	28'	MFWD 190	50,400	180	10	0.075	0.99	1.25	1.05	0.43	3.75	2.23	2.77	8.76
Disk Ripper	15'	MFWD 225	41,500	180	10	0.136	1.78	2.68	1.57	0.92	6.97	3.31	5.84	16.13
Ditcher		2WD 130	5,750	200	10	0.020	0.26	0.22	0.04	0.11	0.64	0.06	0.66	1.37
Ditcher (1m/160a)		2WD 130	5,750	200	10	0.009	0.12	0.10	0.02	0.05	0.30	0.02	0.31	0.64
Fert Appl (Liquid)	4R-38	MFWD 150	14,700	150	8	0.154	2.73	2.03	1.51	0.69	6.97	1.71	4.15	12.83
Fert Appl (Liquid)	6R-30	MFWD 170	13,700	150	8	0.130	2.31	1.94	1.19	0.69	6.15	1.34	4.38	11.88
Fert Appl (Liquid)	6R-38	MFWD 170	11,600	150	8	0.103	1.82	1.53	0.79	0.54	4.71	0.90	3.45	9.07
Fert Appl (Liquid)	8R-30	MFWD 190	14,500	150	8	0.098	1.73	1.63	0.94	0.57	4.88	1.07	3.59	9.55
Fert Appl (Liquid)	8R-38	MFWD 190	16,600	150	8	0.077	1.37	1.29	0.85	0.45	3.97	0.96	2.84	7.78
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,700	150	8	0.051	0.91	0.85	0.60	0.30	2.68	0.68	1.89	5.26
Fert Appl (Liquid)	12R-30	MFWD 225	19,000	150	8	0.078	1.38	1.54	0.99	0.53	4.46	1.12	3.37	8.95
Fert Appl (Liquid)	12R-38	MFWD 225	17,700	150	8	0.051	0.91	1.01	0.60	0.35	2.89	0.68	2.21	5.79
Field Cult & Inc	42'	MFWD 225	64,700	100	10	0.037	0.66	0.74	0.61	0.25	2.27	2.58	1.62	6.48
Field Cult & Inc	50'	MFWD 225	74,900	100	10	0.031	0.56	0.62	0.59	0.21	1.99	2.51	1.36	5.86
Field Cult & Inc Fld	24'	MFWD 170	38,000	100	10	0.066	1.16	0.98	0.62	0.35	3.13	2.65	2.21	7.99
Field Cult & Inc Fld	32'	MFWD 190	45,000	100	10	0.049	0.87	0.82	0.55	0.28	2.54	2.35	1.81	6.71
Field Cult & Inc Rdg	12'	2WD 150	18,000	100	10	0.132	2.33	1.73	0.59	0.44	5.11	2.51	2.68	10.31
Field Cultivate Fld	24'	MFWD 170	25,300	100	10	0.062	0.81	0.92	0.39	0.33	2.46	1.66	2.08	6.21
Field Cultivate Fld	32'	MFWD 190	39,600	100	10	0.046	0.61	0.77	0.46	0.27	2.12	1.95	1.70	5.78
Field Cultivate Fld	42'	MFWD 225	56,900	100	10	0.035	0.46	0.69	0.50	0.24	1.91	2.13	1.52	5.57
Field Cultivate Fld	50'	MFWD 225	65,300	100	10	0.029	0.39	0.58	0.48	0.20	1.67	2.06	1.28	5.01
Field Cultivate Rdg	12'	2WD 150	12,600	100	10	0.124	1.63	1.63	0.39	0.41	4.08	1.65	2.52	8.26
Grain Cart Corn	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.06	0.28	0.92	2.27
Grain Cart Corn	700 bu	MFWD 190	36,800	200	12	0.025	0.33	0.42	0.25	0.14	1.15	0.43	0.92	2.51
Grain Cart Corn	1000 bu	MFWD 225	48,700	200	12	0.025	0.33	0.49	0.33	0.17	1.33	0.57	1.08	3.00
Grain Cart Rice	500 bu	MFWD 190	23,900	200	12	0.062	0.82	1.03	0.40	0.36	2.62	0.70	2.28	5.61
Grain Cart Rice	700 bu	MFWD 190	36,800	200	12	0.055	0.72	0.91	0.54	0.31	2.50	0.95	2.01	5.46
Grain Cart Rice	1000 bu	MFWD 190	48,700	200	12	0.045	0.60	0.76	0.60	0.26	2.23	1.04	1.67	4.96
Grain Cart Soybean	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.07	0.28	0.93	2.29
Grain Cart Soybean	700 bu	MFWD 190	36,800	200	12	0.021	0.27	0.35	0.21	0.12	0.96	0.36	0.77	2.11
Grain Cart Soybean	1000 bu	MFWD 190	48,700	200	12	0.021	0.27	0.35	0.28	0.12	1.03	0.48	0.77	2.30
Grain Cart Wht/Sor	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.07	0.28	0.93	2.29
Grain Cart Wht/Sor	700 bu	MFWD 190	36,800	200	12	0.021	0.27	0.35	0.21	0.12	0.96	0.36	0.77	2.11
Grain Cart Wht/Sor	1000 bu	MFWD 190	48,700	200	12	0.021	0.27	0.35	0.28	0.12	1.03	0.48	0.77	2.30
Grain Drill	10'	2WD 130	26,800	150	8	0.188	4.18	2.14	1.89	1.04	9.26	3.62	6.27	19.17
Grain Drill	12'	2WD 130	24,100	150	8	0.157	3.48	1.78	1.42	0.86	7.56	2.71	5.23	15.51
Grain Drill	15'	MFWD 150	32,700	150	8	0.125	2.79	1.65	1.54	0.56	6.54	2.94	3.38	12.87
Grain Drill	20'	MFWD 170	38,800	150	8	0.094	2.09	1.40	1.37	0.50	5.36	2.62	3.15	11.14
Grain Drill	24'	MFWD 190	58,600	150	8	0.078	1.74	1.30	1.72	0.45	5.23	3.30	2.87	11.41
Grain Drill	30'	MFWD 225	65,300	150	8	0.062	1.39	1.23	1.53	0.42	4.60	2.94	2.69	10.24
Grain Drill	35'	MFWD 225	93,600	150	8	0.053	1.19	1.06	1.89	0.36	4.51	3.61	2.31	10.44
Grain Drill & Pre	10'	2WD 130	32,200	150	8	0.203	4.50	2.31	2.45	1.12	10.39	4.69	6.75	21.84
Grain Drill & Pre	12'	2WD 130	29,600	150	8	0.169	3.75	1.92	1.87	0.93	8.49	3.59	5.63	17.72
Grain Drill & Pre	15'	MFWD 150	38,100	150	8	0.135	3.00	1.77	1.93	0.60	7.32	3.69	3.64	14.66
Grain Drill & Pre	20'	MFWD 170	44,300	150	8	0.101	2.25	1.51	1.68	0.53	5.99	3.22	3.39	12.61
Grain Drill & Pre	24'	MFWD 190	64,000	150	8	0.084	1.87	1.40	2.03	0.49	5.80	3.88	3.09	12.79
Grain Drill & Pre	30'	MFWD 225	70,700	150	8	0.067	1.50	1.33	1.79	0.46	5.09	3.43	2.90	11.42
Grain Drill & Pre	35'	MFWD 225	99,100	150	8	0.058	1.28	1.14	2.15	0.39	4.98	4.12	2.48	11.59
Grain Drill & Pre T	8R-38	MFWD 225	50,500	150	8	0.062	1.39	1.23	1.19	0.42	4.25	2.27	2.69	9.22
Harrow - Rigid	21'	2WD 150	6,750	200	10	0.073	0.97	0.97	0.17	0.24	2.36	0.26	1.50	4.13
Harrow - Folding	24'	MFWD 190	12,700	200	10	0.064	0.85	1.07	0.28	0.37	2.58	0.43	2.36	5.39
Harrow - Folding	30'	MFWD 190	15,200	200	10	0.051	0.68	0.86	0.27	0.30	2.11	0.41	1.89	4.42
Harrow - Folding	40'	MFWD 190	17,400	200	10	0.038	0.51	0.64	0.23	0.22	1.61	0.35	1.42	3.39
Harrow - Folding	48'	MFWD 225	22,700	200	10	0.032	0.42	0.63	0.25	0.22	1.53	0.38	1.38	3.31

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (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-----							
Harrow - Rigid	13'	2WD 130	4,950	200	10	0.119	1.56	1.35	0.20	0.66	3.79	0.31	3.97	8.08
Header - Corn	6R-30	265 hp	46,500	300	8	0.170	2.23	3.94	1.97	5.72	13.89	2.97	22.60	39.47
Header - Corn	6R-38	265 hp	46,700	300	8	0.134	1.76	3.11	1.56	4.52	10.97	2.36	17.84	31.18
Header - Corn	8R-30	265 hp	58,600	300	8	0.127	1.67	2.96	1.87	4.29	10.80	2.81	16.95	30.57
Header - Corn	8R-38	325 hp	59,600	300	8	0.100	1.32	2.87	1.50	3.53	9.23	2.26	13.94	25.44
Header - Corn	12R-20	325 hp	77,400	300	8	0.127	1.67	3.63	2.47	4.46	12.25	3.71	17.63	33.60
Header - Corn	12R-30	325 hp	91,600	300	8	0.085	1.11	2.42	1.94	2.97	8.46	2.93	11.75	23.16
Header - Draper (CL)	25' Rigid	265 hp	58,200	300	8	0.203	2.66	4.70	2.70	6.83	16.91	4.23	26.96	48.11
Header - Draper (CL)	30' Rigid	325 hp	67,200	300	8	0.169	2.22	4.81	2.60	5.92	15.56	4.07	23.37	43.01
Header - Draper (CL)	36' Rigid	355 hp	71,300	300	8	0.141	1.85	4.38	2.30	4.99	13.53	3.60	19.70	36.84
Header - Draper (SL)	25' Rigid	325 hp	58,200	300	8	0.176	2.31	5.00	2.34	6.16	15.82	3.67	24.30	43.80
Header - Draper (SL)	30' Rigid	325 hp	67,200	300	8	0.146	1.92	4.17	2.25	5.13	13.49	3.53	20.25	37.28
Header - Draper (SL)	36' Rigid	355 hp	71,300	300	8	0.122	1.60	3.79	1.99	4.32	11.72	3.12	17.07	31.93
Header - Rice (CL)	25' Rigid	325 hp	64,400	300	8	0.253	3.33	7.21	4.08	8.88	23.52	6.14	35.05	64.73
Header - Rice (CL)	30' Rigid	325 hp	74,100	300	8	0.211	2.77	6.01	3.91	7.40	20.11	5.89	29.21	55.22
Header - Rice (SL)	25' Rigid	325 hp	64,400	300	8	0.220	2.89	6.25	3.54	7.70	20.38	5.32	30.38	56.10
Header - Rice (SL)	30' Rigid	325 hp	74,100	300	8	0.183	2.40	5.21	3.39	6.41	17.43	5.10	25.31	47.86
Header -RiceStrp(CL)	20'	265 hp	48,600	300	8	0.253	3.33	5.88	3.08	8.54	20.84	4.64	33.70	59.18
Header -RiceStrp(CL)	24'	325 hp	53,300	300	8	0.211	2.77	6.01	2.81	7.40	19.01	4.24	29.21	52.47
Header -RiceStrp(CL)	32'	325 hp	58,700	300	8	0.158	2.08	4.51	2.32	5.55	14.47	3.50	21.90	39.89
Header -RiceStrp(SL)	20'	265 hp	48,600	300	8	0.220	2.89	5.10	2.67	7.40	18.06	4.02	29.20	51.29
Header -RiceStrp(SL)	24'	325 hp	53,300	300	8	0.183	2.40	5.21	2.44	6.41	16.48	3.67	25.31	45.47
Header -RiceStrp(SL)	32'	325 hp	58,700	300	8	0.137	1.80	3.91	2.01	4.81	12.54	3.03	18.98	34.57
Header -Soybean	22' Flex	265 hp	31,800	300	8	0.116	1.52	2.69	0.92	3.90	9.04	1.38	15.41	25.84
Header -Soybean	25' Flex	325 hp	34,300	300	8	0.102	1.34	2.90	0.87	3.57	8.70	1.31	14.10	24.12
Header -Soybean	30' Flex	325 hp	39,600	300	8	0.085	1.11	2.42	0.84	2.97	7.36	1.26	11.75	20.38
Header -Soybean	35' Flex	355 hp	45,700	300	8	0.072	0.95	2.26	0.83	2.58	6.64	1.25	10.19	18.09
Header Wheat/Sorghum	22' Rigid	265 hp	19,600	300	8	0.116	1.52	2.69	0.56	3.90	8.69	0.85	15.41	24.96
Header Wheat/Sorghum	25' Rigid	325 hp	24,300	300	8	0.102	1.34	2.90	0.62	3.57	8.44	0.93	14.10	23.48
Header Wheat/Sorghum	30' Rigid	325 hp	28,300	300	8	0.085	1.11	2.42	0.60	2.97	7.12	0.90	11.75	19.78
Land Plane	50'x16'	MFWD 190	14,300	200	10	0.151	1.99	2.52	0.43	0.88	5.82	1.14	5.55	12.52
Levee Pull & Seed	8 Blade	MFWD 170	10,400	100	10	0.003	0.04	0.05	0.00	0.01	0.12	0.03	0.11	0.28
Levee Pull (1m/80a)	8 blade	MFWD 170	7,180	100	10	0.003	0.04	0.05	0.00	0.01	0.12	0.02	0.11	0.27
Levee Splitter (1/80	32"	MFWD 150	7,180	100	10	0.004	0.05	0.05	0.00	0.01	0.13	0.03	0.11	0.27
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	5.72	4.28	2.23	1.49	13.74	4.54	9.43	27.72
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	5.72	4.28	2.23	1.49	13.74	4.54	9.43	27.72
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	3.82	2.86	1.49	1.00	9.18	3.03	6.30	18.53
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	4.84	3.62	1.89	1.26	11.63	3.85	7.98	23.47
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	3.82	2.86	1.49	1.00	9.18	3.03	6.30	18.53
NT Grain Drill	10'	2WD 130	34,500	150	8	0.235	5.23	2.68	3.04	1.30	12.26	5.83	7.84	25.94
NT Grain Drill	12'	2WD 130	41,800	150	8	0.163	3.63	1.86	2.56	0.90	8.96	4.90	5.44	19.32
NT Grain Drill	15'	MFWD 150	49,700	150	8	0.130	2.90	1.71	2.44	0.58	7.65	4.66	3.52	15.84
NT Grain Drill	20'	MFWD 170	65,600	150	8	0.098	2.18	1.46	2.41	0.52	6.57	4.62	3.28	14.48
NT Grain Drill	24'	MFWD 190	82,400	150	8	0.081	1.81	1.36	2.52	0.47	6.18	4.83	2.99	14.01
NT Grain Drill	30'	MFWD 225	94,200	150	8	0.065	1.45	1.28	2.31	0.44	5.50	4.42	2.80	12.73
NT Grain Drill & Pre	10'	2WD 130	39,900	150	8	0.211	4.69	2.40	3.16	1.17	11.43	6.05	7.04	24.53
NT Grain Drill & Pre	12'	2WD 130	47,200	150	8	0.176	3.91	2.00	3.12	0.97	10.01	5.96	5.86	21.84
NT Grain Drill & Pre	15'	MFWD 150	55,100	150	8	0.141	3.13	1.85	2.91	0.63	8.52	5.57	3.79	17.89
NT Grain Drill & Pre	20'	MFWD 170	71,000	150	8	0.105	2.34	1.57	2.81	0.56	7.29	5.38	3.53	16.22
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.95	1.46	2.90	0.51	6.83	5.55	3.22	15.61
NT Grain Drill & Pre	30'	MFWD 225	99,600	150	8	0.070	1.56	1.38	2.63	0.48	6.06	5.03	3.02	14.12
NT Plant&Pre-Folding	8R-38	MFWD 170	54,300	150	8	0.083	1.85	1.24	1.70	0.44	5.24	3.25	2.79	11.30
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	86,900	150	8	0.055	1.23	0.82	1.81	0.29	4.17	3.47	1.86	9.50
NT Plant&Pre-Folding	12R-20	MFWD 190	71,600	150	8	0.105	2.34	1.75	2.83	0.61	7.56	5.43	3.87	16.86
NT Plant&Pre-Folding	12R-30	MFWD 190	78,100	150	8	0.070	1.56	1.17	2.06	0.40	5.21	3.95	2.58	11.74
NT Plant&Pre-Folding	12R-38	MFWD 190	86,900	150	8	0.055	1.23	0.92	1.81	0.32	4.29	3.47	2.03	9.80
NT Plant&Pre-Folding	16R-30	MFWD 190	109,000	150	8	0.052	1.17	0.87	2.16	0.30	4.52	4.13	1.93	10.59
NT Plant&Pre-Folding	23R-15	MFWD 190	141,000	150	8	0.073	1.63	1.22	3.88	0.42	7.16	7.42	2.68	17.27
NT Plant&Pre-Folding	24R-15	MFWD 225	148,000	150	8	0.070	1.56	1.38	3.91	0.48	7.34	7.48	3.02	17.85
NT Plant&Pre-Folding	24R-20	MFWD 190	163,000	150	8	0.052	1.17	0.87	3.23	0.30	5.59	6.18	1.93	13.71
NT Plant&Pre-Folding	24R-30	MFWD 190	199,000	150	8	0.035	0.78	0.58	2.63	0.20	4.20	5.03	1.29	10.52
NT Plant&Pre-Folding	31R-15	MFWD 225	173,000	150	8	0.054	1.21	1.07	3.54	0.37	6.20	6.78	2.34	15.33
NT Plant&Pre-Folding	32R-15	MFWD 225	192,000	150	8	0.052	1.17	1.04	3.80	0.36	6.38	7.28	2.26	15.93
NT Plant&Pre-Rigid	4R-30	2WD 130	28,200	150	8	0.211	4.69	2.40	2.23	1.17	10.50	4.27	7.04	21.83
NT Plant&Pre-Rigid	4R-38	2WD 130	30,500	150	8	0.166	3.69	1.89	1.90	0.92	8.41	3.64	5.54	17.60
NT Plant&Pre-Rigid	6R-30	MFWD 150	39,600	150	8	0.141	3.13	1.85	2.09	0.63	7.70	4.00	3.79	15.50
NT Plant&Pre-Rigid	6R-38	MFWD 150	35,400	150	8	0.111	2.47	1.46	1.47	0.49	5.90	2.82	2.99	11.73
NT Plant&Pre-Rigid	8R-30	MFWD 170	45,600	150	8	0.105	2.34	1.57	1.80	0.56	6.29	3.45	3.53	13.29
NT Plant&Pre-Rigid	8R-38	MFWD 170	42,900	150	8	0.083	1.85	1.24	1.34	0.44	4.88	2.57	2.79	10.25
NT Plant&Pre-Rigid	10R-30	MFWD 190	47,400	150	8	0.084	1.87	1.40	1.50	0.49	5.28	2.87	3.09	11.25
NT Plant&Pre-Rigid	11R-15	MFWD 170	55,200	150	8	0.143	3.19	2.14	2.97	0.76	9.07	5.69	4.81	19.59
NT Plant&Pre-Rigid	11R-20	MFWD 170	50,700	150	8	0.115	2.56	1.71	2.19	0.61	7.09	4.20	3.86	15.16
NT Plant&Pre-Rigid	12R-20	MFWD 190	57,100	150	8	0.105	2.34	1.75	2.26	0.61	6.98	4.33	3.87	15.18
NT Plant&Pre-Rigid	12R-30	MFWD 190	72,000	150	8	0.070	1.56	1.17	1.90	0.40	5.05	3.64	2.58	11.27
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	6,210	150	8	0.097	2.16	1.91	0.22	0.66	4.97	0.43	4.18	9.59
NT Plant&Pre-Rigid	15R-15	MFWD 190	71,000	150	8	0.113	2.51	1.88	3.01	0.65	8.06	5.76	4.14	17.96
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	159,000	150	8	0.055	1.23	1.09	3.31	0.37	6.03	6.34	2.38	14.76
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	129,000	150	8	0.083	1.85	1.64	4.04	0.56	8.11	7.73	3.58	19.43
NT Plant-Folding	8R-38	MFWD 170	48,000	150	8	0.077	1.72	1.15	1.39	0.41	4.68	2.67	2.59	9.95

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
NT Plant-Folding	8R-38 2x1	MFWD 170	79,100	150	8	0.051	1.14	0.76	1.53	0.27	3.72	2.93	1.72	8.38
NT Plant-Folding	12R-20	MFWD 190	66,100	150	8	0.098	2.18	1.63	2.43	0.57	6.81	4.65	3.59	15.06
NT Plant-Folding	12R-30	MFWD 190	70,300	150	8	0.065	1.45	1.08	1.72	0.38	4.64	3.30	2.39	10.34
NT Plant-Folding	12R-38	MFWD 190	79,100	150	8	0.051	1.14	0.85	1.53	0.30	3.84	2.93	1.89	8.66
NT Plant-Folding	16R-30	MFWD 190	101,000	150	8	0.049	1.09	0.81	1.86	0.28	4.05	3.55	1.79	9.40
NT Plant-Folding	23R-15	MFWD 190	133,000	150	8	0.068	1.51	1.13	3.40	0.39	6.44	6.50	2.49	15.44
NT Plant-Folding	24R-15	MFWD 225	140,000	150	8	0.065	1.45	1.28	3.43	0.44	6.62	6.57	2.80	16.01
NT Plant-Folding	24R-20	MFWD 190	156,000	150	8	0.049	1.09	0.81	2.87	0.28	5.06	5.49	1.79	12.35
NT Plant-Folding	24R-30	MFWD 190	180,000	150	8	0.032	0.72	0.54	2.20	0.19	3.67	4.22	1.19	9.09
NT Plant-Folding	31R-15	MFWD 225	154,000	150	8	0.050	1.12	0.99	2.93	0.34	5.40	5.60	2.17	13.18
NT Plant-Folding	32R-15	MFWD 225	173,000	150	8	0.049	1.09	0.96	3.18	0.33	5.57	6.09	2.10	13.77
NT Plant-Rigid	4R-30	2WD 130	22,700	150	8	0.196	4.36	2.23	1.67	1.08	9.35	3.19	6.53	19.09
NT Plant-Rigid	4R-38	2WD 130	25,100	150	8	0.154	3.43	1.75	1.45	0.85	7.50	2.78	5.14	15.43
NT Plant-Rigid	6R-30	MFWD 150	34,100	150	8	0.130	2.90	1.71	1.67	0.58	6.88	3.20	3.52	13.61
NT Plant-Rigid	6R-38	MFWD 150	29,900	150	8	0.103	2.29	1.35	1.15	0.46	5.27	2.21	2.78	10.27
NT Plant-Rigid	8R-30	MFWD 170	40,200	150	8	0.098	2.18	1.46	1.48	0.52	5.64	2.83	3.28	11.76
NT Plant-Rigid	8R-38	MFWD 170	37,500	150	8	0.077	1.72	1.15	1.09	0.41	4.38	2.08	2.59	9.06
NT Plant-Rigid	10R-30	MFWD 190	41,900	150	8	0.078	1.74	1.30	1.23	0.45	4.74	2.36	2.87	9.97
NT Plant-Rigid	11R-15	MFWD 170	49,800	150	8	0.133	2.96	1.98	2.49	0.70	8.15	4.77	4.46	17.40
NT Plant-Rigid	11R-20	MFWD 170	45,300	150	8	0.107	2.38	1.59	1.82	0.57	6.37	3.48	3.59	13.45
NT Plant-Rigid	12R-20	MFWD 190	51,700	150	8	0.098	2.18	1.63	1.90	0.57	6.28	3.64	3.59	13.52
NT Plant-Rigid	12R-30	MFWD 190	56,200	150	8	0.065	1.45	1.08	1.37	0.38	4.30	2.63	2.39	9.33
NT Plant-Rigid	13R-18/20	MFWD 225	56,600	150	8	0.090	2.01	1.79	1.93	0.61	6.35	3.69	3.90	13.95
NT Plant-Rigid	15R-15	MFWD 190	63,200	150	8	0.105	2.33	1.74	2.48	0.61	7.17	4.76	3.84	15.78
NT Plant-TwinRow	12R-30/40	MFWD 225	140,000	150	8	0.051	1.14	1.01	2.71	0.35	5.23	5.19	2.21	12.63
NT Plant-TwinRow	8R-30/40	MFWD 225	123,000	150	8	0.077	1.72	1.52	3.58	0.52	7.36	6.85	3.33	17.54
Peanut Cond. & Lifter	6-Row	MFWD 190	12,900	300	20	0.100	1.31	1.66	0.21	0.58	3.77	0.31	3.66	7.75
Peanut Conditioner	6-Row	MFWD 190	14,900	300	20	0.100	1.31	1.66	0.29	0.58	3.85	0.32	3.66	7.83
Peanut Dig/Invertor	4R-30	MFWD 190	29,000	300	15	0.235	3.09	3.92	1.70	1.37	10.09	2.03	8.63	20.76
Peanut Dig/Invertor	4R-38	MFWD 190	29,000	300	15	0.186	2.44	3.09	1.34	1.08	7.96	1.60	6.81	16.39
Peanut Dig/Invertor	6R-38	MFWD 190	42,100	300	15	0.124	1.63	2.06	0.91	0.72	5.33	1.55	4.54	11.42
Peanut Dump Cart	6-Row	MFWD 190	47,500	300	20	0.310	4.07	5.15	0.85	1.80	11.88	3.49	11.34	26.72
Peanut Harvester	4R-30	MFWD 225	133,000	300	20	0.849	11.16	16.73	6.40	5.79	40.10	24.53	36.46	101.10
Peanut Harvester	4R-38	MFWD 225	133,000	300	20	0.934	12.28	18.40	7.04	6.36	44.09	28.23	40.09	112.41
Peanut Harvester	6R-38	MFWD 225	147,000	300	20	0.625	8.21	12.30	4.44	4.25	29.21	20.86	26.81	76.89
Peanut Lifter	6-Row	MFWD 225	6,300	300	20	0.100	1.31	1.96	0.13	0.68	4.09	0.13	4.28	8.52
Peanut Plt&Pre Fold.	12R-38	MFWD 190	79,800	150	8	0.080	1.78	1.33	2.40	0.46	5.99	4.60	2.94	13.54
Peanut Plt&Pre Rigid	8R-30	MFWD 190	41,000	150	8	0.152	3.39	2.54	2.34	0.88	9.16	4.49	5.59	19.25
Peanut Plt&Pre Rigid	8R-38	MFWD 190	38,200	150	8	0.120	2.68	2.00	1.73	0.70	7.12	3.30	4.42	14.85
Pipe Spool 160ac	1/4m roll	2WD 130	3,600	15	12	0.003	0.09	0.03	0.00	0.01	0.15	0.07	0.10	0.33
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.18	0.04	0.00	0.02	0.24	0.00	0.12	0.37
Plant & Pre-Folding	8R-38	MFWD 170	48,700	150	8	0.080	1.78	1.19	1.46	0.42	4.86	2.80	2.68	10.35
Plant & Pre-Folding	8R-38 2x1	MFWD 170	79,800	150	8	0.053	1.18	0.79	1.59	0.28	3.86	3.05	1.78	8.71
Plant & Pre-Folding	12R-20	MFWD 190	64,600	150	8	0.101	2.25	1.68	2.45	0.59	6.99	4.70	3.71	15.41
Plant & Pre-Folding	12R-30	MFWD 190	71,100	150	8	0.067	1.50	1.12	1.80	0.39	4.82	3.45	2.47	10.75
Plant & Pre-Folding	12R-38	MFWD 190	79,800	150	8	0.053	1.18	0.88	1.59	0.31	3.98	3.05	1.95	8.99
Plant & Pre-Folding	16R-30	MFWD 190	99,600	150	8	0.050	1.12	0.84	1.89	0.29	4.16	3.62	1.85	9.64
Plant & Pre-Folding	23R-15	MFWD 190	127,000	150	8	0.070	1.56	1.17	3.35	0.40	6.50	6.42	2.58	15.50
Plant & Pre-Folding	24R-15	MFWD 225	134,000	150	8	0.067	1.50	1.33	3.40	0.46	6.69	6.50	2.90	16.10
Plant & Pre-Folding	24R-20	MFWD 190	149,000	150	8	0.050	1.12	0.84	2.83	0.29	5.10	5.42	1.85	12.38
Plant & Pre-Folding	24R-30	MFWD 190	185,000	150	8	0.033	0.75	0.56	2.34	0.19	3.85	4.49	1.23	9.59
Plant & Pre-Folding	31R-15	MFWD 225	155,000	150	8	0.052	1.16	1.03	3.04	0.35	5.60	5.83	2.25	13.68
Plant & Pre-Folding	32R-15	MFWD 225	173,000	150	8	0.050	1.12	0.99	3.29	0.34	5.76	6.30	2.17	14.24
Plant & Pre-Rigid	4R-30	2WD 130	25,800	150	8	0.203	4.50	2.31	1.96	1.12	9.90	3.75	6.75	20.42
Plant & Pre-Rigid	4R-38	2WD 130	28,200	150	8	0.159	3.54	1.81	1.69	0.88	7.94	3.23	5.32	16.50
Plant & Pre-Rigid	6R-30	MFWD 150	36,000	150	8	0.135	3.00	1.77	1.82	0.60	7.21	3.49	3.64	14.35
Plant & Pre-Rigid	6R-38	MFWD 150	31,900	150	8	0.106	2.37	1.40	1.27	0.47	5.53	2.44	2.87	10.85
Plant & Pre-Rigid	8R-30	MFWD 170	41,000	150	8	0.101	2.25	1.51	1.56	0.53	5.86	2.98	3.39	12.24
Plant & Pre-Rigid	8R-38	MFWD 170	38,200	150	8	0.080	1.78	1.19	1.14	0.42	4.55	2.19	2.68	9.43
Plant & Pre-Rigid	10R-30	MFWD 190	41,500	150	8	0.081	1.80	1.35	1.26	0.47	4.89	2.41	2.97	10.28
Plant & Pre-Rigid	11R-15	MFWD 170	48,800	150	8	0.148	3.29	2.20	2.71	0.78	8.99	5.18	4.95	19.14
Plant & Pre-Rigid	11R-20	MFWD 170	44,300	150	8	0.110	2.46	1.65	1.84	0.58	6.54	3.52	3.71	13.78
Plant & Pre-Rigid	12R-20	MFWD 190	50,100	150	8	0.101	2.25	1.68	1.90	0.59	6.44	3.64	3.71	13.80
Plant & Pre-Rigid	12R-30	MFWD 190	65,000	150	8	0.067	1.50	1.12	1.64	0.39	4.67	3.15	2.47	10.30
Plant & Pre-Rigid	13R-18/20	MFWD 225	54,500	150	8	0.093	2.07	1.84	1.91	0.63	6.46	3.65	4.01	14.14
Plant & Pre-Rigid	15R-15	MFWD 190	62,200	150	8	0.108	2.41	1.80	2.53	0.63	7.38	4.84	3.97	16.20
Plant & Pre-TwinRow	12R-30/40	MFWD 225	145,000	150	8	0.053	1.18	1.05	2.90	0.36	5.50	5.55	2.29	13.35
Plant & Pre-TwinRow	8R-30/40	MFWD 225	119,000	150	8	0.080	1.78	1.58	3.58	0.54	7.49	6.85	3.44	17.78
Plant - Folding	8R-38	MFWD 170	43,300	150	8	0.074	1.65	1.10	1.21	0.39	4.36	2.31	2.49	9.17
Plant - Folding	8R-38 2x1	MFWD 170	72,000	150	8	0.049	1.10	0.73	1.33	0.26	3.44	2.56	1.65	7.66
Plant - Folding	12R-20	MFWD 190	59,100	150	8	0.094	2.09	1.56	2.08	0.54	6.29	3.99	3.45	13.74
Plant - Folding	12R-30	MFWD 190	63,300	150	8	0.062	1.39	1.04	1.49	0.36	4.29	2.85	2.30	9.45
Plant - Folding	12R-38	MFWD 190	72,000	150	8	0.049	1.10	0.82	1.33	0.28	3.55	2.56	1.81	7.93
Plant - Folding	16R-30	MFWD 190	91,800	150	8	0.047	1.04	0.78	1.62	0.27	3.72	3.10	1.72	8.55
Plant - Folding	23R-15	MFWD 190	119,000	150	8	0.065	1.45	1.08	2.92	0.38	5.84	5.58	2.39	13.83
Plant - Folding	24R-15	MFWD 225	126,000	150	8	0.062	1.39	1.23	2.97	0.42	6.03	5.68	2.69	14.40
Plant - Folding	24R-20	MFWD 190	142,000	150	8	0.047	1.04	0.78	2.51	0.27	4.61	4.80	1.72	11.14
Plant - Folding	24R-30	MFWD 190	166,000	150	8	0.031	0.69	0.52	1.95	0.18	3.35	3.74	1.15	8.25

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/acre	-----\$/acre-----							
Plant - Folding	31R-15	MFWD 225	136,000	150	8	0.048	1.08	0.95	2.48	0.33	4.85	4.75	2.09	11.70
Plant - Folding	32R-15	MFWD 225	155,000	150	8	0.047	1.04	0.92	2.74	0.32	5.03	5.24	2.02	12.29
Plant - Rigid	4R-30	2WD 130	20,400	150	8	0.188	4.18	2.14	1.44	1.04	8.81	2.75	6.27	17.85
Plant - Rigid	4R-38	2WD 130	22,700	150	8	0.148	3.29	1.68	1.26	0.82	7.07	2.41	4.94	14.43
Plant - Rigid	6R-30	MFWD 150	30,600	150	8	0.125	2.79	1.65	1.44	0.56	6.44	2.75	3.38	12.58
Plant - Rigid	6R-38	MFWD 150	26,400	150	8	0.099	2.20	1.30	0.98	0.44	4.93	1.87	2.66	9.48
Plant - Rigid	8R-30	MFWD 170	35,500	150	8	0.094	2.09	1.40	1.25	0.50	5.25	2.40	3.15	10.80
Plant - Rigid	8R-38	MFWD 170	32,800	150	8	0.074	1.65	1.10	0.91	0.39	4.07	1.75	2.49	8.32
Plant - Rigid	10R-30	MFWD 190	36,100	150	8	0.075	1.67	1.25	1.02	0.43	4.38	1.95	2.76	9.10
Plant - Rigid	11R-15	MFWD 170	43,400	150	8	0.137	3.05	2.04	2.24	0.73	8.07	4.28	4.60	16.96
Plant - Rigid	11R-20	MFWD 170	38,900	150	8	0.103	2.28	1.53	1.50	0.54	5.87	2.87	3.44	12.19
Plant - Rigid	12R-20	MFWD 190	44,600	150	8	0.094	2.09	1.56	1.57	0.54	5.78	3.01	3.45	12.25
Plant - Rigid	12R-30	MFWD 190	57,200	150	8	0.062	1.39	1.04	1.34	0.36	4.15	2.57	2.30	9.03
Plant - Rigid	13R-18/20	MFWD 225	49,000	150	8	0.086	1.92	1.71	1.59	0.59	5.82	3.05	3.72	12.61
Plant - Rigid	15R-15	2WD 150	54,400	150	8	0.094	2.09	1.23	1.92	0.31	5.57	3.67	1.91	11.16
Plant - TwinRow	12R-30/40	MFWD 225	126,000	150	8	0.049	1.10	0.97	2.34	0.33	4.76	4.48	2.12	11.37
Plant - TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.074	1.65	1.46	3.18	0.50	6.81	6.09	3.19	16.10
Roller/Cultipacker	12'	2WD 130	6,520	300	12	0.124	1.63	1.41	0.19	0.68	3.93	0.26	4.14	8.33
Roller/Cultipacker	20'	MFWD 150	17,000	300	12	0.074	0.98	0.97	0.29	0.33	2.59	0.41	2.00	5.01
Roller/Cultipacker	30'	MFWD 170	18,700	300	12	0.049	0.65	0.74	0.21	0.26	1.87	0.30	1.66	3.84
Roller/Cultipacker	38'	MFWD 225	20,600	300	12	0.039	0.51	0.77	0.19	0.26	1.74	0.26	1.68	3.69
Roller/Stubble	20'	2WD 50	13,500	300	12	0.074	0.98	0.32	0.23	0.04	1.59	0.32	0.29	2.21
Roller/Stubble	32'	MFWD 225	22,800	300	12	0.046	0.61	0.91	0.25	0.31	2.10	0.34	2.00	4.44
Rotary Cutter	7'	MFWD 130	4,690	185	10	0.168	2.21	1.91	0.64	0.64	5.41	0.45	3.89	9.76
Rotary Cutter	12'	2WD 150	16,000	185	10	0.098	1.29	1.28	1.27	0.33	4.18	0.89	1.99	7.07
Rotary Cutter-Flex	15'	MFWD 150	19,400	185	10	0.078	1.03	1.03	1.23	0.35	3.65	0.87	2.11	6.63
Rotary Cutter-Flex	20'	MFWD 150	28,100	185	10	0.058	0.77	0.77	1.34	0.26	3.15	0.94	1.58	5.68
Row Cond & Inc-Fold.	26'	MFWD 190	24,700	100	10	0.063	1.12	1.05	0.39	0.36	2.93	1.65	2.32	6.91
Row Cond & Inc-Fold.	38'	MFWD 225	32,400	100	10	0.043	0.76	0.85	0.35	0.29	2.26	1.48	1.86	5.61
Row Cond & Inc-Rigid	13'	2WD 130	13,300	100	10	0.126	2.24	1.44	0.42	0.70	4.81	1.78	4.22	10.81
Row Cond & Inc-Rigid	21'	2WD 170	16,700	100	10	0.078	1.38	1.16	0.32	0.29	3.17	1.38	1.83	6.40
Row Cond & Inc-Rigid	26'	MFWD 190	19,600	100	10	0.026	0.47	0.44	0.13	0.15	1.19	0.55	0.97	2.72
Row Cond Folding	26'	MFWD 225	19,300	100	10	0.059	0.78	1.17	0.28	0.40	2.65	1.21	2.56	6.43
Row Cond Folding	38'	MFWD 225	24,600	100	10	0.040	0.53	0.80	0.25	0.27	1.87	1.06	1.75	4.68
Row Cond Rigid	13'	2WD 130	7,840	100	10	0.119	1.56	1.35	0.23	0.66	3.82	0.98	3.97	8.78
Row Cond Rigid	21'	2WD 170	11,200	100	10	0.073	0.97	1.10	0.20	0.27	2.55	0.87	1.73	5.16
Row Cond Rigid	26'	MFWD 190	14,200	100	10	0.059	0.78	0.99	0.21	0.34	2.33	0.89	2.18	5.41
Row Cond./Roll-Fold.	26'	MFWD 190	22,200	160	10	0.072	0.94	1.19	0.40	0.41	2.96	1.05	2.63	6.66
Row Cond./Roll-Fold.	30'	MFWD 190	35,600	160	10	0.062	0.82	1.03	0.55	0.36	2.77	1.46	2.28	6.53
Row Cond./Roll-Fold.	40'	MFWD 225	34,300	160	10	0.046	0.61	0.92	0.40	0.31	2.26	1.06	2.01	5.33
Row Cond./Roll-Rigid	21'	MFWD 190	23,000	160	10	0.089	1.17	1.48	0.51	0.51	3.69	1.35	3.26	8.31
Row Cond./Roll-Rigid	26'	MFWD 190	25,800	160	10	0.072	0.94	1.19	0.46	0.41	3.03	1.22	2.63	6.89
Spin Spreader	5 ton	MFWD 190	11,800	100	8	0.042	0.93	0.69	0.27	0.24	2.15	0.56	1.54	4.25
Spray (ATV Ropewick)	75"	800 CC	660	200	8	0.260	4.60	0.34	0.08	0.39	5.42	0.09	1.55	7.07
Spray (ATV)	12'/17'	800 CC	2,280	200	8	0.112	1.99	0.15	0.12	0.17	2.43	0.14	0.67	3.25
Spray (ATV)	20'	800 CC	1,950	200	8	0.084	1.49	0.11	0.07	0.12	1.81	0.09	0.50	2.41
Spray (Band)	27' Fold	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82
Spray (Band)	40' Fold	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Band)	50' Fold	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Band)	53' Fold	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Band)	60' Fold	MFWD 170	18,600	200	8	0.028	0.49	0.41	0.24	0.14	1.31	0.29	0.94	2.55
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,480	200	8	0.130	2.30	1.70	0.33	0.58	4.92	0.40	3.50	8.82
Spray (Bcast/HB)	20' Rigid	MFWD 150	6,450	200	8	0.084	1.49	1.11	0.25	0.37	3.23	0.30	2.27	5.82
Spray (Bcast/HB)	27' Fold	MFWD 170	10,700	200	8	0.062	1.10	0.93	0.31	0.33	2.68	0.37	2.09	5.16
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,830	200	8	0.062	1.10	0.93	0.23	0.33	2.60	0.27	2.09	4.97
Spray (Bcast/HB)	30' Fold	MFWD 170	16,500	200	8	0.056	0.99	0.83	0.43	0.29	2.57	0.52	1.88	4.98
Spray (Bcast/HB)	40' Fold	MFWD 170	16,100	200	8	0.042	0.74	0.62	0.31	0.22	1.92	0.38	1.41	3.72
Spray (Broadcast)	27'	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82
Spray (Broadcast)	40'	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Broadcast)	50'	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Broadcast)	53'	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Broadcast)	60'	MFWD 170	18,600	200	8	0.028	0.49	0.41	0.24	0.14	1.31	0.29	0.94	2.55
Spray (Direct/Hood)	8R-30	MFWD 170	15,600	200	8	0.084	1.49	1.25	0.61	0.44	3.82	0.74	2.83	7.39
Spray (Direct/Hood)	8R-38	MFWD 170	16,600	200	8	0.066	1.18	0.99	0.52	0.35	3.05	0.62	2.23	5.91
Spray (Direct/Hood)	12R-30	MFWD 170	22,200	200	8	0.056	0.99	0.83	0.58	0.29	2.72	0.70	1.88	5.31
Spray (Direct/Hood)	12R-38	MFWD 170	22,500	200	8	0.044	0.78	0.66	0.46	0.23	2.15	0.56	1.48	4.21
Spray (Direct/Layby)	8R-30	MFWD 170	12,700	200	8	0.084	1.49	1.25	0.50	0.44	3.70	0.60	2.83	7.14
Spray (Direct/Layby)	8R-38	MFWD 170	12,700	200	8	0.066	1.18	0.99	0.39	0.35	2.93	0.47	2.23	5.64
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	17,300	200	8	0.044	0.78	0.66	0.36	0.23	2.04	0.43	1.48	3.97
Spray (Direct/Layby)	12R-30	MFWD 170	17,400	200	8	0.056	0.99	0.83	0.46	0.29	2.59	0.55	1.88	5.03
Spray (Direct/Layby)	12R-38	MFWD 170	17,300	200	8	0.044	0.78	0.66	0.36	0.23	2.04	0.43	1.48	3.97
Spray (Direct/Layby)	16R-20	2WD 50	10,000	200	8	0.062	1.10	0.27	0.29	0.04	1.71	0.35	0.24	2.31
Spray (Levee Leaper)	50'	MFWD 225	12,900	200	8	0.033	0.59	0.66	0.20	0.23	1.69	0.24	1.45	3.39
Spray (Pull Type)	60'	MFWD 225	36,400	200	8	0.028	0.49	0.55	0.48	0.19	1.72	0.57	1.21	3.51
Spray (Pull Type)	80'	MFWD 225	50,300	200	8	0.021	0.37	0.41	0.49	0.14	1.43	0.60	0.90	2.94
Spray (Pull Type)	90'	2WD 50	51,000	200	8	0.018	0.33	0.08	0.44	0.01	0.87	0.54	0.07	1.49
Spray (Pull Type)	120'	MFWD 225	76,600	200	8	0.014	0.24	0.27	0.50	0.09	1.12	0.60	0.60	2.34
Spray (Ropewick)	20'	MFWD 190	3,440	200	8	0.084	1.49	1.40	0.13	0.49	3.53	0.16	3.09	6.79
Spray (Spot)	27'	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (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-----							
Spray (Spot)	40'	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Spot)	50'	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Spot)	53'	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Spot)	60'	MFWD 225	18,600	200	8	0.028	0.49	0.55	0.24	0.19	1.49	0.29	1.21	2.99
Stalk Shredder	14'	MFWD 150	12,800	200	10	0.117	1.54	1.54	1.32	0.52	4.94	0.79	3.16	8.90
Stalk Shredder Flex	20'	MFWD 150	29,800	200	10	0.082	1.08	1.08	2.15	0.36	4.68	1.29	2.21	8.20
Stalk Shredder-Flail	12'	MFWD 150	15,500	200	10	0.137	1.80	1.80	1.86	0.61	6.09	1.12	3.69	10.91
Stalk Shredder-Flail	15'	MFWD 150	19,800	200	10	0.110	1.44	1.44	1.90	0.49	5.28	1.15	2.95	9.39
Stalk Shredder-Flail	18'	MFWD 150	26,900	200	10	0.091	1.20	1.20	2.15	0.40	4.97	1.30	2.46	8.74
Stalk Shredder-Flail	20'	MFWD 150	27,000	200	10	0.082	1.08	1.08	1.94	0.36	4.48	1.17	2.21	7.87
Stalk Shredder-Flail	25'	MFWD 150	39,600	200	10	0.066	0.86	0.86	2.28	0.29	4.31	1.38	1.77	7.47
Strip Till	8R-38	MFWD 225	38,100	150	10	0.061	0.80	1.21	1.01	0.41	3.46	1.65	2.64	7.75
Strip Till	12R-30	MFWD 225	61,100	150	10	0.061	0.80	1.21	1.63	0.41	4.07	2.65	2.64	9.36
Strip Till	12R-40	MFWD 225	58,500	150	10	0.046	0.60	0.90	1.17	0.31	3.00	1.90	1.98	6.89
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.68	3.39	0.24	1.18	7.51	0.59	7.47	15.58
Subsoiler	4 shank	MFWD 225	9,340	100	15	0.153	2.01	3.02	0.47	1.04	6.56	1.18	6.59	14.34
Subsoiler	5 shank	MFWD 225	10,800	100	15	0.122	1.60	2.40	0.44	0.83	5.29	1.08	5.24	11.62
Subsoiler low-till	4 shank	MFWD 225	10,800	100	15	0.153	2.01	3.02	0.55	1.04	6.64	1.36	6.59	14.60
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.34	2.01	0.56	0.69	4.61	1.39	4.38	10.39
Subsoiler low-till	8 shank	MFWD 225	20,600	100	15	0.076	1.00	1.50	0.52	0.52	3.55	1.29	3.28	8.14

Notes:

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

Total Direct: Does not include interest on operating capital.

HB = Hooded Boom, HD = Hooded Direct

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2017

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Apron Maxx RTA	oz	0.93
Activator 90	pt	3.75	Apron Maxx RTA+Moly	pt	17.16
Agri-Dex	pt	2.25	Apron XL LS	oz	5.27
Crop Oil Conc. (Pet.)	pt	2.47	Artisan	oz	1.13
Crop Oil Conc. (Veg.)	pt	3.75	Bravo Ultrex	lb	9.00
Dyne-A-Pak	pt	4.63	Bravo Weather Stick	pt	6.62
Herbimax	pt	1.88	Captan 50 WP	lb	5.41
Induce	pt	3.63	Cotton Seed Trt.	acre	20.00
MSO	pt	3.75	CruiserMaxx	oz	4.60
Penetrator Plus	pt	3.50	Dithane F-45	qt	9.08
Prime Oil	pt	2.25	Dithane Rainshield	pt	4.15
SuperMax AMS	pt	2.67	Enable 2F	oz	2.17
Surfactant	pt	3.69	Headline EC	oz	2.86
CLEANING			Headline SC	oz	3.76
Cleaning Peanuts	ton	18.00	Manzate 75 DF	lb	5.54
CROP CONSULTANT			Moncut 70 DF	lb	38.35
Corn Consultant	acre	6.00	Propimax EC	pt	13.03
Cotton Consultant	acre	8.00	Prosaro	oz	2.70
Peanut Consultant	acre	9.25	Provost	oz	2.73
Rice Consultant	acre	8.00	Quadris	oz	2.08
Sorghum Consultant	acre	6.00	Quadris Top	oz	2.51
Soybeans Consultant	acre	6.50	Quilt	pt	18.82
Wheat Consultant	acre	5.50	Quilt XCEL	pt	23.07
CUSTOM FERTILIZE			Ridomil Gold	oz	7.23
App Fert by Air	cwt	7.00	Ridomil Gold PC GR	lb	5.96
App Fert by Air (Mi)	appl	7.00	Rovral 4F	pt	16.97
Custom Apply Fert	acre	7.00	Stratego	pt	22.58
CUSTOM LIME			Stratego YLD	oz	3.20
Lime (Spread)	ton	46.00	Tilt 3.6 EC	oz	0.85
CUSTOM PLANT			Tilt/ Bravo SE	oz	0.45
Custom Plant	acre	13.00	Uniform	oz	5.21
Custom Plant Air	cwt	7.00	GINNING		
CUSTOM SPRAY			Gin & Haul	lb	0.11
App by Air (3 gal)	appl	5.00	GROWTH REGULATORS		
App by Air (5 gal)	appl	6.50	Mepex	oz	0.13
App by Air (10 gal)	appl	8.50	Mepex Gin Out	oz	0.19
Custom Spray Ground	acre	7.50	Mepichlor 4.2%	oz	0.13
Custom Spray Self Pr	acre	6.25	Mepiquat	oz	0.13
Custom Spray Tractor	acre	7.75	Mepiquat Extra	oz	0.60
DRYING			Pentia	pt	7.21
Dry Corn	bu	0.19	Pix Plus	oz	0.40
Dry Grain Sorghum	cwt	0.25	Stance	oz	1.38
Dry Peanuts	ton	24.00	HARVEST AIDS		
Dry Rice	bu	0.40	Adios	oz	1.50
ERADICATION FEE			Aim 2EC	oz	5.60
Eradication	acre	1.00	CottonQuik	pt	6.06
FERTILIZERS			Def 6	pt	6.88
Agrotain Plus	lb	4.56	Def/Folex	pt	8.10
Agrotain Ultra	pt	10.23	Defol 5	gal	5.50
Amm Sulfate (21% N)	cwt	17.23	Ethephon 6E	pt	3.38
Boron Plus	pt	4.24	Finish 6	pt	10.25
DAP	cwt	24.82	First Pick	pt	3.72
Fert 10-34-0	cwt	28.58	Folex 6EC	pt	9.32
Fert 10-34-0	gal	3.33	Freefall SC	oz	1.69
Fert 11-37-0	cwt	32.70	Ginstar EC	pt	30.23
Fert 33-0-0-12S	cwt	17.50	Gramoxone SL	oz	0.27
Fert 41-0-0-4	cwt	16.85	Sharpen	oz	6.25
Lime	ton	36.00	Sodium Chlorate 5L	gal	5.50
NBPT	pt	10.23	SuperBoll	oz	0.25
Phosphorus (46% P2O5)	cwt	21.88	TDZ SC	oz	1.19
Potash (60% K2O)	cwt	16.97	Thidiazuron 4lb	oz	1.44
Sulfur Plus	pt	2.62	Tribufos 6lb	pt	9.32
UAN (32% N)	cwt	14.31	HAULING		
UAN (32%)	gal	1.58	Haul Corn	bu	0.23
UAN + Sulfur (28%)	cwt	14.48	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	gal	1.61	Haul Rice	bu	0.35
Urea, Solid (46% N)	cwt	16.78	Haul Sorghum	bu	0.25
Zinc Plus	pt	2.99	Haul Soybeans	bu	0.27
FUNGICIDES			Haul Wheat	bu	0.26
Aframe	oz	1.13	HERBICIDES		
Alfa Guard	lb	1.56	2,4-D Amine 4	pt	2.79
Allegiance Flowable	pt	51.61	AAtrex 4L	pt	2.58

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2017(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
AAtrex NINE-0	lb	4.52	Newpath 2SL	oz	3.63
Accent Q	oz	24.75	Osprey	oz	3.74
Aim 2EC	oz	5.60	Outlook	pt	19.31
Assure II	oz	0.84	Paraquat	oz	0.32
Atrazine 4L	pt	1.95	Parazone 3SL	oz	0.32
Axial XL	oz	1.16	Peak Accu Pak	oz	18.18
Axiom 68DF	oz	2.13	Permit 75 DF	oz	20.59
Banvel	pt	15.02	Poast 1.53	pt	13.41
Basagran	pt	15.81	Poast Plus	pt	9.69
Beyond	oz	4.97	PowerFlex HL	lb	122.38
Bicep II Magnum	qt	11.69	Prefix	pt	6.34
Bicep Lite Magnum	pt	8.13	Prowl 3.3 EC	pt	6.86
Bolero 8EC	pt	7.65	Pursuit 2S	oz	3.97
Boundary 6.5 EC	pt	10.18	Python WDG	oz	15.58
Butyrac 175 (2,4-D)	pt	3.55	Quinstar	lb	56.17
Butyrac 200 (2,4-DB)	pt	4.77	Raptor	oz	4.96
Cadre	oz	4.21	RealmQ	oz	5.21
Callisto 4SC	oz	6.84	RebelEx	oz	2.36
Canopy 75%	oz	3.08	Reflex 2LC	pt	6.56
Canopy EX	oz	9.05	Regiment 80WP	oz	44.39
Caparol 4L	pt	4.44	Remedy Ultra	pt	10.76
Capreno	oz	6.97	Resolve SG	oz	8.26
Clarity	pt	11.18	Ricebeaux	pt	4.48
Classic	oz	16.95	Riceshot	pt	4.78
Clearpath	lb	59.53	Ricestar HT	pt	24.54
Clincher SF	oz	2.38	Roundup Power Max	oz	0.21
Cobra 2EC	oz	1.95	Roundup PowerMax	pt	3.28
Command 3ME	pt	19.34	Roundup WeatherMax	oz	0.27
Corvus	oz	6.72	Roundup WeatherMax	pt	4.29
Cotoran 4L	pt	6.31	Scepter 70 DG	oz	5.06
Cotton Pro	pt	3.98	Select Max	pt	14.99
Credit Extra	pt	2.50	Sequence	pt	5.42
Direx 4L	pt	3.29	Sharpen	oz	5.35
Diuron 4L	pt	3.36	Simazine 4L	pt	2.89
Diuron 80 DF	lb	5.81	Stalwart	pt	5.11
Diuron 80%	lb	6.20	Stam 80 EDF	lb	10.85
Dual II Magnum	pt	15.51	Stam M4	qt	8.10
Dual Magnum	pt	14.97	Staple LX	oz	8.46
Duet	pt	4.75	Steadfast	oz	12.40
Envoke	oz	103.36	Storm	pt	12.75
Expert	pt	4.95	Strada WG	oz	7.33
Facet L	pt	14.84	Strongarm	oz	62.62
Fierce	oz	6.98	Superwham	qt	9.78
Finesse	oz	15.88	Surpass EC	qt	29.04
First Rate	oz	41.21	Synchrony XP	oz	14.31
Flexstar	pt	8.81	Touchdown Total	qt	8.38
Fultime	pt	6.29	Treflan 4EC	pt	4.01
Fusilade DX	oz	1.13	Tricor DF	lb	17.81
Fusion	pt	29.86	Trifluralin 4EC	pt	4.01
Glyphosate 3lbs a.e	pt	2.29	Ultra Blazer	pt	11.65
Glyphosate 3lbs a.e	oz	0.14	Valor SX	oz	6.60
Glystar Plus	pt	2.64	Valor XLT	oz	5.77
Goal 2XL	pt	10.80	Verdict	oz	1.77
Gramoxone SL 2.0	oz	0.27	INOCULANT		
Grandstand R	qt	17.15	Optimize	oz	2.14
Grasp Xtra	oz	1.58	Optimize LIFT	oz	0.59
Halex GT	pt	7.60	Vault	oz	1.73
Halomax	oz	21.07	INSECTICIDES		
Harmony Extra SG TS	oz	14.02	Abamectin .15EC	oz	1.08
Harness XTRA	pt	9.45	Acephate 90%	lb	9.80
Impact	oz	23.68	Acephate 90SP	lb	8.69
Layby Pro	qt	14.04	Acramite-4SC	oz	1.99
Leadoff	oz	6.04	Admire Pro	oz	1.72
Lexar	pt	7.90	Asana .66 XL	oz	0.67
Liberty 280	oz	0.57	Aztec 2.1% G	lb	3.88
Linex 4L	pt	11.23	Baythroid XL	oz	2.48
Londax 60DF	oz	20.27	Belt	oz	8.77
Lorox 50DF	lb	26.36	Bidrin 8WM	oz	1.12
Metribuzin 75	lb	14.41	Bifenthrin	oz	1.03
MSMA 6.6	pt	3.66	Bifenture 2EC	pt	20.48
MSMA6 Plus	pt	3.63			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2017 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Brigade EC	pt	19.36	Steward	pt	39.51
Brigade WSB	lb	26.04	Transform WG	oz	7.90
Capture LFR	oz	2.97	Zeal Miticid I	oz	21.74
Carbaryl 4L	pt	6.32	IRRIGATION SUPPLIES		
Carbine 50WG	oz	6.66	Roll-Out Pipe	ft	0.25
Centric 40WG	oz	5.21	SEED/PLANTS		
Comite 1l	pt	9.46	Corn Seed BtRR	thous	3.89
Confirm 2F	oz	2.27	Corn Seed RR2	thous	3.17
Diamond .83EC	pt	21.84	Cotton Seed B2XF	thous	0.89
Diamond .83EC	oz	1.37	Cotton Seed GLB2	thous	2.81
Dimethoate 4E	pt	5.88	Cotton Seed LLB2	thous	1.43
Dimilin 2L	oz	2.12	Cotton Seed W3RF	thous	1.05
Dipel DF	lb	14.47	Cotton Seed WRF	thous	0.79
Dipel ES	pt	5.50	Cruiser Maxx Rice	lbseed	0.23
Endigo ZC	pt	31.11	Peanut Seed	lb	0.78
Force 3G	lb	7.41	Rice Clearfield	lb	1.05
Gaucho 600	oz	2.48	Rice Clrflld Hyb Trt	lb	5.30
Hero	pt	29.57	Rice Conv Hyb Trt	lb	5.57
Imidan 70 WSB	oz	0.70	Rice Seed CF(Levees)	lb	1.05
Incidental Pest Trt	acre	12.00	Rice Seed CFH(Levee)	lb	1.77
Incidental Pest Trt	acre	8.00	Rice Seed Conv.	lb	0.38
Intrepid 2F	oz	2.05	Rice Seed Cv(Levees)	lb	0.38
Intruder 70WSP	oz	10.99	Rice Seed CvH(Levee)	lb	1.65
Karate Z	oz	2.58	Sorghum Concept	lb	2.55
Lambda	oz	101.00	Sorghum Concept+ Po	lb	3.39
Lannate LV	pt	12.23	Soybean Seed LL	lb	1.16
Lannate SP	oz	2.42	Soybean Seed RR2	lb	1.26
Leverage 2.7	oz	1.95	Wheat Seed Private	lb	0.25
Lorsban 15G	lb	2.40	SOIL TEST		
Lorsban 4E	pt	6.66	Soil Test	acre	10.00
Macho	oz	0.71	SURVEY & MARK LEVEES		
Malathion 5E	pt	4.40	Survey & Mark Levees	acre	4.50
Malathion 8E	pt	9.30	TECHNOLOGY FEE		
Mustang Max	oz	1.44	B2 Cot Tech Fee	thous	0.76
Nuprid 4F	oz	1.20	B2 Cot Tech Fee	cap/ac	31.91
Oberon 4 SC	pt	59.84	B2XF Cot Tech Fee	thous	1.49
Orthene 97S	lb	10.90	B2XF Cot Tech Fee	cap/ac	62.69
Pounce 25WP	lb	16.80	LLB2 Cot Tech Fee	thous	0.76
Prevathon	oz	1.31	RF Cot Tech Fee	thous	1.04
Radiant	oz	6.61	RF Cot Tech Fee	cap/ac	43.66
Sevin 4F	pt	7.02	WRF Cot Tech Fee	thous	1.45
Sevin XLR Plus	qt	15.07	W3RF Cot Tech Fee	thous	1.45
Sivanto	oz	2.53			

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2017

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	1.70
Gasoline	gal	1.90
LP Gas	gal	1.50
INTEREST RATES		
Short-term	%	4.75
Intermediate-term	%	5.00

Appendix Table 6. Labor types, wage rates and unallocated labor
multipliers for crop enterprises, Mississippi, 2017

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	13.14
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, 2017

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis	Forward Contract Price ^c	Loan	Budget Price ^e
Corn	bu	Dec '17	3.83	-0.21	3.62	2.10	3.62
Cotton Lint	lb	Dec '17	0.6899	-	0.6695	0.4946	0.67
Cottonseed	lb						0.099 ^f
Grain	bu				3.44	2.02	3.44
Peanuts	ton				400.00	355.00	400.00
Soybeans	bu	Nov '17	9.65	+0.09	9.74	5.19	9.74
Rice	bu	Nov '17	4.95	-0.58	4.37	2.97	4.37
Wheat	bu	Jul '17	4.43	-0.19	4.24	2.58	4.24

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2016 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 2016 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 2016 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2016 Farm-stored Loan Rate for long grain rough rice. National 2017 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 2006-2015.

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, 2017

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		0.24	0.11	0.21		0.01	0.57	0.66	1.23
Survey & Mark Levees	acre	4.50					0.11	4.61		4.61
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.64	0.29	0.56		0.04	1.53	1.76	3.29
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26		0.02	0.70	0.68	1.38
IRRIGATE LABOR	hour				0.68		0.02	0.70		0.70
Install Gates										
IRRIGATE LABOR	hour				2.72		0.06	2.78		2.78
Apply Water										
IRRIGATE LABOR	hour				6.80		0.16	6.96		6.96
Apply Water										
IRRIGATE LABOR	hour				6.80		0.13	6.93		6.93
Apply Water										
IRRIGATE LABOR	hour				6.80		0.11	6.91		6.91
Apply Water										
IRRIGATE LABOR	hour				6.80		0.08	6.88		6.88
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80)	32"		0.50	0.23	0.44		0.01	1.18	1.36	2.54
Tear Down Levees										
Levee Splitter (1/80)	32"		0.19	0.09	0.16			0.44	0.51	0.95
Land Forming (\$113)	each								8.02	8.02
Levee Gates	each								0.77	0.77
Well & Pump, Flood	each			4.88			0.10	4.98	14.41	19.39
Engine, Rice CL, 75	each								16.75	16.75
May Irrigation	ac-in		8.31	1.42			0.23	9.96		9.96
June Irrigation	ac-in		12.46	2.13			0.29	14.88		14.88
July Irrigation	ac-in		12.46	2.13			0.23	14.82		14.82
August Irrigation	ac-in		12.46	2.13			0.17	14.76		14.76
TOTALS		4.50	47.56	13.53	33.59	0.00	1.79	100.97	44.92	145.89

Note: Cost of production estimates are based on 2016 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, 2017

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						0.05	2.30	2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.48	0.22	0.42			0.03	1.15	1.32
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.02	0.70	0.68
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Install Gates										
IRRIGATE LABOR	hour				1.36			0.03	1.39	1.39
Apply Water										
IRRIGATE LABOR	hour				4.53			0.11	4.64	4.64
Apply Water										
IRRIGATE LABOR	hour				4.53			0.09	4.62	4.62
Apply Water										
IRRIGATE LABOR	hour				4.53			0.07	4.60	4.60
Apply Water										
IRRIGATE LABOR	hour				4.53			0.05	4.58	4.58
Remove Gates										
IRRIGATE LABOR	hour				0.91			0.01	0.92	0.92
Tear Down Levees										
Levee Splitter (1/80)	32"		0.37	0.17	0.33			0.01	0.88	1.03
Land Forming (\$450)	each									31.93
Levee Gates	each									0.77
Well & Pump, Flood	each			4.88				0.10	4.98	14.41
Engine, Rice SL, 75	each									16.75
May Irrigation	ac-in		8.31	1.74				0.24	10.29	10.29
June Irrigation	ac-in		9.69	2.03				0.23	11.95	11.95
July Irrigation	ac-in		9.69	2.03				0.19	11.91	11.91
August Irrigation	ac-in		9.69	2.03				0.14	11.86	11.86
TOTALS		2.25	38.53	13.22	22.53	0.00	1.40	77.93	66.89	144.82

Note: Cost of production estimates are based on 2016 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, 2017

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						0.05	2.30	2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.48	0.22	0.42			0.03	1.15	1.32
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.02	0.70	0.68
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Ditcher (1m/160a)			0.14	0.07	0.12			0.01	0.34	0.34
Roll-Out Pipe	ft	8.25						0.20	8.45	8.45
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.19	0.10	0.39			0.02	0.70	0.70
Install Gates										
IRRIGATE LABOR	hour				1.36			0.03	1.39	1.39
Apply Water										
IRRIGATE LABOR	hour				1.81			0.04	1.85	1.85
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"		0.37	0.17	0.33			0.01	0.88	1.03
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.09	0.04	0.19				0.32	0.35
Land Forming (\$450)	each									31.93
Levee Gates	each									0.33
Well & Pump, Flood	each			4.88				0.10	4.98	14.41
Engine, Mult In Rice	each									16.75
May Irrigation	ac-in		6.92	1.63				0.20	8.75	8.75
June Irrigation	ac-in		8.31	1.96				0.20	10.47	10.47
July Irrigation	ac-in		8.31	1.96				0.16	10.43	10.43
August Irrigation	ac-in		8.31	1.96				0.12	10.39	10.39
TOTALS		10.50	33.42	13.11	11.89	0.00	1.31		70.23	67.84

Note: Cost of production estimates are based on 2016 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, 2017

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	
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		0.04	2.31	2.31	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.03	2.30	2.30	
Land Forming (\$450)	each							31.93	31.93	
Well & Pump, Flood	each			4.88			0.10	4.98	14.41	
Engine, Rice SL, 75	each							16.75	16.75	
May Irrigation	ac-in		5.54	1.16			0.16	6.86	6.86	
June Irrigation	ac-in		6.92	1.45			0.17	8.54	8.54	
July Irrigation	ac-in		6.92	1.45			0.13	8.50	8.50	
August Irrigation	ac-in		6.92	1.45			0.10	8.47	8.47	
TOTALS		0.00	26.30	10.39	9.53	0.00	0.83	47.05	63.09	110.14

Note: Cost of production estimates are based on 2016 input prices.

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