RICE
2015
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2014-04

October 2014

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 2015 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses**."

Acknowledgments

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

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

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

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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 2014. (Appendix Tables 1, 2, and 3).

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

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

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

Estimates of Direct Costs

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

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

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

where:

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

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

The labor wage rate per hour includes social security, accident and unemployment insurance, and some perquisites (11). Labor costs are estimated for four labor categories: operator labor, hand labor, irrigation labor, and unallocated labor. Operator labor and hand labor represent estimates of labor required to perform the in-field tasks. Operator labor is that labor required to operate all power-driven equipment. Irrigation labor is used to perform tasks associated with an irrigation system. Unallocated labor is an estimate of labor that is not used directly in producing the enterprise. Its cost is estimated as a percentage of operator labor (11). The percentages used for the various crop enterprises are listed in Appendix Table 6.

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

$$CRCPA = CRCPH \; x \; PR$$

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 2014 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 month of September. The basis is determined by subtracting the average daily cash price for the month of September from the average daily closing price of the near contract month. 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, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	2.2500	13.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	4.0000	101.00	
FUNGICIDES					
Stratego	pt	24.91	0.7500	18.68	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Riceshot	pt	3.81	8.0000	30.48	
Facet L	pt	10.36	2.0000	20.72	
Permit 75 DF	oz	19.73	0.5000	9.87	
Clincher SF	oz	2.30	7.5000	17.25	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	93.6000	14.04	
Karate Z	oz	2.85	1.0000	2.85	
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	80.0000	30.40	
Rice Seed (Levees)	lb	0.38	13.6000	5.17	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	1.0000	3.60	
Surfactant	pt	3.60	0.0750	0.27	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.7500	30.88	
HAULING					
Haul Rice	bu	0.35	148.0000	51.80	
DRYING					
Dry Rice	bu	0.40	148.0000	59.20	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
OPERATOR LABOR					
Tractors	hour	12.55	0.5757	7.23	
Harvesters	hour	12.55	0.2030	2.55	
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	12.53	0.5887	7.38	
DIESEL FUEL					
Tractors	gal	3.20	5.4144	17.32	
Harvesters	gal	3.20	3.3975	10.87	
Flood Irr.	gal	3.20	26.8827	86.02	
REPAIR & MAINTENANCE					
Implements	acre	7.72	1.0000	7.72	
Tractors	acre	2.89	1.0000	2.89	
Harvesters	acre	6.88	1.0000	6.88	
Flood Irr.	acre	12.43	1.0000	12.43	
INTEREST ON OP. CAP.	acre	10.33	1.0000	10.33	

TOTAL DIRECT EXPENSES				680.55	
FIXED EXPENSES					
Implements	acre	15.91	1.0000	15.91	
Tractors	acre	17.51	1.0000	17.51	
Harvesters	acre	26.32	1.0000	26.32	
Flood Irr.	acre	37.33	1.0000	37.33	

TOTAL FIXED EXPENSES				97.07	

TOTAL SPECIFIED EXPENSES				777.62	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 1.B Summary of estimated costs and returns per acre
Contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	148.0000	825.84	_____
TOTAL INCOME				825.84	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.88	1.0000	15.88	_____
FERTILIZERS	acre	118.87	1.0000	118.87	_____
FUNGICIDES	acre	18.68	1.0000	18.68	_____
HERBICIDES	acre	104.13	1.0000	104.13	_____
INSECTICIDES	acre	16.89	1.0000	16.89	_____
SEED/PLANTS	acre	35.57	1.0000	35.57	_____
ADJUVANTS	acre	3.87	1.0000	3.87	_____
CUSTOM FERTILIZE	acre	30.88	1.0000	30.88	_____
HAULING	acre	51.80	1.0000	51.80	_____
DRYING	acre	59.20	1.0000	59.20	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	12.55	0.7788	9.78	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	12.53	0.5887	7.38	_____
DIESEL FUEL	gal	3.20	35.6946	114.21	_____
REPAIR & MAINTENANCE	acre	29.92	1.0000	29.92	_____
INTEREST ON OP. CAP.	acre	10.33	1.0000	10.33	_____
TOTAL DIRECT EXPENSES				680.55	_____
RETURNS ABOVE DIRECT EXPENSES				145.29	_____
TOTAL FIXED EXPENSES				97.07	_____
TOTAL SPECIFIED EXPENSES				777.62	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				48.22	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 1.C Estimated resource use for field operations, per acre
Contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					80.0000				
Cruiser Maxx Rice	lbseed					80.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
Seed Levees				1.00	Apr					
Rice Seed (Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App by Air (5 gal)	appl			1.00	May	1.0000				
Riceshot	pt					8.0000				
Facet L	pt					2.0000				
Permit 75 DF	oz					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
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				
Crop Oil Conc.(Pet.)	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			0.75	Jul	0.7500				
Stratego	pt					0.7500				
Surfactant	pt					0.0750				
App by Air (3 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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	148.0000				
Dry Rice	bu			1.00	Aug	148.0000				
Disk Heavy	28'	MFWD 190	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 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 1.D Estimated costs for field operations, per acre
Contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST: OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Seed Conv.	lb	30.40					0.67	31.07		31.07
Cruiser Maxx Rice	lbseed	12.00					0.26	12.26		12.26
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
Seed Levees										
Rice Seed (Levees)	lb	5.17					0.11	5.28		5.28
Cruiser Maxx Rice	lbseed	2.04					0.04	2.08		2.08
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Riceshot	pt	30.48					0.56	31.04		31.04
Facet L	pt	20.72					0.38	21.10		21.10
Permit 75 DF	oz	9.87					0.18	10.05		10.05
App Fert by Air	cwt	16.25					0.30	16.55		16.55
Urea, Solid (46% N)	cwt	63.13					1.16	64.29		64.29
Rice Management										
RICE MGT. LABOR	hour				2.72		0.05	2.77		2.77
App by Air (5 gal)	appl	3.00					0.04	3.04		3.04
Clincher SF	oz	17.25					0.25	17.50		17.50
Crop Oil Conc.(Pet.)	pt	3.60					0.05	3.65		3.65
Rice Management										
RICE MGT. LABOR	hour				4.53		0.07	4.60		4.60
App Fert by Air	cwt	9.75					0.14	9.89		9.89
Urea, Solid (46% N)	cwt	37.88					0.56	38.44		38.44
Rice Management										
RICE MGT. LABOR	hour				4.53		0.05	4.58		4.58
App by Air (5 gal)	appl	4.50					0.05	4.55		4.55
Stratego	pt	18.68					0.21	18.89		18.89
Surfactant	pt	0.27						0.27		0.27
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		10.87	9.32	4.84		0.18	25.21	30.00	55.21
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	51.80					0.38	52.18		52.18
Dry Rice	bu	59.20					0.43	59.63		59.63
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre	4.50	89.23	13.12	33.53		2.30	142.68	41.26	183.94
TOTALS		460.27	114.21	29.92	65.82	0.00	10.33	680.55	97.07	777.62

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 1.E Estimated monthly income and expense flows per acre
Contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

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	825.84	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	3.00	6.88	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.99	37.88	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	18.68	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	25.81	61.07	17.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	14.04	0.00	0.00	2.85	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	35.57	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.27	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13	9.75	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	51.80	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.20	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
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	16.21	9.52	11.33	11.33	10.67	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	22.62	23.46	23.46	23.46	12.34	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	4.64	6.94	2.06	2.06	9.73	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	2.70	3.84	1.58	0.72	1.05	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	126.09	212.95	109.91	66.25	144.79	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-126.09	-212.95	-109.91	-66.25	681.05	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-135.57	-348.52	-458.43	-524.68	156.37	145.29

Note: Cost of production estimates are based on 2014 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, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	74.00	bu	-314	-294	-273	-253	-232	-211	-191	-170	-149	-129	-108
			-412	-391	-370	-350	-329	-308	-288	-267	-246	-226	-205
60	88.80	bu	-264	-239	-214	-189	-165	-140	-115	-90	-65	-41	-16
			-361	-336	-311	-286	-262	-237	-212	-187	-163	-138	-113
70	103.60	bu	-213	-184	-155	-126	-97	-68	-40	-11	17	46	75
			-310	-281	-252	-223	-194	-165	-137	-108	-79	-50	-21
80	118.40	bu	-162	-129	-96	-63	-30	2	35	68	101	134	167
			-259	-226	-193	-160	-127	-94	-61	-28	4	37	70
90	133.20	bu	-111	-74	-37	-0	36	73	111	148	185	222	259
			-208	-171	-134	-97	-60	-23	13	51	88	125	162
100	148.00	bu	-61	-19	21	62	103	145	186	227	269	310	351
			-158	-116	-75	-34	6	48	89	130	172	213	254
110	162.80	bu	-10	35	80	125	171	216	262	307	352	398	443
			-107	-62	-16	28	74	119	165	210	255	301	346
120	177.60	bu	40	89	139	188	238	288	337	387	436	486	535
			-56	-7	42	91	141	191	240	290	339	389	438
130	192.40	bu	91	144	198	252	305	359	413	466	520	574	627
			-5	47	101	155	208	262	316	369	423	477	530
140	207.20	bu	141	199	257	315	373	430	488	546	604	662	719
			44	102	160	218	276	333	391	449	507	565	622
150	222.00	bu	192	254	316	378	440	502	564	626	688	750	811
			95	157	219	281	343	405	467	529	591	652	714

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 2014 input prices.

Table 2.A Estimated costs per acre
Straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	2.2500	13.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	4.0000	101.00	
FUNGICIDES					
Stratego	pt	24.91	0.7500	18.68	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Riceshot	pt	3.81	8.0000	30.48	
Facet L	pt	10.36	2.0000	20.72	
Permit 75 DF	oz	19.73	0.5000	9.87	
Clincher SF	oz	2.30	7.5000	17.25	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	93.6000	14.04	
Karate Z	oz	2.85	1.0000	2.85	
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	80.0000	30.40	
Rice Seed (Levees)	lb	0.38	13.6000	5.17	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	1.0000	3.60	
Surfactant	pt	3.60	0.0750	0.27	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.7500	30.88	
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	
OPERATOR LABOR					
Tractors	hour	12.55	0.5281	6.62	
Harvesters	hour	12.55	0.1760	2.21	
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	12.54	0.5643	7.08	
DIESEL FUEL					
Tractors	gal	3.20	5.0192	16.06	
Harvesters	gal	3.20	2.9444	9.42	
Flood Irr.	gal	3.20	21.9949	70.39	
REPAIR & MAINTENANCE					
Implements	acre	7.34	1.0000	7.34	
Tractors	acre	2.68	1.0000	2.68	
Harvesters	acre	5.96	1.0000	5.96	
Flood Irr.	acre	11.97	1.0000	11.97	
INTEREST ON OP. CAP.	acre	9.78	1.0000	9.78	
TOTAL DIRECT EXPENSES				644.50	
FIXED EXPENSES					
Implements	acre	15.07	1.0000	15.07	
Tractors	acre	16.24	1.0000	16.24	
Harvesters	acre	22.81	1.0000	22.81	
Flood Irr.	acre	59.10	1.0000	59.10	
TOTAL FIXED EXPENSES				113.22	
TOTAL SPECIFIED EXPENSES				757.72	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 2.B Summary of estimated costs and returns per acre
Straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	156.0000	870.48	_____
TOTAL INCOME				870.48	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.88	1.0000	15.88	_____
FERTILIZERS	acre	118.87	1.0000	118.87	_____
FUNGICIDES	acre	18.68	1.0000	18.68	_____
HERBICIDES	acre	104.13	1.0000	104.13	_____
INSECTICIDES	acre	16.89	1.0000	16.89	_____
SEED/PLANTS	acre	35.57	1.0000	35.57	_____
ADJUVANTS	acre	3.87	1.0000	3.87	_____
CUSTOM FERTILIZE	acre	30.88	1.0000	30.88	_____
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	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	12.55	0.7041	8.83	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	_____
DIESEL FUEL	gal	3.20	29.9586	95.87	_____
REPAIR & MAINTENANCE	acre	27.95	1.0000	27.95	_____
INTEREST ON OP. CAP.	acre	9.78	1.0000	9.78	_____
TOTAL DIRECT EXPENSES				644.50	_____
RETURNS ABOVE DIRECT EXPENSES				225.98	_____
TOTAL FIXED EXPENSES				113.22	_____
TOTAL SPECIFIED EXPENSES				757.72	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				112.76	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 2.C Estimated resource use for field operations, per acre
Straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					80.0000				
Cruiser Maxx Rice	lbseed					80.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
Seed Levees				1.00	Apr					
Rice Seed (Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App by Air (5 gal)	appl			1.00	May	1.0000				
Riceshot	pt					8.0000				
Facet L	pt					2.0000				
Permit 75 DF	oz					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
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				
Crop Oil Conc.(Pet.)	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			0.75	Jul	0.7500				
Stratego	pt					0.7500				
Surfactant	pt					0.0750				
App by Air (3 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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 190	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 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 2.D Estimated costs for field operations, per acre
Straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Seed Conv.	lb	30.40					0.67	31.07		31.07
Cruiser Maxx Rice	lbseed	12.00					0.26	12.26		12.26
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
Seed Levees										
Rice Seed (Levees)	lb	5.17					0.11	5.28		5.28
Cruiser Maxx Rice	lbseed	2.04					0.04	2.08		2.08
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Riceshot	pt	30.48					0.56	31.04		31.04
Facet L	pt	20.72					0.38	21.10		21.10
Permit 75 DF	oz	9.87					0.18	10.05		10.05
App Fert by Air	cwt	16.25					0.30	16.55		16.55
Urea, Solid (46% N)	cwt	63.13					1.16	64.29		64.29
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.00					0.04	3.04		3.04
Clincher SF	oz	17.25					0.25	17.50		17.50
Crop Oil Conc.(Pet.)	pt	3.60					0.05	3.65		3.65
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	9.75					0.14	9.89		9.89
Urea, Solid (46% N)	cwt	37.88					0.56	38.44		38.44
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	4.50					0.05	4.55		4.55
Stratego	pt	18.68					0.21	18.89		18.89
Surfactant	pt	0.27						0.27		0.27
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		9.42	8.08	4.20		0.16	21.86	26.00	47.86
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.40	55.00		55.00
Dry Rice	bu	62.40					0.46	62.86		62.86
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre	2.25	72.34	12.39	22.48		1.82	111.28	61.41	172.69
TOTALS		464.02	95.87	27.95	46.88	0.00	9.78	644.50	113.22	757.72

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 2.E Estimated monthly income and expense flows per acre
Straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

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	870.48	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	3.00	6.88	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.99	37.88	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	18.68	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	25.81	61.07	17.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	14.04	0.00	0.00	2.85	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	35.57	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.27	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13	9.75	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
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	12.24	5.44	6.34	6.34	9.76	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	21.87	18.25	18.25	18.25	10.38	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	4.68	6.72	1.84	1.84	8.38	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	2.55	3.67	1.43	0.61	1.08	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	119.01	203.27	99.34	55.72	146.60	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-119.01	-203.27	-99.34	-55.72	723.88	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-128.49	-331.76	-431.10	-486.82	237.06	225.98

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* 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, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-259	-237	-215	-193	-172	-150	-128	-106	-85	-63	-41
			-372	-350	-328	-307	-285	-263	-241	-220	-198	-176	-154
60	93.60	bu	-205	-179	-153	-127	-101	-75	-48	-22	3	29	55
			-318	-292	-266	-240	-214	-188	-162	-136	-109	-83	-57
70	109.20	bu	-152	-121	-91	-60	-30	0	30	61	91	122	152
			-265	-234	-204	-173	-143	-113	-82	-52	-21	8	39
80	124.80	bu	-98	-63	-29	5	40	75	110	145	179	214	249
			-211	-177	-142	-107	-72	-37	-2	31	66	101	136
90	140.40	bu	-45	-5	33	72	111	150	189	229	268	307	346
			-158	-119	-80	-40	-1	37	76	115	155	194	233
100	156.00	bu	8	51	95	138	182	225	269	313	356	400	443
			-104	-61	-17	25	69	112	156	199	243	286	330
110	171.60	bu	61	109	157	205	253	301	349	396	444	492	540
			-51	-3	44	92	140	188	235	283	331	379	427
120	187.20	bu	115	167	219	272	324	376	428	480	533	585	637
			2	54	106	158	211	263	315	367	419	472	524
130	202.80	bu	168	225	282	338	395	451	508	564	621	678	734
			55	112	168	225	281	338	395	451	508	564	621
140	218.40	bu	222	283	344	405	466	527	587	648	709	770	831
			109	170	231	291	352	413	474	535	596	657	718
150	234.00	bu	275	341	406	471	537	602	667	732	798	863	928
			162	227	293	358	423	489	554	619	684	750	815

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 2014 input prices.

Table 3.A Estimated costs per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	2.2500	13.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	4.0000	101.00	
FUNGICIDES					
Stratego	pt	24.91	0.7500	18.68	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Riceshot	pt	3.81	8.0000	30.48	
Facet L	pt	10.36	2.0000	20.72	
Permit 75 DF	oz	19.73	0.5000	9.87	
Clincher SF	oz	2.30	7.5000	17.25	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	93.6000	14.04	
Karate Z	oz	2.85	1.0000	2.85	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	80.0000	30.40	
Rice Seed (Levees)	lb	0.38	13.6000	5.17	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	1.0000	3.60	
Surfactant	pt	3.60	0.0750	0.27	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.7500	30.88	
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	
OPERATOR LABOR					
Tractors	hour	12.55	0.5563	6.98	
Harvesters	hour	12.55	0.1760	2.21	
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	0.0926	0.84	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	
DIESEL FUEL					
Tractors	gal	3.20	5.2074	16.66	
Harvesters	gal	3.20	2.9444	9.42	
Flood Irr.	gal	3.20	18.7364	59.95	
REPAIR & MAINTENANCE					
Implements	acre	7.39	1.0000	7.39	
Tractors	acre	2.77	1.0000	2.77	
Harvesters	acre	5.96	1.0000	5.96	
Flood Irr.	acre	12.12	1.0000	12.12	
INTEREST ON OP. CAP.	acre	9.64	1.0000	9.64	

TOTAL DIRECT EXPENSES				632.75	
FIXED EXPENSES					
Implements	acre	15.47	1.0000	15.47	
Tractors	acre	16.73	1.0000	16.73	
Harvesters	acre	22.81	1.0000	22.81	
Flood Irr.	acre	59.79	1.0000	59.79	

TOTAL FIXED EXPENSES				114.80	

TOTAL SPECIFIED EXPENSES				747.55	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 3.B Summary of estimated costs and returns per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	156.0000	870.48	
TOTAL INCOME				870.48	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.88	1.0000	15.88	
FERTILIZERS	acre	118.87	1.0000	118.87	
FUNGICIDES	acre	18.68	1.0000	18.68	
HERBICIDES	acre	104.13	1.0000	104.13	
INSECTICIDES	acre	16.89	1.0000	16.89	
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	
SEED/PLANTS	acre	35.57	1.0000	35.57	
ADJUVANTS	acre	3.87	1.0000	3.87	
CUSTOM FERTILIZE	acre	30.88	1.0000	30.88	
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	
HAND LABOR	hour	9.06	0.3426	3.11	
IRRIGATE LABOR	hour	9.06	1.1625	10.52	
OPERATOR LABOR	hour	12.55	0.7323	9.19	
RICE MGT. LABOR	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	
DIESEL FUEL	gal	3.20	26.8883	86.03	
REPAIR & MAINTENANCE	acre	28.24	1.0000	28.24	
INTEREST ON OP. CAP.	acre	9.64	1.0000	9.64	
TOTAL DIRECT EXPENSES				632.75	
RETURNS ABOVE DIRECT EXPENSES				237.73	
TOTAL FIXED EXPENSES				114.80	
TOTAL SPECIFIED EXPENSES				747.55	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				122.93	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 3.C Estimated resource use for field operations, per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					80.0000				
Cruiser Maxx Rice	lbseed					80.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
Seed Levees				1.00	Apr					
Rice Seed (Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App by Air (5 gal)	appl			1.00	May	1.0000				
Riceshot	pt					8.0000				
Facet L	pt					2.0000				
Permit 75 DF	oz					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
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				
Crop Oil Conc.(Pet.)	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			0.75	Jul	0.7500				
Stratego	pt					0.7500				
Surfactant	pt					0.0750				
App by Air (3 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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 190	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							0.73	0.73	2.93	0.56

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 3.D Estimated costs for field operations, per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	DIRECT COST FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
					dollars					
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Seed Conv.	lb	30.40					0.67	31.07		31.07
Cruiser Maxx Rice	lbseed	12.00					0.26	12.26		12.26
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
Seed Levees										
Rice Seed (Levees)	lb	5.17					0.11	5.28		5.28
Cruiser Maxx Rice	lbseed	2.04					0.04	2.08		2.08
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Riceshot	pt	30.48					0.56	31.04		31.04
Facet L	pt	20.72					0.38	21.10		21.10
Permit 75 DF	oz	9.87					0.18	10.05		10.05
App Fert by Air	cwt	16.25					0.30	16.55		16.55
Urea, Solid (46% N)	cwt	63.13					1.16	64.29		64.29
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.00					0.04	3.04		3.04
Clincher SF	oz	17.25					0.25	17.50		17.50
Crop Oil Conc.(Pet.)	pt	3.60					0.05	3.65		3.65
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	9.75					0.14	9.89		9.89
Urea, Solid (46% N)	cwt	37.88					0.56	38.44		38.44
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	4.50					0.05	4.55		4.55
Stratego	pt	18.68					0.21	18.89		18.89
Surfactant	pt	0.27						0.27		0.27
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		9.42	8.08	4.20		0.16	21.86	26.00	47.86
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.40	55.00		55.00
Dry Rice	bu	62.40					0.46	62.86		62.86
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre	10.83	62.50	12.68	11.84		1.68	99.53	62.99	162.52
TOTALS		472.60	86.03	28.24	36.24	0.00	9.64	632.75	114.80	747.55

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 3.E Estimated monthly income and expense flows per acre
Straight levee rice
Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2015

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	870.48	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	3.00	6.88	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.99	37.88	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	18.68	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	25.81	61.07	17.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	14.04	0.00	0.00	2.85	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.58	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	35.57	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.27	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13	9.75	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
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	10.03	2.72	3.62	3.62	9.49	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	19.73	15.64	15.64	15.64	10.51	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	4.79	6.77	1.89	1.89	8.41	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	2.65	3.57	1.36	0.55	1.07	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	123.45	197.89	93.99	50.38	146.48	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-123.45	-197.89	-93.99	-50.38	724.00	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-132.93	-330.82	-424.81	-475.19	248.81	237.73

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* 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, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-247	-225	-203	-182	-160	-138	-116	-95	-73	-51	-29
			-362	-340	-318	-296	-275	-253	-231	-209	-188	-166	-144
60	93.60	bu	-193	-167	-141	-115	-89	-63	-37	-11	15	41	67
			-308	-282	-256	-230	-204	-178	-152	-125	-99	-73	-47
70	109.20	bu	-140	-109	-79	-48	-18	11	42	72	103	133	164
			-255	-224	-194	-163	-133	-102	-72	-41	-11	19	49
80	124.80	bu	-86	-52	-17	17	52	87	122	156	191	226	261
			-201	-166	-132	-97	-62	-27	7	42	76	111	146
90	140.40	bu	-33	5	44	84	123	162	201	240	279	319	358
			-148	-109	-69	-30	8	47	86	126	165	204	243
100	156.00	bu	20	63	107	150	194	237	281	324	368	411	455
			-94	-51	-7	35	79	122	166	209	253	297	340
110	171.60	bu	73	121	169	217	265	312	360	408	456	504	552
			-41	6	54	102	150	198	246	293	341	389	437
120	187.20	bu	127	179	231	283	336	388	440	492	544	597	649
			12	64	116	168	221	273	325	377	430	482	534
130	202.80	bu	180	237	293	350	406	463	520	576	633	689	746
			65	122	178	235	292	348	405	461	518	575	631
140	218.40	bu	234	295	355	416	477	538	599	660	721	782	843
			119	180	241	302	363	423	484	545	606	667	728
150	234.00	bu	287	352	418	483	548	614	679	744	809	875	940
			172	238	303	368	433	499	564	629	695	760	825

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 2014 input prices.

Table 4.A Estimated costs per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	6.00	2.2500	13.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	4.0000	101.00	
FUNGICIDES					
Stratego	pt	24.91	0.7500	18.68	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Riceshot	pt	3.81	8.0000	30.48	
Facet L	pt	10.36	2.0000	20.72	
Permit 75 DF	oz	19.73	0.5000	9.87	
Clincher SF	oz	2.30	7.5000	17.25	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	80.0000	12.00	
Karate Z	oz	2.85	1.0000	2.85	
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	80.0000	30.40	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	1.0000	3.60	
Surfactant	pt	3.60	0.0750	0.27	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.7500	30.88	
HAULING					
Haul Rice	bu	0.35	164.0000	57.40	
DRYING					
Dry Rice	bu	0.40	164.0000	65.60	
OPERATOR LABOR					
Tractors	hour	12.55	0.4510	5.66	
Harvesters	hour	12.55	0.1760	2.21	
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	0.0926	0.84	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	
DIESEL FUEL					
Tractors	gal	3.20	4.4111	14.11	
Harvesters	gal	3.20	2.9444	9.42	
Flood Irr.	gal	3.20	15.4779	49.52	
REPAIR & MAINTENANCE					
Implements	acre	7.24	1.0000	7.24	
Tractors	acre	2.36	1.0000	2.36	
Harvesters	acre	5.96	1.0000	5.96	
Flood Irr.	acre	9.86	1.0000	9.86	
INTEREST ON OP. CAP.	acre	8.97	1.0000	8.97	

TOTAL DIRECT EXPENSES				601.93	
FIXED EXPENSES					
Implements	acre	14.65	1.0000	14.65	
Tractors	acre	14.35	1.0000	14.35	
Harvesters	acre	22.81	1.0000	22.81	
Flood Irr.	acre	58.56	1.0000	58.56	

TOTAL FIXED EXPENSES				110.37	

TOTAL SPECIFIED EXPENSES				712.30	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 4.B Summary of estimated costs and returns per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	164.0000	915.12	_____
TOTAL INCOME				915.12	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.88	1.0000	15.88	_____
FERTILIZERS	acre	118.87	1.0000	118.87	_____
FUNGICIDES	acre	18.68	1.0000	18.68	_____
HERBICIDES	acre	104.13	1.0000	104.13	_____
INSECTICIDES	acre	14.85	1.0000	14.85	_____
SEED/PLANTS	acre	30.40	1.0000	30.40	_____
ADJUVANTS	acre	3.87	1.0000	3.87	_____
CUSTOM FERTILIZE	acre	30.88	1.0000	30.88	_____
HAULING	acre	57.40	1.0000	57.40	_____
DRYING	acre	65.60	1.0000	65.60	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	12.55	0.6270	7.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	_____
DIESEL FUEL	gal	3.20	22.8336	73.05	_____
REPAIR & MAINTENANCE	acre	25.42	1.0000	25.42	_____
INTEREST ON OP. CAP.	acre	8.97	1.0000	8.97	_____
TOTAL DIRECT EXPENSES				601.93	_____
RETURNS ABOVE DIRECT EXPENSES				313.19	_____
TOTAL FIXED EXPENSES				110.37	_____
TOTAL SPECIFIED EXPENSES				712.30	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				202.82	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 4.C Estimated resource use for field operations, per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					80.0000				
Cruiser Maxx Rice	lbseed					80.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App by Air (5 gal)	appl			1.00	May	1.0000				
Riceshot	pt					8.0000				
Facet L	pt					2.0000				
Permit 75 DF	oz					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
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				
Crop Oil Conc.(Pet.)	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			0.75	Jul	0.7500				
Stratego	pt					0.7500				
Surfactant	pt					0.0750				
App by Air (3 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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	164.0000				
Dry Rice	bu			1.00	Aug	164.0000				
Disk Heavy	28'	MFWD 190	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.62	0.62	2.71	0.56

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 4.D Estimated costs for field operations, per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Seed Conv.	lb	30.40					0.67	31.07		31.07
Cruiser Maxx Rice	lbseed	12.00					0.26	12.26		12.26
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Riceshot	pt	30.48					0.56	31.04		31.04
Facet L	pt	20.72					0.38	21.10		21.10
Permit 75 DF	oz	9.87					0.18	10.05		10.05
App Fert by Air	cwt	16.25					0.30	16.55		16.55
Urea, Solid (46% N)	cwt	63.13					1.16	64.29		64.29
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	3.00					0.04	3.04		3.04
Clincher SF	oz	17.25					0.25	17.50		17.50
Crop Oil Conc.(Pet.)	pt	3.60					0.05	3.65		3.65
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	9.75					0.14	9.89		9.89
Urea, Solid (46% N)	cwt	37.88					0.56	38.44		38.44
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	4.50					0.05	4.55		4.55
Stratego	pt	18.68					0.21	18.89		18.89
Surfactant	pt	0.27						0.27		0.27
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		9.42	8.08	4.20		0.16	21.86	26.00	47.86
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	57.40					0.42	57.82		57.82
Dry Rice	bu	65.60					0.48	66.08		66.08
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre		49.52	9.86	9.53		1.12	70.03	58.56	128.59
TOTALS		460.56	73.05	25.42	33.93	0.00	8.97	601.93	110.37	712.30

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 4.E Estimated monthly income and expense flows per acre
Straight levee rice - zero grade
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2015

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	915.12	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	3.00	6.88	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.99	37.88	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	18.68	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	25.81	61.07	17.25	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	2.85	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	30.40	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	0.27	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13	9.75	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	57.40	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.60	0.00
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	7.29	3.18	4.08	4.08	8.54	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	15.33	13.03	13.03	13.03	9.76	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	3.88	6.19	1.31	1.31	8.24	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	2.08	3.52	1.31	0.52	1.10	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	96.79	195.11	91.21	47.62	150.64	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-96.79	-195.11	-91.21	-47.62	764.48	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-106.27	-301.38	-392.59	-440.21	324.27	313.19

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* 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, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	82.00	bu	-196	-173	-151	-128	-105	-82	-59	-36	-13	9	31
			-307	-284	-261	-238	-215	-192	-169	-147	-124	-101	-78
60	98.40	bu	-140	-113	-85	-58	-30	-3	24	51	79	106	133
			-250	-223	-196	-168	-141	-113	-86	-58	-31	-3	23
70	114.80	bu	-84	-52	-20	11	43	75	107	139	171	203	235
			-194	-162	-130	-98	-66	-34	-2	29	61	93	125
80	131.20	bu	-28	8	45	81	118	154	191	228	264	301	337
			-138	-101	-65	-28	7	44	81	117	154	190	227
90	147.60	bu	28	69	110	151	192	234	275	316	357	398	439
			-82	-41	0	41	82	123	164	206	247	288	329
100	164.00	bu	84	130	175	221	267	313	358	404	450	496	541
			-25	19	65	111	157	202	248	294	340	385	431
110	180.40	bu	140	190	241	291	341	392	442	492	543	593	643
			30	80	130	181	231	281	332	382	432	483	533
120	196.80	bu	196	251	306	361	416	471	526	581	636	691	745
			86	141	196	251	306	361	415	470	525	580	635
130	213.20	bu	253	312	372	431	491	550	610	669	729	788	847
			142	202	261	321	380	440	499	559	618	678	737
140	229.60	bu	309	373	437	501	565	629	693	757	821	885	949
			199	263	327	391	455	519	583	647	711	775	839
150	246.00	bu	365	434	502	571	640	708	777	846	914	983	1051
			255	323	392	461	529	598	667	735	804	872	941

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 2014 input prices.

Table 5.A Estimated costs per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (10 gal)	appl	8.00	1.0000	8.00	
App by Air (5 gal)	appl	6.00	2.2500	13.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	4.0000	101.00	
FUNGICIDES					
Stratego	pt	24.91	1.0000	24.91	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Newpath 2SL	oz	3.47	6.0000	20.82	
Clearpath	lb	55.06	0.5000	27.53	
Aim 2EC	oz	6.33	1.0000	6.33	
Beyond	oz	4.29	1.2500	5.36	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	82.0000	12.30	
Karate Z	oz	2.85	1.0000	2.85	
SEED/PLANTS					
Rice Clearfield	lb	0.90	70.0000	63.00	
Rice Seed CF(Levees)	lb	0.90	12.0000	10.80	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	4.5000	16.20	
Surfactant	pt	3.60	0.1000	0.36	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.7500	30.88	
HAULING					
Haul Rice	bu	0.35	148.0000	51.80	
DRYING					
Dry Rice	bu	0.40	148.0000	59.20	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
OPERATOR LABOR					
Tractors	hour	12.55	0.5757	7.23	
Harvesters	hour	12.55	0.2030	2.55	
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	0.7000	6.34	
UNALLOCATED LABOR	hour	12.53	0.5887	7.38	
DIESEL FUEL					
Tractors	gal	3.20	5.4144	17.32	
Harvesters	gal	3.20	3.3975	10.87	
Flood Irr.	gal	3.20	26.8827	86.02	
REPAIR & MAINTENANCE					
Implements	acre	7.72	1.0000	7.72	
Tractors	acre	2.89	1.0000	2.89	
Harvesters	acre	6.88	1.0000	6.88	
Flood Irr.	acre	12.43	1.0000	12.43	
INTEREST ON OP. CAP.	acre	11.35	1.0000	11.35	
TOTAL DIRECT EXPENSES				719.45	
FIXED EXPENSES					
Implements	acre	15.91	1.0000	15.91	
Tractors	acre	17.51	1.0000	17.51	
Harvesters	acre	26.32	1.0000	26.32	
Flood Irr.	acre	37.33	1.0000	37.33	
TOTAL FIXED EXPENSES				97.07	
TOTAL SPECIFIED EXPENSES				816.52	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 5.B Summary of estimated costs and returns per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	148.0000	825.84	_____
TOTAL INCOME				825.84	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	23.88	1.0000	23.88	_____
FERTILIZERS	acre	118.87	1.0000	118.87	_____
FUNGICIDES	acre	24.91	1.0000	24.91	_____
HERBICIDES	acre	85.85	1.0000	85.85	_____
INSECTICIDES	acre	15.15	1.0000	15.15	_____
SEED/PLANTS	acre	73.80	1.0000	73.80	_____
ADJUVANTS	acre	16.56	1.0000	16.56	_____
CUSTOM FERTILIZE	acre	30.88	1.0000	30.88	_____
HAULING	acre	51.80	1.0000	51.80	_____
DRYING	acre	59.20	1.0000	59.20	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	12.55	0.7788	9.78	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	12.53	0.5887	7.38	_____
DIESEL FUEL	gal	3.20	35.6946	114.21	_____
REPAIR & MAINTENANCE	acre	29.92	1.0000	29.92	_____
INTEREST ON OP. CAP.	acre	11.35	1.0000	11.35	_____
TOTAL DIRECT EXPENSES				719.45	_____
RETURNS ABOVE DIRECT EXPENSES				106.39	_____
TOTAL FIXED EXPENSES				97.07	_____
TOTAL SPECIFIED EXPENSES				816.52	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				9.32	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 5.C Estimated resource use for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					70.0000				
Cruiser Maxx Rice	lbseed					70.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air (10 gal)	appl			1.00	Apr	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim 2EC	oz					1.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.25	Jun	0.2500				
Beyond	oz					1.2500				
Crop Oil Conc.(Pet.)	pt					0.5000				
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					1.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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	148.0000				
Dry Rice	bu			1.00	Aug	148.0000				
Disk Heavy	28'	MFWD 190	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	5.34	0.58

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 5.D Estimated costs for field operations, per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Clearfield	lb	63.00					1.39	64.39		64.39
Cruiser Maxx Rice	lbseed	10.50					0.23	10.73		10.73
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
Seed Levees										
Rice Seed CF(Levees)	lb	10.80					0.24	11.04		11.04
Cruiser Maxx Rice	lbseed	1.80					0.04	1.84		1.84
App by Air (10 gal)	appl	8.00					0.18	8.18		8.18
Newpath 2SL	oz	20.82					0.46	21.28		21.28
Crop Oil Conc.(Pet.)	pt	7.20					0.16	7.36		7.36
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App Fert by Air	cwt	16.25					0.30	16.55		16.55
Urea, Solid (46% N)	cwt	63.13					1.16	64.29		64.29
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Clearpath	lb	27.53					0.50	28.03		28.03
Crop Oil Conc.(Pet.)	pt	7.20					0.13	7.33		7.33
Aim 2EC	oz	6.33					0.12	6.45		6.45
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	1.50					0.02	1.52		1.52
Beyond	oz	5.36					0.08	5.44		5.44
Crop Oil Conc.(Pet.)	pt	1.80					0.03	1.83		1.83
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	9.75					0.14	9.89		9.89
Urea, Solid (46% N)	cwt	37.88					0.56	38.44		38.44
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	6.00					0.07	6.07		6.07
Stratego	pt	24.91					0.27	25.18		25.18
Surfactant	pt	0.36						0.36		0.36
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (CL)	25' Rigid		10.87	9.32	4.84		0.18	25.21	30.00	55.21
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	51.80					0.38	52.18		52.18
Dry Rice	bu	59.20					0.43	59.63		59.63
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre	4.50	89.23	13.12	33.53		2.30	142.68	41.26	183.94
TOTALS		505.40	114.21	29.92	58.57	0.00	11.35	719.45	97.07	816.52

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 5.E Estimated monthly income and expense flows per acre
Clearfield contour levee rice
Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2015

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	825.84	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	8.00	6.00	1.50	8.38	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.99	37.88	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.91	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	46.63	33.86	5.36	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.30	0.00	0.00	2.85	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	73.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.20	7.20	1.80	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13	9.75	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	51.80	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.20	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
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	16.21	7.71	8.61	8.61	10.67	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	22.62	23.46	23.46	23.46	12.34	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	4.64	6.94	2.06	2.06	9.73	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	4.32	3.44	1.33	0.77	1.05	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	200.22	190.73	91.75	71.40	144.79	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-200.22	-190.73	-91.75	-71.40	681.05	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-209.70	-400.43	-492.18	-563.58	117.47	106.39

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* 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, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	74.00	bu	-353	-333	-312	-291	-271	-250	-229	-209	-188	-168	-147
			-450	-430	-409	-388	-368	-347	-327	-306	-285	-265	-244
60	88.80	bu	-303	-278	-253	-228	-203	-179	-154	-129	-104	-80	-55
			-400	-375	-350	-325	-301	-276	-251	-226	-201	-177	-152
70	103.60	bu	-252	-223	-194	-165	-136	-107	-78	-50	-21	7	36
			-349	-320	-291	-262	-233	-204	-175	-147	-118	-89	-60
80	118.40	bu	-201	-168	-135	-102	-69	-36	-3	29	62	95	128
			-298	-265	-232	-199	-166	-133	-100	-67	-34	-1	31
90	133.20	bu	-150	-113	-76	-39	-2	34	72	109	146	183	220
			-247	-210	-173	-136	-99	-62	-24	12	49	86	123
100	148.00	bu	-100	-58	-17	23	65	106	147	188	230	271	312
			-197	-155	-114	-73	-31	9	50	91	133	174	215
110	162.80	bu	-49	-3	41	86	132	177	223	268	314	359	404
			-146	-100	-55	-10	35	80	126	171	216	262	307
120	177.60	bu	1	50	100	150	199	249	298	348	397	447	496
			-95	-46	3	53	102	152	201	251	300	350	399
130	192.40	bu	52	105	159	213	266	320	374	427	481	535	588
			-44	8	62	116	169	223	277	330	384	438	491
140	207.20	bu	102	160	218	276	334	392	449	507	565	623	681
			5	63	121	179	237	294	352	410	468	526	583
150	222.00	bu	153	215	277	339	401	463	525	587	649	711	773
			56	118	180	242	304	366	428	490	552	614	676

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 2014 input prices.

Table 6.A Estimated costs per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (10 gal)	appl	8.00	1.0000	8.00	
App by Air (5 gal)	appl	6.00	2.2500	13.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	4.0000	101.00	
FUNGICIDES					
Stratego	pt	24.91	1.0000	24.91	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Newpath 2SL	oz	3.47	6.0000	20.82	
Clearpath	lb	55.06	0.5000	27.53	
Aim 2EC	oz	6.33	1.0000	6.33	
Beyond	oz	4.29	1.2500	5.36	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	82.0000	12.30	
Karate Z	oz	2.85	1.0000	2.85	
SEED/PLANTS					
Rice Clearfield	lb	0.90	70.0000	63.00	
Rice Seed CF(Levees)	lb	0.90	12.0000	10.80	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	4.5000	16.20	
Surfactant	pt	3.60	0.1000	0.36	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.7500	30.88	
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	
OPERATOR LABOR					
Tractors	hour	12.55	0.5281	6.62	
Harvesters	hour	12.55	0.1760	2.21	
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	12.54	0.5643	7.08	
DIESEL FUEL					
Tractors	gal	3.20	5.0192	16.06	
Harvesters	gal	3.20	2.9444	9.42	
Flood Irr.	gal	3.20	21.9949	70.39	
REPAIR & MAINTENANCE					
Implements	acre	7.34	1.0000	7.34	
Tractors	acre	2.68	1.0000	2.68	
Harvesters	acre	5.96	1.0000	5.96	
Flood Irr.	acre	11.97	1.0000	11.97	
INTEREST ON OP. CAP.	acre	10.90	1.0000	10.90	
TOTAL DIRECT EXPENSES				690.75	
FIXED EXPENSES					
Implements	acre	15.07	1.0000	15.07	
Tractors	acre	16.24	1.0000	16.24	
Harvesters	acre	22.81	1.0000	22.81	
Flood Irr.	acre	59.10	1.0000	59.10	
TOTAL FIXED EXPENSES				113.22	
TOTAL SPECIFIED EXPENSES				803.97	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 6.B Summary of estimated costs and returns per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	156.0000	870.48	_____
TOTAL INCOME				870.48	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	23.88	1.0000	23.88	_____
FERTILIZERS	acre	118.87	1.0000	118.87	_____
FUNGICIDES	acre	24.91	1.0000	24.91	_____
HERBICIDES	acre	85.85	1.0000	85.85	_____
INSECTICIDES	acre	15.15	1.0000	15.15	_____
SEED/PLANTS	acre	73.80	1.0000	73.80	_____
ADJUVANTS	acre	16.56	1.0000	16.56	_____
CUSTOM FERTILIZE	acre	30.88	1.0000	30.88	_____
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	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	12.55	0.7041	8.83	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	_____
DIESEL FUEL	gal	3.20	29.9586	95.87	_____
REPAIR & MAINTENANCE	acre	27.95	1.0000	27.95	_____
INTEREST ON OP. CAP.	acre	10.90	1.0000	10.90	_____
TOTAL DIRECT EXPENSES				690.75	_____
RETURNS ABOVE DIRECT EXPENSES				179.73	_____
TOTAL FIXED EXPENSES				113.22	_____
TOTAL SPECIFIED EXPENSES				803.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				66.51	_____

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 6.C Estimated resource use for field operations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					70.0000				
Cruiser Maxx Rice	lbseed					70.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air (10 gal)	appl			1.00	Apr	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim 2EC	oz					1.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.25	Jun	0.2500				
Beyond	oz					1.2500				
Crop Oil Conc.(Pet.)	pt					0.5000				
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					1.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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 190	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 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 6.D Estimated costs for field operations, per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		DIRECT COST								
		dollars								
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Clearfield	lb	63.00					1.39	64.39		64.39
Cruiser Maxx Rice	lbseed	10.50					0.23	10.73		10.73
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
Seed Levees										
Rice Seed CF(Levees)	lb	10.80					0.24	11.04		11.04
Cruiser Maxx Rice	lbseed	1.80					0.04	1.84		1.84
App by Air (10 gal)	appl	8.00					0.18	8.18		8.18
Newpath 2SL	oz	20.82					0.46	21.28		21.28
Crop Oil Conc.(Pet.)	pt	7.20					0.16	7.36		7.36
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App Fert by Air	cwt	16.25					0.30	16.55		16.55
Urea, Solid (46% N)	cwt	63.13					1.16	64.29		64.29
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Clearpath	lb	27.53					0.50	28.03		28.03
Crop Oil Conc.(Pet.)	pt	7.20					0.13	7.33		7.33
Aim 2EC	oz	6.33					0.12	6.45		6.45
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	1.50					0.02	1.52		1.52
Beyond	oz	5.36					0.08	5.44		5.44
Crop Oil Conc.(Pet.)	pt	1.80					0.03	1.83		1.83
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	9.75					0.14	9.89		9.89
Urea, Solid (46% N)	cwt	37.88					0.56	38.44		38.44
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	6.00					0.07	6.07		6.07
Stratego	pt	24.91					0.27	25.18		25.18
Surfactant	pt	0.36						0.36		0.36
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		9.42	8.08	4.20		0.16	21.86	26.00	47.86
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.40	55.00		55.00
Dry Rice	bu	62.40					0.46	62.86		62.86
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre	2.25	72.34	12.39	22.48		1.82	111.28	61.41	172.69
TOTALS		509.15	95.87	27.95	46.88	0.00	10.90	690.75	113.22	803.97

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 6.E Estimated monthly income and expense flows per acre
Clearfield straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

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	870.48	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	8.00	6.00	1.50	8.38	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.99	37.88	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.91	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	46.63	33.86	5.36	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.30	0.00	0.00	2.85	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	73.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.20	7.20	1.80	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13	9.75	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
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	12.24	5.44	6.34	6.34	9.76	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	21.87	18.25	18.25	18.25	10.38	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	4.68	6.72	1.84	1.84	8.38	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	4.17	3.30	1.22	0.69	1.08	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	193.14	182.89	83.94	63.62	146.60	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-193.14	-182.89	-83.94	-63.62	723.88	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-202.62	-385.51	-469.45	-533.07	190.81	179.73

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* 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, 2015

			PERCENT									
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-305	-283	-261	-240	-218	-196	-174	-153	-131	-109	-87
			-418	-396	-375	-353	-331	-309	-288	-266	-244	-222	-200
60	93.60	bu	-251	-225	-199	-173	-147	-121	-95	-69	-42	-16	9
			-365	-338	-312	-286	-260	-234	-208	-182	-156	-130	-103
70	109.20	bu	-198	-167	-137	-106	-76	-46	-15	14	45	75	106
			-311	-281	-250	-220	-189	-159	-128	-98	-67	-37	-6
80	124.80	bu	-144	-110	-75	-40	-5	29	64	98	133	168	203
			-258	-223	-188	-153	-118	-84	-49	-14	20	55	90
90	140.40	bu	-91	-52	-13	26	65	104	143	182	221	261	300
			-204	-165	-126	-87	-47	-8	30	69	108	147	187
100	156.00	bu	-37	5	49	92	136	179	223	266	310	353	397
			-151	-107	-64	-20	22	66	110	153	197	240	284
110	171.60	bu	15	63	111	159	207	254	302	350	398	446	494
			-97	-49	-1	46	93	141	189	237	285	333	381
120	187.20	bu	69	121	173	225	278	330	382	434	486	539	591
			-44	8	60	112	164	217	269	321	373	425	478
130	202.80	bu	122	179	235	292	348	405	462	518	575	631	688
			9	65	122	179	235	292	348	405	462	518	575
140	218.40	bu	176	237	297	358	419	480	541	602	663	724	785
			62	123	184	245	306	367	428	489	550	611	672
150	234.00	bu	229	294	360	425	490	556	621	686	751	817	882
			116	181	246	312	377	442	508	573	638	703	769

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 2014 input prices.

Table 7.A Estimated costs per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (10 gal)	appl	8.00	1.0000	8.00	
App by Air (5 gal)	appl	6.00	2.2500	13.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	4.0000	101.00	
FUNGICIDES					
Stratego	pt	24.91	1.0000	24.91	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Newpath 2SL	oz	3.47	6.0000	20.82	
Clearpath	lb	55.06	0.5000	27.53	
Aim 2EC	oz	6.33	1.0000	6.33	
Beyond	oz	4.29	1.2500	5.36	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	82.0000	12.30	
Karate Z	oz	2.85	3.0000	8.55	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	
SEED/PLANTS					
Rice Clearfield	lb	0.90	70.0000	63.00	
Rice Seed CF(Levees)	lb	0.90	12.0000	10.80	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	4.5000	16.20	
Surfactant	pt	3.60	0.1000	0.36	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.7500	30.88	
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	
OPERATOR LABOR					
Tractors	hour	12.55	0.5563	6.98	
Harvesters	hour	12.55	0.1760	2.21	
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	0.0926	0.84	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	
DIESEL FUEL					
Tractors	gal	3.20	5.2074	16.66	
Harvesters	gal	3.20	2.9444	9.42	
Flood Irr.	gal	3.20	18.7364	59.95	
REPAIR & MAINTENANCE					
Implements	acre	7.39	1.0000	7.39	
Tractors	acre	2.77	1.0000	2.77	
Harvesters	acre	5.96	1.0000	5.96	
Flood Irr.	acre	12.12	1.0000	12.12	
INTEREST ON OP. CAP.	acre	10.86	1.0000	10.86	
TOTAL DIRECT EXPENSES				684.80	
FIXED EXPENSES					
Implements	acre	15.47	1.0000	15.47	
Tractors	acre	16.73	1.0000	16.73	
Harvesters	acre	22.81	1.0000	22.81	
Flood Irr.	acre	59.79	1.0000	59.79	
TOTAL FIXED EXPENSES				114.80	
TOTAL SPECIFIED EXPENSES				799.60	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

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, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	156.0000	870.48	
TOTAL INCOME				870.48	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	23.88	1.0000	23.88	
FERTILIZERS	acre	118.87	1.0000	118.87	
FUNGICIDES	acre	24.91	1.0000	24.91	
HERBICIDES	acre	85.85	1.0000	85.85	
INSECTICIDES	acre	20.85	1.0000	20.85	
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	
SEED/PLANTS	acre	73.80	1.0000	73.80	
ADJUVANTS	acre	16.56	1.0000	16.56	
CUSTOM FERTILIZE	acre	30.88	1.0000	30.88	
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	
HAND LABOR	hour	9.06	0.3426	3.11	
IRRIGATE LABOR	hour	9.06	1.1625	10.52	
OPERATOR LABOR	hour	12.55	0.7323	9.19	
RICE MGT. LABOR	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	
DIESEL FUEL	gal	3.20	26.8883	86.03	
REPAIR & MAINTENANCE	acre	28.24	1.0000	28.24	
INTEREST ON OP. CAP.	acre	10.86	1.0000	10.86	
TOTAL DIRECT EXPENSES				684.80	
RETURNS ABOVE DIRECT EXPENSES				185.68	
TOTAL FIXED EXPENSES				114.80	
TOTAL SPECIFIED EXPENSES				799.60	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				70.88	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

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, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							----------hours----------			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					70.0000				
Cruiser Maxx Rice	lbseed					70.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air (10 gal)	appl			1.00	Apr	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Clearpath	lb					0.5000				
Karate Z	oz					2.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim 2EC	oz					1.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.25	Jun	0.2500				
Beyond	oz					1.2500				
Crop Oil Conc.(Pet.)	pt					0.5000				
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					1.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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 190	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							0.73	0.73	2.93	0.56

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 7.D Estimated costs for field operations, per acre
Clearfield straight levee multi inlet rice
Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Clearfield	lb	63.00					1.39	64.39		64.39
Cruiser Maxx Rice	lbseed	10.50					0.23	10.73		10.73
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
Seed Levees										
Rice Seed CF(Levees)	lb	10.80					0.24	11.04		11.04
Cruiser Maxx Rice	lbseed	1.80					0.04	1.84		1.84
App by Air (10 gal)	appl	8.00					0.18	8.18		8.18
Newpath 2SL	oz	20.82					0.46	21.28		21.28
Crop Oil Conc.(Pet.)	pt	7.20					0.16	7.36		7.36
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App Fert by Air	cwt	16.25					0.30	16.55		16.55
Urea, Solid (46% N)	cwt	63.13					1.16	64.29		64.29
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Clearpath	lb	27.53					0.50	28.03		28.03
Karate Z	oz	5.70					0.10	5.80		5.80
Crop Oil Conc.(Pet.)	pt	7.20					0.13	7.33		7.33
Aim 2EC	oz	6.33					0.12	6.45		6.45
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	1.50					0.02	1.52		1.52
Beyond	oz	5.36					0.08	5.44		5.44
Crop Oil Conc.(Pet.)	pt	1.80					0.03	1.83		1.83
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	9.75					0.14	9.89		9.89
Urea, Solid (46% N)	cwt	37.88					0.56	38.44		38.44
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	6.00					0.07	6.07		6.07
Stratego	pt	24.91					0.27	25.18		25.18
Surfactant	pt	0.36						0.36		0.36
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		9.42	8.08	4.20		0.16	21.86	26.00	47.86
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	54.60					0.40	55.00		55.00
Dry Rice	bu	62.40					0.46	62.86		62.86
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre	10.83	62.50	12.68	11.84		1.68	99.53	62.99	162.52
TOTALS		523.43	86.03	28.24	36.24	0.00	10.86	684.80	114.80	799.60

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

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, 2015

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	870.48	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	8.00	6.00	1.50	8.38	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.99	37.88	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.91	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	46.63	33.86	5.36	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.30	5.70	0.00	2.85	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.58	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	73.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.20	7.20	1.80	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13	9.75	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
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	10.03	2.72	3.62	3.62	9.49	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	19.73	15.64	15.64	15.64	10.51	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	4.79	6.77	1.89	1.89	8.41	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	4.27	3.30	1.15	0.63	1.07	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	197.58	183.31	78.59	58.28	146.48	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-197.58	-183.31	-78.59	-58.28	724.00	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-207.06	-390.37	-468.96	-527.24	196.76	185.68

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* 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, 2015

PRODUCT			PERCENT									
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-299	-277	-255	-234	-212	-190	-168	-147	-125	-103	-81
			-414	-392	-370	-348	-327	-305	-283	-261	-240	-218	-196
60	93.60	bu	-245	-219	-193	-167	-141	-115	-89	-63	-37	-10	15
			-360	-334	-308	-282	-256	-230	-204	-177	-151	-125	-99
70	109.20	bu	-192	-161	-131	-101	-70	-40	-9	20	51	81	112
			-307	-276	-246	-215	-185	-154	-124	-93	-63	-33	-2
80	124.80	bu	-138	-104	-69	-34	0	35	69	104	139	174	209
			-253	-218	-184	-149	-114	-79	-44	-10	24	59	94
90	140.40	bu	-85	-46	-7	32	71	110	149	188	227	267	306
			-200	-161	-121	-82	-43	-4	34	73	113	152	191
100	156.00	bu	-31	11	55	98	142	185	229	272	316	359	403
			-146	-103	-59	-16	27	70	114	157	201	244	288
110	171.60	bu	21	69	117	165	213	260	308	356	404	452	500
			-93	-45	2	50	98	146	194	241	289	337	385
120	187.20	bu	75	127	179	231	283	336	388	440	492	545	597
			-39	12	64	116	169	221	273	325	378	430	482
130	202.80	bu	128	185	241	298	354	411	468	524	581	637	694
			13	70	126	183	240	296	353	409	466	522	579
140	218.40	bu	182	242	303	364	425	486	547	608	669	730	791
			67	128	189	250	310	371	432	493	554	615	676
150	234.00	bu	235	300	366	431	496	561	627	692	757	823	888
			120	186	251	316	381	447	512	577	643	708	773

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 2014 input prices.

Table 8.A Estimated costs per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (10 gal)	appl	8.00	1.0000	8.00	
App by Air (5 gal)	appl	6.00	2.2500	13.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
HARVEST AIDS					
Aim 2EC	oz	6.33	1.0000	6.33	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	4.0000	101.00	
FUNGICIDES					
Stratego	pt	24.91	1.0000	24.91	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Newpath 2SL	oz	3.47	6.0000	20.82	
Clearpath	lb	55.06	0.5000	27.53	
Beyond	oz	4.29	1.2500	5.36	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	82.0000	12.30	
Karate Z	oz	2.85	1.0000	2.85	
SEED/PLANTS					
Rice Clearfield	lb	0.90	70.0000	63.00	
Rice Seed CF(Levees)	lb	0.90	12.0000	10.80	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	4.5000	16.20	
Surfactant	pt	3.60	0.1000	0.36	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.7500	30.88	
HAULING					
Haul Rice	bu	0.35	164.0000	57.40	
DRYING					
Dry Rice	bu	0.40	164.0000	65.60	
OPERATOR LABOR					
Tractors	hour	12.55	0.4510	5.66	
Harvesters	hour	12.55	0.1760	2.21	
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	0.0926	0.84	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	
DIESEL FUEL					
Tractors	gal	3.20	4.4111	14.11	
Harvesters	gal	3.20	2.9444	9.42	
Flood Irr.	gal	3.20	15.4779	49.52	
REPAIR & MAINTENANCE					
Implements	acre	7.24	1.0000	7.24	
Tractors	acre	2.36	1.0000	2.36	
Harvesters	acre	5.96	1.0000	5.96	
Flood Irr.	acre	9.86	1.0000	9.86	
INTEREST ON OP. CAP.	acre	10.24	1.0000	10.24	

TOTAL DIRECT EXPENSES				655.54	
FIXED EXPENSES					
Implements	acre	14.65	1.0000	14.65	
Tractors	acre	14.35	1.0000	14.35	
Harvesters	acre	22.81	1.0000	22.81	
Flood Irr.	acre	58.56	1.0000	58.56	

TOTAL FIXED EXPENSES				110.37	

TOTAL SPECIFIED EXPENSES				765.91	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

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, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	164.0000	915.12	
TOTAL INCOME				915.12	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	23.88	1.0000	23.88	
HARVEST AIDS	acre	6.33	1.0000	6.33	
FERTILIZERS	acre	118.87	1.0000	118.87	
FUNGICIDES	acre	24.91	1.0000	24.91	
HERBICIDES	acre	79.52	1.0000	79.52	
INSECTICIDES	acre	15.15	1.0000	15.15	
SEED/PLANTS	acre	73.80	1.0000	73.80	
ADJUVANTS	acre	16.56	1.0000	16.56	
CUSTOM FERTILIZE	acre	30.88	1.0000	30.88	
HAULING	acre	57.40	1.0000	57.40	
DRYING	acre	65.60	1.0000	65.60	
HAND LABOR	hour	9.06	0.3426	3.11	
IRRIGATE LABOR	hour	9.06	1.0500	9.53	
OPERATOR LABOR	hour	12.55	0.6270	7.87	
RICE MGT. LABOR	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	
DIESEL FUEL	gal	3.20	22.8336	73.05	
REPAIR & MAINTENANCE	acre	25.42	1.0000	25.42	
INTEREST ON OP. CAP.	acre	10.24	1.0000	10.24	
TOTAL DIRECT EXPENSES				655.54	
RETURNS ABOVE DIRECT EXPENSES				259.58	
TOTAL FIXED EXPENSES				110.37	
TOTAL SPECIFIED EXPENSES				765.91	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				149.21	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

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, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					70.0000				
Cruiser Maxx Rice	lbseed					70.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air (10 gal)	appl			1.00	Apr	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
App by Air (5 gal)	appl			1.00	May	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim 2EC	oz					1.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.25	Jun	0.2500				
Beyond	oz					1.2500				
Crop Oil Conc.(Pet.)	pt					0.5000				
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					1.0000				
Surfactant	pt					0.1000				
App by Air (3 gal)	appl			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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	164.0000				
Dry Rice	bu			1.00	Aug	164.0000				
Disk Heavy	28'	MFWD 190	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.62	0.62	2.71	0.56

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 8.D Estimated costs for field operations, per acre
Clearfield straight levee-zero grade rice
Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Clearfield	lb	63.00					1.39	64.39		64.39
Cruiser Maxx Rice	lbseed	10.50					0.23	10.73		10.73
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
Seed Levees										
Rice Seed CF(Levees)	lb	10.80					0.24	11.04		11.04
Cruiser Maxx Rice	lbseed	1.80					0.04	1.84		1.84
App by Air (10 gal)	appl	8.00					0.18	8.18		8.18
Newpath 2SL	oz	20.82					0.46	21.28		21.28
Crop Oil Conc.(Pet.)	pt	7.20					0.16	7.36		7.36
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App Fert by Air	cwt	16.25					0.30	16.55		16.55
Urea, Solid (46% N)	cwt	63.13					1.16	64.29		64.29
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Clearpath	lb	27.53					0.50	28.03		28.03
Crop Oil Conc.(Pet.)	pt	7.20					0.13	7.33		7.33
Aim 2EC	oz	6.33					0.12	6.45		6.45
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	1.50					0.02	1.52		1.52
Beyond	oz	5.36					0.08	5.44		5.44
Crop Oil Conc.(Pet.)	pt	1.80					0.03	1.83		1.83
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	9.75					0.14	9.89		9.89
Urea, Solid (46% N)	cwt	37.88					0.56	38.44		38.44
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (5 gal)	appl	6.00					0.07	6.07		6.07
Stratego	pt	24.91					0.27	25.18		25.18
Surfactant	pt	0.36						0.36		0.36
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		9.42	8.08	4.20		0.16	21.86	26.00	47.86
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	57.40					0.42	57.82		57.82
Dry Rice	bu	65.60					0.48	66.08		66.08
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre		49.52	9.86	9.53		1.12	70.03	58.56	128.59
TOTALS		512.90	73.05	25.42	33.93	0.00	10.24	655.54	110.37	765.91

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

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, 2015

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	915.12	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	8.00	6.00	1.50	8.38	0.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.99	37.88	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.91	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	46.63	27.53	5.36	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.30	0.00	0.00	2.85	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	73.80	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.20	7.20	1.80	0.36	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.13	9.75	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	57.40	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.60	0.00
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	7.29	3.18	4.08	4.08	8.54	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	15.33	13.03	13.03	13.03	9.76	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	3.88	6.19	1.31	1.31	8.24	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	3.85	3.15	1.10	0.60	1.10	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	178.28	174.73	75.81	55.52	150.64	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-178.28	-174.73	-75.81	-55.52	764.48	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-187.76	-362.49	-438.30	-493.82	270.66	259.58

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* 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, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	82.00	bu	-250	-227	-204	-181	-158	-136	-113	-90	-67	-44	-21
			-360	-337	-315	-292	-269	-246	-223	-200	-177	-154	-132
60	98.40	bu	-194	-166	-139	-111	-84	-56	-29	-2	25	52	80
			-304	-277	-249	-222	-194	-167	-139	-112	-84	-57	-30
70	114.80	bu	-137	-105	-73	-41	-9	22	54	86	118	150	182
			-248	-216	-184	-152	-120	-88	-56	-24	7	39	71
80	131.20	bu	-81	-45	-8	28	64	101	137	174	211	247	284
			-192	-155	-118	-82	-45	-9	27	64	100	137	173
90	147.60	bu	-25	15	56	98	139	180	221	262	303	345	386
			-135	-94	-53	-12	28	70	111	152	193	234	275
100	164.00	bu	30	76	122	168	213	259	305	351	396	442	488
			-79	-33	11	57	103	149	194	240	286	332	377
110	180.40	bu	87	137	187	238	288	338	389	439	489	540	590
			-23	27	77	127	178	228	278	328	379	429	479
120	196.80	bu	143	198	253	308	362	417	472	527	582	637	692
			32	87	142	197	252	307	362	417	472	527	581
130	213.20	bu	199	259	318	377	437	496	556	615	675	734	794
			89	148	208	267	327	386	446	505	565	624	683
140	229.60	bu	255	319	383	447	512	576	640	704	768	832	896
			145	209	273	337	401	465	529	593	657	721	785
150	246.00	bu	312	380	449	517	586	655	723	792	861	929	998
			201	270	338	407	476	544	613	682	750	819	887

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 2014 input prices.

Table 9.A Estimated costs per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (10 gal)	appl	8.00	1.0000	8.00	
App by Air (5 gal)	appl	6.00	1.2500	7.50	
App by Air (3 gal)	appl	4.75	0.5000	2.38	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	18.60	0.3750	6.98	
DAP	cwt	29.00	0.3750	10.88	
Urea, Solid (46% N)	cwt	25.25	3.6700	92.67	
HERBICIDES					
Command 3ME	pt	19.06	1.0000	19.06	
Glyphosate 3lbs a.e	pt	2.25	3.0000	6.75	
Newpath 2SL	oz	3.47	6.0000	20.82	
Clearpath	lb	55.06	0.5000	27.53	
Aim 2EC	oz	6.33	1.0000	6.33	
Beyond	oz	4.29	1.2500	5.36	
INSECTICIDES					
Cruiser Maxx Rice	lbseed	0.15	29.2500	4.39	
Karate Z	oz	2.85	1.0000	2.85	
SEED/PLANTS					
Rice Clearfield Hyb	lb	6.12	25.0000	153.00	
Rice Seed CFH(Levee)	lb	6.12	4.2500	26.01	
ADJUVANTS					
Crop Oil Conc.(Pet.)	pt	3.60	4.5000	16.20	
CUSTOM FERTILIZE					
App Fert by Air	cwt	6.50	4.4200	28.73	
HAULING					
Haul Rice	bu	0.35	179.0000	62.65	
DRYING					
Dry Rice	bu	0.40	179.0000	71.60	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
OPERATOR LABOR					
Tractors	hour	12.55	0.5281	6.62	
Harvesters	hour	12.55	0.1760	2.21	
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	12.54	0.5643	7.08	
DIESEL FUEL					
Tractors	gal	3.20	5.0192	16.06	
Harvesters	gal	3.20	2.9444	9.42	
Flood Irr.	gal	3.20	21.9949	70.39	
REPAIR & MAINTENANCE					
Implements	acre	7.34	1.0000	7.34	
Tractors	acre	2.68	1.0000	2.68	
Harvesters	acre	5.96	1.0000	5.96	
Flood Irr.	acre	11.97	1.0000	11.97	
INTEREST ON OP. CAP.	acre	12.69	1.0000	12.69	

TOTAL DIRECT EXPENSES				765.34	
FIXED EXPENSES					
Implements	acre	15.07	1.0000	15.07	
Tractors	acre	16.24	1.0000	16.24	
Harvesters	acre	22.81	1.0000	22.81	
Flood Irr.	acre	59.10	1.0000	59.10	

TOTAL FIXED EXPENSES				113.22	

TOTAL SPECIFIED EXPENSES				878.56	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 9.B Summary of estimated costs and returns per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	5.58	179.0000	998.82	
TOTAL INCOME				998.82	
DIRECT EXPENSES					
CUSTOM SPRAY	acre	17.88	1.0000	17.88	
FERTILIZERS	acre	110.53	1.0000	110.53	
HERBICIDES	acre	85.85	1.0000	85.85	
INSECTICIDES	acre	7.24	1.0000	7.24	
SEED/PLANTS	acre	179.01	1.0000	179.01	
ADJUVANTS	acre	16.20	1.0000	16.20	
CUSTOM FERTILIZE	acre	28.74	1.0000	28.74	
HAULING	acre	62.65	1.0000	62.65	
DRYING	acre	71.60	1.0000	71.60	
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	
HAND LABOR	hour	9.06	0.3426	3.11	
IRRIGATE LABOR	hour	9.06	2.3750	21.52	
OPERATOR LABOR	hour	12.55	0.7041	8.83	
RICE MGT. LABOR	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR	hour	12.54	0.5643	7.08	
DIESEL FUEL	gal	3.20	29.9586	95.87	
REPAIR & MAINTENANCE	acre	27.95	1.0000	27.95	
INTEREST ON OP. CAP.	acre	12.69	1.0000	12.69	
TOTAL DIRECT EXPENSES				765.34	
RETURNS ABOVE DIRECT EXPENSES				233.48	
TOTAL FIXED EXPENSES				113.22	
TOTAL SPECIFIED EXPENSES				878.56	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				120.26	

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 9.C Estimated resource use for field operations, per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							hours			
Field Cultivate Fld	32'	MFWD 190	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 190	0.038	1.00	Oct		0.03	0.03	0.03	0.03
Grain Drill	24'	MFWD 190	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield Hyb	lb					25.0000				
Cruiser Maxx Rice	lbseed					25.0000				
Roller/Cultipacker	30'	MFWD 190	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Command 3ME	pt					1.0000				
Glyphosate 3lbs a.e	pt					3.0000				
Seed Levees				1.00	Apr					
Rice Seed CFH(Levee)	lb					4.2500				
Cruiser Maxx Rice	lbseed					4.2500				
App by Air (10 gal)	appl			1.00	Apr	1.0000				
Newpath 2SL	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			0.75	May	0.7500				
Amm Sulfate (21% N)	cwt					0.3750				
DAP	cwt					0.3750				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
App by Air (5 gal)	appl			1.00	May	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim 2EC	oz					1.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air (5 gal)	appl			0.25	Jun	0.2500				
Beyond	oz					1.2500				
Crop Oil Conc.(Pet.)	pt					0.5000				
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			0.50	Jul	0.5000				
Karate Z	oz					1.0000				
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 190	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	179.0000				
Dry Rice	bu			1.00	Aug	179.0000				
Disk Heavy	28'	MFWD 190	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 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 9.D Estimated costs for field operations, per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
		dollars								
Field Cultivate Fld	32'		2.92	1.36	2.22		0.29	6.79	6.52	13.31
Harrow - Folding	40'		1.21	0.44	0.93		0.11	2.69	1.58	4.27
Grain Drill	24'		2.46	2.08	2.59		0.16	7.29	5.58	12.87
Rice Clearfield Hyb	lb	153.00					3.37	156.37		156.37
Cruiser Maxx Rice	lbseed	3.75					0.08	3.83		3.83
Roller/Cultipacker	30'		1.56	0.47	1.18		0.07	3.28	1.86	5.14
Spray (Broadcast)	60'		0.88	0.28	0.80		0.04	2.00	1.05	3.05
Command 3ME	pt	19.06					0.42	19.48		19.48
Glyphosate 3lbs a.e	pt	6.75					0.15	6.90		6.90
Seed Levees										
Rice Seed CFH(Levee)	lb	26.01					0.57	26.58		26.58
Cruiser Maxx Rice	lbseed	0.64					0.01	0.65		0.65
App by Air (10 gal)	appl	8.00					0.18	8.18		8.18
Newpath 2SL	oz	20.82					0.46	21.28		21.28
Crop Oil Conc.(Pet.)	pt	7.20					0.16	7.36		7.36
App Fert by Air	cwt	4.88					0.09	4.97		4.97
Amm Sulfate (21% N)	cwt	6.98					0.13	7.11		7.11
DAP	cwt	10.88					0.20	11.08		11.08
App Fert by Air	cwt	17.36					0.32	17.68		17.68
Urea, Solid (46% N)	cwt	67.42					1.24	68.66		68.66
App by Air (5 gal)	appl	6.00					0.11	6.11		6.11
Clearpath	lb	27.53					0.50	28.03		28.03
Crop Oil Conc.(Pet.)	pt	7.20					0.13	7.33		7.33
Aim 2EC	oz	6.33					0.12	6.45		6.45
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air (5 gal)	appl	1.50					0.02	1.52		1.52
Beyond	oz	5.36					0.08	5.44		5.44
Crop Oil Conc.(Pet.)	pt	1.80					0.03	1.83		1.83
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App Fert by Air	cwt	6.50					0.10	6.60		6.60
Urea, Solid (46% N)	cwt	25.25					0.37	25.62		25.62
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
App by Air (3 gal)	appl	2.38					0.03	2.41		2.41
Karate Z	oz	2.85					0.03	2.88		2.88
Rice Management										
RICE MGT. LABOR	hour				1.81		0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		9.42	8.08	4.20		0.16	21.86	26.00	47.86
Grain Cart Rice	700 bu		0.34	0.16	0.26		0.01	0.77	0.52	1.29
Handling & Storage										
HAND LABOR	hour				2.27		0.02	2.29		2.29
Haul Rice	bu	62.65					0.46	63.11		63.11
Dry Rice	bu	71.60					0.53	72.13		72.13
Disk Heavy	28'		4.74	2.69	3.61		0.04	11.08	8.70	19.78
Flood Irr.	acre	2.25	72.34	12.39	22.48		1.82	111.28	61.41	172.69
TOTALS		581.95	95.87	27.95	46.88	0.00	12.69	765.34	113.22	878.56

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.

Table 9.E Estimated monthly income and expense flows per acre
Clearfield hybrid straight levee rice
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2015

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	998.82	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	8.00	6.00	1.50	2.38	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.28	25.25	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	46.63	33.86	5.36	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.39	0.00	0.00	2.85	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	179.01	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	7.20	7.20	1.80	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.24	6.50	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	62.65	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.60	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
LABOR	3.15	0.00	0.00	0.00	0.00	0.00	12.24	5.44	6.34	6.34	9.76	3.61
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.13	0.00	0.00	0.00	0.00	0.00	21.87	18.25	18.25	18.25	10.38	4.74
REPAIR & MAINTENANCE	1.80	0.00	0.00	0.00	0.00	0.00	4.68	6.72	1.84	1.84	8.38	2.69
INTEREST ON OP. CAP.	0.40	0.00	0.00	0.00	0.00	0.00	6.30	3.40	0.99	0.35	1.21	0.04
TOTAL DIRECT EXPENSES	9.48	0.00	0.00	0.00	0.00	0.00	292.57	188.39	67.83	32.01	163.98	11.08
NET INCOME	-9.48	0.00	0.00	0.00	0.00	0.00	-292.57	-188.39	-67.83	-32.01	834.84	-11.08
NET INCOME TO DATE	-9.48	-9.48	-9.48	-9.48	-9.48	-9.48	-302.05	-490.44	-558.27	-590.28	244.56	233.48

Note: Cost of production estimates are based on 2014 input prices.
Fertilization decisions should be based on soil tests.
* 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, 2015

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			4.18	4.46	4.74	5.02	5.30	5.58	5.85	6.13	6.41	6.69	6.97
PERCENT	YIELD	UNIT	dollars										
50	89.50	bu	-323	-298	-273	-248	-223	-198	-173	-148	-123	-98	-73
			-436	-411	-386	-361	-336	-311	-286	-261	-236	-211	-186
60	107.40	bu	-261	-231	-201	-171	-141	-111	-81	-52	-22	7	37
			-374	-345	-315	-285	-255	-225	-195	-165	-135	-105	-75
70	125.30	bu	-200	-165	-130	-95	-60	-25	9	44	79	114	149
			-313	-278	-243	-208	-173	-138	-103	-68	-33	1	35
80	143.20	bu	-139	-99	-59	-19	20	60	100	140	180	220	260
			-252	-212	-172	-132	-92	-52	-12	27	67	107	147
90	161.10	bu	-77	-32	12	57	102	147	192	237	281	326	371
			-190	-145	-100	-55	-11	33	78	123	168	213	258
100	179.00	bu	-16	33	83	133	183	233	283	333	383	433	483
			-129	-79	-29	20	70	120	170	220	270	320	369
110	196.90	bu	45	100	155	209	264	319	374	429	484	539	594
			-68	-13	41	96	151	206	261	316	371	426	481
120	214.80	bu	106	166	226	286	346	406	466	526	585	645	705
			-6	53	113	173	233	292	352	412	472	532	592
130	232.70	bu	167	232	297	362	427	492	557	622	687	752	817
			54	119	184	249	314	379	444	509	574	639	703
140	250.60	bu	229	299	369	439	508	578	648	718	788	858	928
			116	186	255	325	395	465	535	605	675	745	815
150	268.50	bu	290	365	440	515	590	665	740	815	890	964	1039
			177	252	327	402	477	552	626	701	776	851	926

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 2014 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, 2015

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	291,000	300	8	13.64	12.55	43.64	30.31	86.51	116.03	202.54
Combine (300-349 hp)	325 hp	325,000	300	8	16.73	12.55	53.53	33.85	99.94	129.59	229.53
Combine (350-399 hp)	355 hp	350,000	300	8	18.27	12.55	58.46	36.45	107.47	139.56	247.03
Combine (400-449 hp)	425 hp	375,000	300	8	21.87	12.55	70.00	39.06	121.61	149.53	271.14
Combine (450-499hp)	475 hp	397,000	300	8	24.44	12.55	78.23	41.35	132.14	158.30	290.44
Cotton Stripper	173 hp	170,000	200	8	8.08	12.55	25.85	26.56	64.96	101.68	166.65
Tractor(20-39hp)CB	MFWD 30	31,100	600	8	1.54	12.55	4.94	0.97	18.46	5.64	24.11
Tractor(20-39hp)RB	MFWD 30	18,600	600	8	1.54	12.55	4.94	0.58	18.07	3.37	21.44
Tractor(40-59hp)CB	2WD 50	33,700	600	8	2.57	12.55	8.23	1.05	21.83	6.12	27.95
Tractor(40-59hp)CB	MFWD 50	38,900	600	8	2.57	12.55	8.23	1.21	22.00	7.06	29.06
Tractor(40-59hp)RB	2WD 50	18,900	600	8	2.57	12.55	8.23	0.59	21.37	3.43	24.80
Tractor(40-59hp)RB	MFWD 50	26,200	600	8	2.57	12.55	8.23	0.81	21.60	4.75	26.36
Tractor(60-89hp)CB	2WD 75	43,400	600	8	3.86	12.55	12.35	1.35	26.25	7.88	34.14
Tractor(60-89hp)CB	MFWD 75	47,900	600	8	3.86	12.55	12.35	1.49	26.40	8.69	35.09
Tractor(60-89hp)RB	2WD 75	35,000	600	8	3.86	12.55	12.35	1.09	25.99	6.35	32.35
Tractor(60-89hp)RB	MFWD 75	39,600	600	8	3.86	12.55	12.35	1.23	26.14	7.19	33.33
Tractor(90-119hp)CB	2WD 105	63,100	600	8	5.40	12.55	17.29	1.97	31.81	11.45	43.27
Tractor(90-119hp)CB	MFWD 105	74,400	600	8	5.40	12.55	17.29	2.32	32.16	13.51	45.68
Tractor(90-119hp)RB	2WD 105	54,300	600	8	5.40	12.55	17.29	1.69	31.54	9.86	41.40
Tractor(90-119hp)RB	MFWD 105	56,900	600	8	5.40	12.55	17.29	1.77	31.62	10.33	41.95
Tractor(120-139hp)CB	2WD 130	96,300	600	8	6.69	12.55	21.41	3.00	36.97	17.48	54.46
Tractor(120-139hp)CB	MFWD 130	114,000	600	8	6.69	12.55	21.41	3.56	37.52	20.70	58.22
Tractor(140-159hp)CB	2WD 150	127,000	600	8	7.72	12.55	24.70	3.96	41.22	23.06	64.29
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	12.55	24.70	4.46	41.72	25.97	67.69
Tractor(160-179hp)CB	MFWD 170	156,000	600	8	8.75	12.55	28.00	4.87	45.42	29.71	75.14
Tractor(180-199hp)CB	MFWD 190	167,000	600	8	9.77	12.55	31.29	5.21	49.06	31.81	80.87
Tractor(200-249hp)CB	MFWD 225	226,000	600	8	11.58	12.55	37.06	7.06	56.67	43.05	99.72
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	12.55	37.06	8.65	58.26	52.76	111.03
Tractor(250-349hp)CB	4WD 300	277,000	600	8	15.44	12.55	49.41	8.65	70.62	52.76	123.38
Tractor(250-349hp)CB	MFWD 300	271,000	600	8	15.44	12.55	49.41	8.46	70.43	51.62	122.05
Tractor(250-349hp)CB	Track 300	281,000	600	8	15.44	12.55	49.41	8.78	70.74	53.52	124.27
Tractor(350-449hp)CB	4WD 400	313,000	600	8	20.58	12.55	65.88	9.78	88.21	59.62	147.84
Tractor(350-449hp)CB	Track 400	364,000	600	8	20.58	12.55	65.88	11.37	89.80	69.33	159.14
Tractor(450-550hp)CB	4WD 500	361,000	600	8	25.73	12.55	82.35	11.28	106.18	68.76	174.95
Tractor(450-550hp)CB	Track 500	399,000	600	8	25.73	12.55	82.35	12.46	107.37	76.00	183.38
Utility Vechicle	900 CC	14,300	200	8	1.00	12.55	3.40	2.23	18.18	8.55	26.73
Utility Vehicle	800 CC	6,500	200	8	0.70	12.55	2.38	1.01	15.94	3.88	19.83
Utility Vehicle-mule	600 CC	11,500	200	8	0.50	12.55	1.70	1.79	16.04	6.87	22.92

Notes:
Labor: Includes allocated labor from power unit.
Total Direct: Does not include interest on operating capital.
CB = Cab, RB = Roll Bar

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2015

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	291,000	300	8	13.64	12.55	43.64	30.31	86.51	116.03	202.54
Combine (300-349 hp)	325 hp	325,000	300	8	16.73	12.55	53.53	33.85	99.94	129.59	229.53
Combine (350-399 hp)	355 hp	350,000	300	8	18.27	12.55	58.46	36.45	107.47	139.56	247.03
Combine (400-449 hp)	425 hp	375,000	300	8	21.87	12.55	70.00	39.06	121.61	149.53	271.14
Combine (450-499hp)	475 hp	397,000	300	8	24.44	12.55	78.23	41.35	132.14	158.30	290.44
Cotton Stripper	173 hp	170,000	200	8	8.08	12.55	25.85	26.56	64.96	101.68	166.65
Tractor(20-39hp)CB	MFWD 30	31,100	600	8	1.54	12.55	4.94	0.97	18.46	5.64	24.11
Tractor(20-39hp)RB	MFWD 30	18,600	600	8	1.54	12.55	4.94	0.58	18.07	3.37	21.44
Tractor(40-59hp)CB	2WD 50	33,700	600	8	2.57	12.55	8.23	1.05	21.83	6.12	27.95
Tractor(40-59hp)CB	MFWD 50	38,900	600	8	2.57	12.55	8.23	1.21	22.00	7.06	29.06
Tractor(40-59hp)RB	2WD 50	18,900	600	8	2.57	12.55	8.23	0.59	21.37	3.43	24.80
Tractor(40-59hp)RB	MFWD 50	26,200	600	8	2.57	12.55	8.23	0.81	21.60	4.75	26.36
Tractor(60-89hp)CB	2WD 75	43,400	600	8	3.86	12.55	12.35	1.35	26.25	7.88	34.14
Tractor(60-89hp)CB	MFWD 75	47,900	600	8	3.86	12.55	12.35	1.49	26.40	8.69	35.09
Tractor(60-89hp)RB	2WD 75	35,000	600	8	3.86	12.55	12.35	1.09	25.99	6.35	32.35
Tractor(60-89hp)RB	MFWD 75	39,600	600	8	3.86	12.55	12.35	1.23	26.14	7.19	33.33
Tractor(90-119hp)CB	2WD 105	63,100	600	8	5.40	12.55	17.29	1.97	31.81	11.45	43.27
Tractor(90-119hp)CB	MFWD 105	74,400	600	8	5.40	12.55	17.29	2.32	32.16	13.51	45.68
Tractor(90-119hp)RB	2WD 105	54,300	600	8	5.40	12.55	17.29	1.69	31.54	9.86	41.40
Tractor(90-119hp)RB	MFWD 105	56,900	600	8	5.40	12.55	17.29	1.77	31.62	10.33	41.95
Tractor(120-139hp)CB	2WD 130	96,300	600	8	6.69	12.55	21.41	3.00	36.97	17.48	54.46
Tractor(120-139hp)CB	MFWD 130	114,000	600	8	6.69	12.55	21.41	3.56	37.52	20.70	58.22
Tractor(140-159hp)CB	2WD 150	127,000	600	8	7.72	12.55	24.70	3.96	41.22	23.06	64.29
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	12.55	24.70	4.46	41.72	25.97	67.69
Tractor(160-179hp)CB	MFWD 170	156,000	600	8	8.75	12.55	28.00	4.87	45.42	29.71	75.14
Tractor(180-199hp)CB	MFWD 190	167,000	600	8	9.77	12.55	31.29	5.21	49.06	31.81	80.87
Tractor(200-249hp)CB	MFWD 225	226,000	600	8	11.58	12.55	37.06	7.06	56.67	43.05	99.72
Tractor(200-249hp)CB	Track 225	277,000	600	8	11.58	12.55	37.06	8.65	58.26	52.76	111.03
Tractor(250-349hp)CB	4WD 300	277,000	600	8	15.44	12.55	49.41	8.65	70.62	52.76	123.38
Tractor(250-349hp)CB	MFWD 300	271,000	600	8	15.44	12.55	49.41	8.46	70.43	51.62	122.05
Tractor(250-349hp)CB	Track 300	281,000	600	8	15.44	12.55	49.41	8.78	70.74	53.52	124.27
Tractor(350-449hp)CB	4WD 400	313,000	600	8	20.58	12.55	65.88	9.78	88.21	59.62	147.84
Tractor(350-449hp)CB	Track 400	364,000	600	8	20.58	12.55	65.88	11.37	89.80	69.33	159.14
Tractor(450-550hp)CB	4WD 500	361,000	600	8	25.73	12.55	82.35	11.28	106.18	68.76	174.95
Tractor(450-550hp)CB	Track 500	399,000	600	8	25.73	12.55	82.35	12.46	107.37	76.00	183.38
Utility Vechicle	900 CC	14,300	200	8	1.00	12.55	3.40	2.23	18.18	8.55	26.73
Utility Vehicle	800 CC	6,500	200	8	0.70	12.55	2.38	1.01	15.94	3.88	19.83
Utility Vehicle-mule	600 CC	11,500	200	8	0.50	12.55	1.70	1.79	16.04	6.87	22.92

Notes:
Labor: Includes allocated labor from power unit.
Total Direct: Does not include interest on operating capital.
CB = Cab, RB = Roll Bar

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Bed-Paratill Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.01	2.99	1.58	0.57	6.16	2.64	3.47	12.28
Bed-Paratill Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.67	1.99	1.34	0.37	4.38	2.23	2.31	8.93
Bed-Paratill Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.67	1.99	1.34	0.37	4.38	2.23	2.31	8.93
Bed-Paratill Rigid	4R-30	MFWD 225	16,500	150	12	0.204	2.56	7.57	1.21	1.44	12.79	2.02	8.79	23.62
Bed-Paratill Rigid	4R-38	MFWD 225	15,200	150	12	0.160	2.01	5.96	0.88	1.13	10.00	1.47	6.92	18.39
Bed-Paratill Rigid	6R-30	MFWD 225	22,600	150	12	0.136	1.70	5.04	1.11	0.96	8.83	1.85	5.86	16.54
Bed-Paratill Rigid	6R-38	MFWD 225	20,300	150	12	0.107	1.34	3.98	0.78	0.75	6.88	1.31	4.62	12.82
Bed-Paratill Rigid	8R-30	MFWD 225	27,200	150	12	0.102	1.28	3.78	1.00	0.72	6.79	1.67	4.39	12.86
Bed-Paratill Rigid	8R-38	MFWD 225	24,500	150	12	0.080	1.01	2.99	0.71	0.57	5.29	1.19	3.47	9.95
Bed-Paratill w/rol	4R-30	MFWD 225	17,600	150	12	0.204	2.56	7.57	1.29	1.44	12.87	2.16	8.79	23.83
Bed-Paratill w/rol	4R-38	MFWD 225	17,600	150	12	0.160	2.01	5.96	1.02	1.13	10.14	1.70	6.92	18.77
Bed-Paratill w/rol	6R-38	MFWD 225	22,700	150	12	0.107	1.34	3.98	0.88	0.75	6.97	1.46	4.62	13.07
Bed-Rip/Disk Fold.	8R-38	MFWD 190	38,000	300	20	0.073	0.91	2.28	0.13	0.38	3.72	0.62	2.32	6.67
Bed-Rip/Disk Fold.	12R-30	MFWD 225	53,200	300	20	0.061	0.77	2.28	0.16	0.43	3.65	0.73	2.65	7.04
Bed-Rip/Disk Fold.	12R-38	MFWD 225	53,200	300	20	0.046	0.58	1.71	0.12	0.32	2.74	0.55	1.98	5.28
Bed-Rip/Disk Rigid	4R-30	MFWD 190	16,700	300	20	0.184	2.32	5.78	0.15	0.96	9.22	0.69	5.88	15.79
Bed-Rip/Disk Rigid	4R-38	MFWD 190	16,700	300	20	0.146	1.84	4.59	0.12	0.76	7.32	0.54	4.66	12.53
Bed-Rip/Disk Rigid	6R-38	MFWD 190	23,000	300	20	0.097	1.22	3.04	0.11	0.50	4.88	0.50	3.09	8.48
Bed-Rip/Disk Rigid	8R-30	MFWD 190	29,800	300	20	0.139	1.74	4.35	0.20	0.72	7.02	0.92	4.42	12.37
Bed-Rip/Disk Rigid	8R-38	MFWD 190	29,800	300	20	0.073	0.91	2.28	0.10	0.38	3.69	0.48	2.32	6.50
Bed-Rip/Disk Rigid	6R-30	MFWD 190	23,000	300	20	0.123	1.54	3.85	0.14	0.64	6.18	0.63	3.92	10.74
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	23,900	150	12	0.107	1.34	3.98	0.92	0.75	7.02	1.54	4.62	13.19
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	31,400	150	12	0.080	1.01	2.99	0.91	0.57	5.49	1.52	3.47	10.49
Bed-Roll-Fold.	8R-38	MFWD 190	27,000	160	10	0.074	0.93	2.31	0.50	0.38	4.13	1.27	2.35	7.76
Bed-Roll-Fold.	12R-30	MFWD 225	28,800	160	10	0.062	0.78	2.31	0.45	0.44	3.99	1.14	2.69	7.82
Bed-Roll-Fold.	12R-38	MFWD 225	32,400	160	10	0.049	0.61	1.82	0.39	0.34	3.19	1.01	2.12	6.33
Bed-Roll-Fold.	16R-30	MFWD 225	33,600	160	10	0.046	0.58	1.73	0.39	0.33	3.05	1.00	2.01	6.07
Bed-Roll-Rigid	8R-38	MFWD 190	20,200	160	10	0.074	0.93	2.31	0.37	0.38	4.01	0.95	2.35	7.32
Bed/Disk (Hipper)	4R-38	MFWD 150	7,820	160	10	0.147	1.85	3.64	0.28	0.65	6.44	0.73	3.83	11.01
Bed/Disk (Hipper)	6R-30	MFWD 170	12,800	160	10	0.125	1.56	3.50	0.40	0.60	6.07	1.01	3.71	10.81
Bed/Disk (Hipper)	6R-38	MFWD 170	13,500	160	10	0.098	1.23	2.76	0.33	0.48	4.81	0.84	2.93	8.59
Bed/Disk (Hipper)	8R-30	MFWD 190	17,400	160	10	0.093	1.17	2.93	0.40	0.48	5.00	1.03	2.98	9.02
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	31,900	160	10	0.049	0.61	1.54	0.39	0.25	2.81	1.00	1.56	5.38
Bed/Disk (Hipper)	10R-30	MFWD 225	19,900	160	10	0.075	0.94	2.77	0.37	0.52	4.62	0.95	3.22	8.80
Bed/Disk (Hipper)	10R-38	MFWD 225	23,100	160	10	0.059	0.74	2.19	0.34	0.41	3.69	0.87	2.54	7.11
Bed/Disk (Hipper)	12R-30	MFWD 225	29,100	160	10	0.062	0.78	2.31	0.45	0.44	3.99	1.15	2.69	7.84
Bed/Disk (Hipper)	12R-38	MFWD 225	31,900	160	10	0.049	0.61	1.82	0.39	0.34	3.18	1.00	2.12	6.31
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	21,300	160	10	0.074	0.93	2.31	0.39	0.38	4.03	1.00	2.35	7.39
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	19,800	160	10	0.074	0.93	2.31	0.36	0.38	4.00	0.93	2.35	7.29
Bed/Disk w/roller	8R-30/40	MFWD 190	22,100	160	10	0.093	1.17	2.93	0.51	0.48	5.11	1.32	2.98	9.42
Bed/Disk w/roller	12R-30/40	MFWD 225	47,200	160	10	0.062	0.78	2.31	0.73	0.44	4.27	1.87	2.69	8.85
Bed/Disk w/roller	8R-38	MFWD 190	25,400	160	10	0.074	0.93	2.31	0.47	0.38	4.10	1.19	2.35	7.66
Bed/Lister	4R-38	MFWD 150	18,200	160	8	0.228	2.86	5.64	0.97	1.02	10.50	2.96	5.93	19.40
Bed/Lister	6R-38	MFWD 150	15,500	160	8	0.120	1.50	2.96	0.43	0.53	5.45	1.33	3.12	9.90
Bed/Lister	8R-30	MFWD 190	22,400	160	8	0.114	1.43	3.57	0.59	0.59	6.20	1.82	3.63	11.66
Bed/Lister	8R-38	MFWD 190	22,800	160	8	0.090	1.13	2.82	0.48	0.47	4.91	1.47	2.87	9.25
Bed/Lister	8R-38 2x1	MFWD 190	35,700	160	8	0.060	0.75	1.88	0.50	0.31	3.45	1.53	1.91	6.89
Bed/Lister	10R-30	MFWD 225	30,100	160	8	0.091	1.14	3.38	0.64	0.64	5.82	1.96	3.93	11.71
Bed/Lister	10R-38	MFWD 225	33,100	160	8	0.072	0.90	2.66	0.55	0.50	4.64	1.70	3.10	9.44
Bed/Lister	12R-38	MFWD 225	35,700	160	8	0.060	0.75	2.22	0.50	0.42	3.90	1.53	2.58	8.02
Bed\Lister	16R-30	MFWD 225	45,900	160	8	0.035	0.44	1.30	0.37	0.24	2.36	1.15	1.51	5.03
Blade-Box	6'-7'	2WD 130	1,090	200	20	0.020	0.25	0.42	0.01	0.06	0.74	0.00	0.34	1.10
Blade-Box	8'-10'	2WD 50	5,060	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	12'-16'	2WD 50	7,550	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	6'-7'	2WD 50	1,150	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	8'-10'	2WD 50	3,310	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper	12'-16'	2WD 50	6,730	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy	4R-30(350)	MFWD 190	30,600	200	10	0.327	4.10	10.24	2.50	1.70	18.56	4.90	10.41	33.88
Boll Buggy	4R-38(255)	MFWD 190	30,600	200	10	0.257	3.23	8.06	1.97	1.34	14.61	3.86	8.20	26.68
Boll Buggy	4R-38(350)	MFWD 190	30,600	200	10	0.257	3.23	8.06	1.97	1.34	14.61	3.86	8.20	26.68
Boll Buggy	4R2x1(350)	MFWD 190	30,600	200	10	0.172	2.16	5.39	1.31	0.89	9.77	2.58	5.48	17.83
Boll Buggy	6R-30(355)	MFWD 190	30,600	200	10	0.218	2.73	6.83	1.66	1.13	12.37	3.26	6.94	22.58
Boll Buggy	6R-38(355)	MFWD 190	30,600	200	10	0.172	2.16	5.39	1.31	0.89	9.77	2.58	5.48	17.83
Boll Buggy-Stripper	13' Bcast	MFWD 150	30,500	200	10	0.251	3.16	6.22	1.92	1.12	12.42	3.75	6.54	22.72
Boll Buggy-Stripper	16' Bcast	MFWD 150	30,600	200	10	0.204	2.56	5.05	1.56	0.91	10.10	3.06	5.31	18.48
Boll Buggy-Stripper	19' Bcast	MFWD 150	30,600	200	10	0.172	2.16	4.25	1.31	0.77	8.50	2.58	4.47	15.56
Boll Buggy-Stripper	4R-30 2x1	MFWD 150	30,600	200	10	0.218	2.73	5.39	1.66	0.97	10.77	3.26	5.66	19.71
Boll Buggy-Stripper	4R-36	MFWD 150	30,500	200	10	0.272	3.42	6.74	2.08	1.21	13.46	4.07	7.08	24.62
Boll Buggy-Stripper	4R-38	MFWD 150	30,600	200	10	0.257	3.23	6.36	1.97	1.15	12.72	3.86	6.69	23.28
Boll Buggy-Stripper	4R-38 2x1	MFWD 150	30,600	200	10	0.172	2.16	4.25	1.31	0.77	8.50	2.58	4.47	15.56
Boll Buggy-Stripper	5R-30	MFWD 150	30,600	200	10	0.261	3.28	6.47	2.00	1.17	12.93	3.92	6.80	23.65
Boll Buggy-Stripper	5R-38	MFWD 150	30,600	200	10	0.207	2.60	5.11	1.58	0.92	10.23	3.10	5.38	18.71
Boll Buggy-Stripper	6R-30	MFWD 150	30,600	200	10	0.218	2.73	5.39	1.66	0.97	10.77	3.26	5.66	19.71
Boll Buggy-Stripper	6R-38	MFWD 150	30,600	200	10	0.172	2.16	4.25	1.31	0.77	8.50	2.58	4.47	15.56
Boll Buggy-Stripper	8R-30	MFWD 150	30,600	200	10	0.163	2.05	4.04	1.25	0.73	8.08	2.45	4.25	14.78
Boll Buggy-Stripper	8R-36/38	MFWD 150	30,600	200	10	0.129	1.62	3.19	0.98	0.57	6.38	1.93	3.36	11.68
Chisel Plow-Folding	16'	2WD 130	22,500	150	12	0.115	1.45	2.47	0.93	0.34	5.21	1.56	2.02	8.79

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Chisel Plow-Folding	24'	MFWD 190	37,200	150	12	0.076	0.95	2.39	1.02	0.39	4.77	1.71	2.43	8.92
Chisel Plow-Folding	32'	MFWD 225	48,000	150	12	0.057	0.72	2.14	1.00	0.40	4.27	1.66	2.48	8.43
Chisel Plow-Folding	42'	MFWD 225	55,200	150	12	0.044	0.55	1.63	0.87	0.31	3.37	1.46	1.89	6.72
Chisel Plow-Folding	50'	MFWD 225	75,500	150	10	0.036	0.46	1.37	1.20	0.26	3.30	1.89	1.59	6.79
Chisel Plow-Folding	61'	MFWD 225	85,100	150	12	0.030	0.38	1.12	0.93	0.21	2.64	1.55	1.30	5.50
Chisel Plow-Rigid	10'	MFWD 170	6,000	150	12	0.184	2.32	5.17	0.40	0.90	8.79	0.66	5.49	14.95
Chisel Plow-Rigid	15'	2WD 130	11,900	150	12	0.123	1.54	2.63	0.52	0.37	5.08	0.88	2.15	8.12
Chisel Plow-Rigid	20'	MFWD 225	1,200	150	12	0.102	1.28	3.80	0.04	0.72	5.86	0.07	4.42	10.36
Chisel Plow-Rigid	24'	MFWD 190	13,100	150	12	0.077	0.96	2.41	0.36	0.40	4.14	0.60	2.45	7.20
Chisel-Harrow	21 shank	2WD 190	12,500	150	12	0.088	1.10	2.75	0.39	0.30	4.56	0.66	1.84	7.06
Chisel-Harrow	27 shank	MFWD 225	14,100	150	12	0.068	0.85	2.53	0.34	0.48	4.22	0.58	2.94	7.75
Coulter-Chisel-Harro	21 shank	2WD 190	19,200	150	12	0.088	1.10	2.75	0.61	0.30	4.77	1.01	1.84	7.63
Coulter-Chisel-Harro	27 shank	MFWD 225	24,000	150	12	0.068	0.85	2.53	0.59	0.48	4.47	0.98	2.94	8.41
Cult & PD Ridge Till	8R-30	2WD 150	30,100	200	12	0.110	1.87	2.71	1.58	0.43	6.61	1.54	2.53	10.70
Cult & PD Ridge Till	12R-30	2WD 190	41,300	200	12	0.073	1.25	2.29	1.45	0.25	5.25	1.41	1.53	8.20
Cultivate	4R-30	2WD 105	11,100	150	10	0.206	2.58	3.56	0.61	0.40	7.17	1.55	2.36	11.09
Cultivate	4R-38	2WD 105	11,900	150	10	0.162	2.03	2.80	0.51	0.27	5.63	1.31	1.60	8.55
Cultivate	6R-30	MFWD 150	15,900	150	10	0.137	1.72	3.39	0.58	0.61	6.32	1.48	3.57	11.37
Cultivate	6R-38	MFWD 150	15,700	150	10	0.108	1.36	2.68	0.45	0.48	4.98	1.15	2.81	8.96
Cultivate	8R-30	MFWD 190	20,600	150	10	0.103	1.29	3.22	0.56	0.53	5.62	1.44	3.28	10.35
Cultivate	8R-38	MFWD 190	21,800	150	10	0.073	0.92	2.30	0.42	0.38	4.04	1.09	2.34	7.47
Cultivate	8R-38 2x1	MFWD 190	29,700	150	10	0.054	0.68	1.69	0.42	0.28	3.09	1.09	1.72	5.91
Cultivate	10R-30	MFWD 225	28,200	150	10	0.082	1.03	3.05	0.62	0.58	5.29	1.58	3.55	10.42
Cultivate	12R-30	MFWD 225	36,300	150	10	0.068	0.86	2.54	0.66	0.48	4.56	1.69	2.95	9.21
Cultivate	12R-38	MFWD 225	37,400	150	10	0.054	0.68	2.01	0.54	0.38	3.61	1.37	2.33	7.33
Cultivate	16R-30	MFWD 225	45,200	150	10	0.051	0.64	1.91	0.62	0.36	3.54	1.58	2.21	7.34
Cultivate & Post	4R-30	2WD 105	17,100	150	10	0.220	3.75	3.80	1.00	0.37	8.93	2.55	2.16	13.66
Cultivate & Post	4R-38	2WD 105	17,800	150	10	0.173	2.95	2.99	0.82	0.29	7.07	2.09	1.70	10.87
Cultivate & Post	6R-30	MFWD 150	21,900	150	10	0.146	2.50	3.62	0.85	0.65	7.64	2.18	3.80	13.63
Cultivate & Post	6R-38	MFWD 150	21,700	150	10	0.115	1.97	2.86	0.67	0.51	6.02	1.70	3.00	10.74
Cultivate & Post	8R-30	MFWD 190	26,500	150	10	0.110	1.87	3.44	0.77	0.57	6.67	1.98	3.49	12.15
Cultivate & Post	8R-38	MFWD 190	27,800	150	10	0.086	1.48	2.72	0.64	0.45	5.30	1.64	2.76	9.71
Cultivate & Post	8R-38 2x1	MFWD 190	37,100	150	10	0.057	0.98	1.81	0.57	0.30	3.67	1.45	1.84	6.97
Cultivate & Post	10R-30	MFWD 225	34,100	150	10	0.088	1.50	3.26	0.80	0.62	6.18	2.03	3.78	12.01
Cultivate & Post	12R-30	MFWD 225	42,200	150	10	0.073	1.25	2.71	0.82	0.51	5.31	2.10	3.15	10.57
Cultivate & Post	12R-38	MFWD 225	44,700	150	10	0.057	0.98	2.14	0.69	0.40	4.23	1.75	2.49	8.48
Cultivate & Post	16R-30	MFWD 225	52,600	150	10	0.055	0.93	2.03	0.77	0.38	4.13	1.96	2.36	8.47
Cultivate Ridge Till	8R-30	2WD 170	25,000	200	12	0.103	1.29	2.88	1.23	0.38	5.80	1.20	2.33	9.34
Cultivate Ridge Till	12R-30	2WD 190	35,400	200	12	0.068	0.86	2.15	1.16	0.23	4.41	1.13	1.44	6.99
Disk & Incorporate	14'	2WD 130	27,800	200	10	0.149	2.55	3.20	1.24	0.45	7.45	2.12	2.61	12.19
Disk & Incorporate	20'	MFWD 190	43,600	180	10	0.092	1.16	2.89	1.34	0.48	5.87	2.28	2.94	11.10
Disk & Incorporate	24'	MFWD 190	48,500	200	10	0.087	1.49	2.73	1.27	0.45	5.94	2.15	2.77	10.88
Disk & Incorporate	28'	MFWD 225	51,200	200	10	0.074	1.27	2.77	1.14	0.52	5.72	1.95	3.22	10.90
Disk & Incorporate	32'	MFWD 225	56,800	200	10	0.065	1.11	2.42	1.11	0.46	5.12	1.89	2.81	9.83
Disk Harrow	14'	2WD 130	21,800	180	10	0.140	1.76	3.00	0.84	0.42	6.03	1.73	2.45	10.22
Disk Harrow	20'	MFWD 190	37,700	180	10	0.098	1.23	3.07	1.02	0.51	5.84	2.09	3.12	11.06
Disk Harrow	24'	MFWD 190	42,600	180	10	0.081	1.02	2.56	0.96	0.42	4.98	1.97	2.60	9.56
Disk Harrow	28'	MFWD 225	45,200	180	10	0.070	0.88	2.59	0.88	0.49	4.85	1.79	3.02	9.67
Disk Harrow	32'	MFWD 225	50,800	180	10	0.061	0.77	2.27	0.86	0.43	4.34	1.76	2.64	8.75
Disk Harrow	42'	MFWD 225	99,500	180	10	0.046	0.58	1.73	1.29	0.33	3.94	2.63	2.01	8.59
Disk Harrow 40-100hp	14'	2WD 75	14,100	180	10	0.140	1.76	1.73	0.54	0.15	4.19	1.12	0.89	6.20
Disk Heavy	14'	MFWD 150	21,800	180	10	0.145	1.83	3.60	0.88	0.65	6.97	1.80	3.79	12.56
Disk Heavy	20'	MFWD 170	37,700	180	10	0.097	1.22	2.72	1.01	0.47	5.43	2.07	2.89	10.40
Disk Heavy	28'	MFWD 190	45,200	180	10	0.075	0.94	2.36	0.95	0.39	4.66	1.93	2.40	9.00
Disk Ripper	15'	MFWD 225	40,400	180	10	0.136	1.70	5.04	1.52	0.96	9.24	3.11	5.86	18.23
Ditcher		2WD 130	4,910	200	10	0.020	0.25	0.42	0.03	0.06	0.77	0.05	0.34	1.17
Ditcher (1m/160a)		2WD 130	4,910	200	10	0.009	0.11	0.20	0.01	0.02	0.36	0.02	0.16	0.55
Fert Appl (Liquid)	4R-38	MFWD 150	13,500	150	8	0.154	2.64	3.82	1.39	0.69	8.54	1.51	4.01	14.08
Fert Appl (Liquid)	6R-30	MFWD 170	16,300	150	8	0.130	2.23	3.66	1.42	0.63	7.96	1.55	3.89	13.40
Fert Appl (Liquid)	6R-38	MFWD 170	14,500	150	8	0.103	1.76	2.89	0.99	0.50	6.16	1.08	3.07	10.32
Fert Appl (Liquid)	8R-30	MFWD 190	15,200	150	8	0.098	1.67	3.07	0.99	0.51	6.25	1.08	3.12	10.46
Fert Appl (Liquid)	8R-38	MFWD 190	17,300	150	8	0.077	1.32	2.42	0.89	0.40	5.05	0.97	2.46	8.50
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	16,900	150	8	0.051	0.88	1.61	0.58	0.26	3.35	0.63	1.64	5.63
Fert Appl (Liquid)	10R-30	MFWD 225	18,600	150	8	0.078	1.34	2.91	0.97	0.55	5.78	1.06	3.38	10.22
Fert Appl (Liquid)	10R-38	MFWD 225	20,300	150	8	0.061	1.05	2.29	0.83	0.43	4.63	0.91	2.66	8.21
Fert Appl (Liquid)	12R-30	MFWD 225	19,400	150	8	0.078	1.34	2.91	1.01	0.55	5.82	1.10	3.38	10.31
Fert Appl (Liquid)	12R-38	MFWD 225	18,500	150	8	0.051	0.88	1.91	0.63	0.36	3.80	0.69	2.22	6.72
Field Cult & Inc	42'	MFWD 225	60,400	100	10	0.037	0.64	1.39	0.57	0.26	2.88	2.32	1.62	6.83
Field Cult & Inc	50'	MFWD 225	70,900	100	10	0.031	0.54	1.17	0.56	0.22	2.50	2.29	1.36	6.16
Field Cult & Inc Fld	24'	MFWD 170	32,200	100	10	0.066	1.12	1.85	0.53	0.32	3.83	2.17	1.96	7.96
Field Cult & Inc Fld	32'	MFWD 190	44,700	100	10	0.049	0.84	1.55	0.55	0.25	3.21	2.25	1.57	7.04
Field Cult & Inc Rdg	12'	2WD 150	17,500	100	10	0.132	2.25	3.26	0.57	0.52	6.62	2.35	3.04	12.03
Field Cultivate Fld	24'	MFWD 170	26,200	100	10	0.062	0.78	1.74	0.40	0.30	3.23	1.66	1.84	6.74
Field Cultivate Fld	32'	MFWD 190	37,300	100	10	0.046	0.58	1.46	0.43	0.24	2.72	1.77	1.48	5.98
Field Cultivate Fld	42'	MFWD 225	53,000	100	10	0.035	0.44	1.31	0.47	0.25	2.48	1.92	1.53	5.93
Field Cultivate Fld	50'	MFWD 225	63,300	100	10	0.029	0.37	1.10	0.47	0.21	2.16	1.92	1.28	5.37
Field Cultivate Rdg	12'	2WD 150	11,500	100	10	0.124	1.56	3.07	0.35	0.49	5.48	1.45	2.86	9.81
Grain Cart Corn	500 bu	MFWD 190	24,700	200	12	0.031	0.40	0.99	0.21	0.16	1.78	0.35	1.01	3.15

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Grain Cart Corn	700 bu	MFWD 190	34,200	200	12	0.025	0.31	0.78	0.23	0.13	1.45	0.38	0.79	2.63
Grain Cart Corn	1000 bu	MFWD 225	48,300	200	12	0.025	0.31	0.92	0.32	0.17	1.74	0.54	1.07	3.36
Grain Cart Rice	500 bu	MFWD 190	24,700	200	12	0.062	0.78	1.95	0.41	0.32	3.48	0.69	1.98	6.16
Grain Cart Rice	700 bu	MFWD 190	34,200	200	12	0.055	0.69	1.72	0.50	0.28	3.20	0.84	1.74	5.80
Grain Cart Rice	1000 bu	MFWD 190	48,300	200	12	0.045	0.57	1.43	0.59	0.23	2.84	0.99	1.45	5.30
Grain Cart Soybean	500 bu	MFWD 190	24,700	200	12	0.025	0.32	0.79	0.17	0.13	1.42	0.28	0.81	2.51
Grain Cart Soybean	700 bu	MFWD 190	34,200	200	12	0.021	0.26	0.66	0.19	0.11	1.23	0.32	0.67	2.24
Grain Cart Soybean	1000 bu	MFWD 190	48,300	200	12	0.021	0.26	0.66	0.27	0.11	1.32	0.46	0.67	2.45
Grain Cart Wht/Sor	500 bu	MFWD 190	24,700	200	12	0.025	0.32	0.79	0.17	0.13	1.42	0.28	0.81	2.51
Grain Cart Wht/Sor	700 bu	MFWD 190	34,200	200	12	0.021	0.26	0.66	0.19	0.11	1.23	0.32	0.67	2.24
Grain Cart Wht/Sor	1000 bu	MFWD 190	48,300	200	12	0.021	0.26	0.66	0.27	0.11	1.32	0.46	0.67	2.45
Grain Drill	8'	2WD 130	23,200	150	8	0.235	5.09	5.04	2.05	0.70	12.90	3.77	4.12	20.80
Grain Drill	10'	2WD 130	25,900	150	8	0.188	4.07	4.03	1.83	0.56	10.51	3.37	3.29	17.18
Grain Drill	12'	2WD 130	22,700	150	8	0.157	3.39	3.36	1.33	0.47	8.57	2.46	2.74	13.78
Grain Drill	15'	MFWD 150	30,500	150	8	0.125	2.71	3.10	1.43	0.56	7.82	2.64	3.26	13.73
Grain Drill	20'	MFWD 170	37,600	150	8	0.094	2.03	2.64	1.32	0.45	6.46	2.44	2.80	11.71
Grain Drill	24'	MFWD 190	56,700	150	8	0.078	1.69	2.45	1.67	0.41	6.23	3.07	2.49	11.81
Grain Drill	30'	MFWD 225	61,300	150	8	0.062	1.35	2.32	1.44	0.44	5.57	2.66	2.70	10.94
Grain Drill	35'	MFWD 225	86,100	150	8	0.053	1.16	1.99	1.73	0.38	5.28	3.20	2.31	10.80
Grain Drill & Pre	8'	2WD 130	29,100	150	8	0.253	5.48	5.43	2.77	0.76	14.45	5.10	4.43	23.99
Grain Drill & Pre	10'	2WD 130	31,800	150	8	0.203	4.38	4.34	2.42	0.61	11.76	4.46	3.55	19.78
Grain Drill & Pre	12'	2WD 130	28,700	150	8	0.169	3.65	3.62	1.82	0.50	9.61	3.35	2.95	15.92
Grain Drill & Pre	15'	MFWD 150	36,500	150	8	0.135	2.92	3.34	1.85	0.60	8.72	3.41	3.51	15.65
Grain Drill & Pre	20'	MFWD 170	43,500	150	8	0.101	2.19	2.84	1.65	0.49	7.18	3.05	3.01	13.25
Grain Drill & Pre	24'	MFWD 190	62,700	150	8	0.084	1.82	2.64	1.98	0.44	6.90	3.66	2.69	13.26
Grain Drill & Pre	30'	MFWD 225	68,700	150	8	0.067	1.46	2.50	1.74	0.47	6.19	3.21	2.91	12.32
Grain Drill & Pre	35'	MFWD 225	93,500	150	8	0.058	1.25	2.15	2.03	0.40	5.84	3.74	2.49	12.09
Grain Drill & Pre T	8R-38	MFWD 225	39,600	150	8	0.062	1.35	2.32	0.93	0.44	5.06	1.71	2.70	9.49
Harrow - Rigid	21'	2WD 150	6,330	200	10	0.073	0.92	1.82	0.16	0.29	3.21	0.23	1.70	5.15
Harrow - Folding	16'	MFWD 190	5,150	200	10	0.097	1.21	3.03	0.17	0.50	4.93	0.25	3.08	8.27
Harrow - Folding	24'	MFWD 190	12,000	200	10	0.064	0.81	2.02	0.27	0.33	3.44	0.39	2.05	5.90
Harrow - Folding	30'	MFWD 190	14,500	200	10	0.051	0.64	1.61	0.26	0.27	2.80	0.38	1.64	4.83
Harrow - Folding	40'	MFWD 190	17,800	200	10	0.038	0.48	1.21	0.24	0.20	2.14	0.35	1.23	3.73
Harrow - Folding	48'	MFWD 225	21,500	200	10	0.032	0.40	1.19	0.24	0.22	2.07	0.35	1.39	3.82
Harrow - Rigid	13'	2WD 130	4,360	200	10	0.119	1.49	2.55	0.18	0.35	4.59	0.26	2.08	6.95
Header - Corn	6R-30	265 hp	43,500	300	8	0.170	2.13	7.43	1.85	5.16	16.58	2.69	19.75	39.03
Header - Corn	6R-38	265 hp	44,700	300	8	0.134	1.68	5.86	1.50	4.07	13.13	2.18	15.59	30.91
Header - Corn	8R-30	265 hp	56,200	300	8	0.127	1.60	5.57	1.79	3.87	12.84	2.60	14.81	30.26
Header - Corn	8R-38	325 hp	57,600	300	8	0.100	1.26	5.40	1.45	3.41	11.54	2.11	13.08	26.73
Header - Corn	12R-20	325 hp	76,400	300	8	0.127	1.60	6.83	2.43	4.32	15.20	3.54	16.55	35.29
Header - Corn	12R-30	325 hp	87,700	300	8	0.085	1.06	4.55	1.86	2.88	10.37	2.71	11.03	24.12
Header - Draper (CL)	25' Rigid	265 hp	52,500	300	8	0.203	2.54	8.86	2.44	6.15	20.01	3.68	23.56	47.25
Header - Draper (CL)	30' Rigid	325 hp	59,800	300	8	0.169	2.12	9.05	2.31	5.72	19.23	3.49	21.93	44.65
Header - Draper (CL)	36' Rigid	355 hp	64,800	300	8	0.141	1.76	8.24	2.09	5.14	17.25	3.15	19.68	40.09
Header - Draper (SL)	25' Rigid	325 hp	52,500	300	8	0.176	2.20	9.42	2.11	5.95	19.70	3.19	22.80	45.70
Header - Draper (SL)	30' Rigid	325 hp	59,800	300	8	0.146	1.84	7.85	2.00	4.96	16.66	3.02	19.00	38.70
Header - Draper (SL)	36' Rigid	355 hp	64,800	300	8	0.122	1.53	7.14	1.81	4.45	14.95	2.73	17.05	34.74
Header - Rice (CL)	25' Rigid	325 hp	51,600	300	8	0.253	3.18	13.59	3.27	8.59	28.64	4.75	32.89	66.30
Header - Rice (CL)	30' Rigid	325 hp	59,000	300	8	0.211	2.65	11.32	3.12	7.16	24.26	4.53	27.41	56.20
Header - Rice (SL)	25' Rigid	325 hp	51,600	300	8	0.220	2.76	11.77	2.83	7.44	24.82	4.12	28.51	57.45
Header - Rice (SL)	30' Rigid	325 hp	59,000	300	8	0.183	2.30	9.81	2.70	6.20	21.02	3.92	23.75	48.71
Header -RiceStrp(CL)	20'	265 hp	47,200	300	8	0.253	3.18	11.08	2.99	7.69	24.95	4.35	29.45	58.76
Header -RiceStrp(CL)	24'	325 hp	51,800	300	8	0.211	2.65	11.32	2.73	7.16	23.88	3.98	27.41	55.27
Header -RiceStrp(CL)	32'	325 hp	57,200	300	8	0.158	1.99	8.49	2.26	5.37	18.12	3.29	20.56	41.98
Header -RiceStrp(SL)	20'	265 hp	47,200	300	8	0.220	2.76	9.60	2.59	6.66	21.62	3.77	25.52	50.92
Header -RiceStrp(SL)	24'	325 hp	51,800	300	8	0.183	2.30	9.81	2.37	6.20	20.69	3.44	23.75	47.90
Header -RiceStrp(SL)	32'	325 hp	57,200	300	8	0.137	1.72	7.36	1.96	4.65	15.70	2.85	17.81	36.38
Header -Soybean	22' Flex	265 hp	30,300	300	8	0.116	1.45	5.06	0.87	3.51	10.92	1.27	13.47	25.67
Header -Soybean	25' Flex	325 hp	32,700	300	8	0.102	1.28	5.46	0.83	3.45	11.04	1.21	13.24	25.50
Header -Soybean	30' Flex	325 hp	31,200	300	8	0.085	1.06	4.55	0.66	2.88	9.17	0.96	11.03	21.17
Header -Soybean	35' Flex	355 hp	43,500	300	8	0.072	0.91	4.26	0.79	2.66	8.63	1.15	10.18	19.97
Header Wheat/Sorghum	22' Rigid	265 hp	19,500	300	8	0.116	1.45	5.06	0.56	3.51	10.60	0.82	13.47	24.90
Header Wheat/Sorghum	25' Rigid	325 hp	27,300	300	8	0.102	1.28	5.46	0.69	3.45	10.90	1.01	13.24	25.16
Header Wheat/Sorghum	30' Rigid	325 hp	30,300	300	8	0.085	1.06	4.55	0.64	2.88	9.15	0.93	11.03	21.12
Header-Cotton Bcast	13'	173 hp	21,300	200	8	0.251	5.44	6.51	1.00	6.68	19.64	2.92	25.60	48.17
Header-Cotton-Bcast	16'	173 hp	23,800	200	8	0.204	4.42	5.29	0.91	5.43	16.06	2.65	20.80	39.51
Header-Cotton-Bcast	19'	173 hp	26,200	200	8	0.172	3.72	4.45	0.84	4.57	13.60	2.45	17.52	33.58
Header-Cotton-Brush	4R-30 2x1	173 hp	34,400	200	8	0.218	4.71	5.64	1.40	5.79	17.56	4.09	22.19	43.84
Header-Cotton-Brush	4R-36	173 hp	34,000	200	8	0.272	5.89	7.05	1.73	7.24	21.93	5.05	27.74	54.73
Header-Cotton-Brush	4R-38	173 hp	34,000	200	8	0.257	5.57	6.66	1.64	6.84	20.72	4.77	26.21	51.71
Header-Cotton-Brush	4R-38 2x1	173 hp	36,000	200	8	0.172	3.72	4.45	1.16	4.57	13.91	3.37	17.52	34.81
Header-Cotton-Brush	5R-30	173 hp	42,800	200	8	0.261	5.65	6.77	2.10	6.95	21.48	6.10	26.63	54.22
Header-Cotton-Brush	5R-38	173 hp	44,300	200	8	0.207	4.47	5.35	1.72	5.50	17.05	5.00	21.06	43.12
Header-Cotton-Brush	6R-30	173 hp	52,700	200	8	0.218	4.71	5.64	2.15	5.79	18.31	6.26	22.19	46.77
Header-Cotton-Brush	6R-38	173 hp	54,400	200	8	0.172	3.72	4.45	1.75	4.57	14.51	5.10	17.52	37.14
Header-Cotton-Brush	8R-30	173 hp	72,700	200	8	0.163	3.53	4.23	2.23	4.34	14.34	6.48	16.64	37.47
Header-Cotton-Brush	8R-36/38	173 hp	74,300	200	8	0.129	2.79	3.34	1.80	3.43	11.38	5.23	13.15	29.77
Land Plane	50'x16'	MFWD 190	12,300	200	10	0.151	1.90	4.74	0.37	0.79	7.81	0.95	4.82	13.58

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Levee Pull & Seed	8 Blade	MFWD 170	10,200	100	10	0.003	0.04	0.09	0.00	0.01	0.16	0.03	0.10	0.31
Levee Pull (1m/80a)	8 blade	MFWD 170	7,120	100	10	0.003	0.04	0.09	0.00	0.01	0.16	0.02	0.10	0.29
Levee Splitter (1/80	32"	MFWD 150	7,120	100	10	0.004	0.05	0.10	0.00	0.01	0.17	0.03	0.10	0.31
Module Builder	4R-30(350)	MFWD 190	34,700	200	10	0.327	7.07	10.24	2.84	1.70	21.86	5.56	10.41	37.84
Module Builder	4R-38(255)	MFWD 190	34,700	200	10	0.257	5.57	8.06	2.23	1.34	17.21	4.37	8.20	29.79
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	5.57	8.06	2.23	1.34	17.21	4.37	8.20	29.79
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	3.72	5.39	1.49	0.89	11.51	2.92	5.48	19.91
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	4.71	6.83	1.89	1.13	14.57	3.70	6.94	25.22
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	3.72	5.39	1.49	0.89	11.51	2.92	5.48	19.91
Module Builder-Strip	13' Bcast	MFWD 150	34,700	200	10	0.251	5.44	6.22	2.18	1.12	14.97	4.27	6.54	25.79
Module Builder-Strip	16' Bcast	MFWD 150	34,700	200	10	0.204	4.42	5.05	1.77	0.91	12.16	3.47	5.31	20.95
Module Builder-Strip	19' Bcast	MFWD 150	34,700	200	10	0.172	3.72	4.25	1.49	0.77	10.24	2.92	4.47	17.64
Module Builder-Strip	4R-30 2x1	MFWD 150	34,700	200	10	0.218	4.71	5.39	1.89	0.97	12.97	3.70	5.66	22.35
Module Builder-Strip	4R-36	MFWD 150	34,700	200	10	0.272	5.89	6.74	2.36	1.21	16.22	4.63	7.08	27.94
Module Builder-Strip	4R-38	MFWD 150	34,700	200	10	0.257	5.57	6.36	2.23	1.15	15.32	4.37	6.69	26.40
Module Builder-Strip	4R-38 2x1	MFWD 150	34,700	200	10	0.172	3.72	4.25	1.49	0.77	10.24	2.92	4.47	17.64
Module Builder-Strip	5R-30	MFWD 150	34,700	200	10	0.261	5.65	6.47	2.27	1.17	15.57	4.44	6.80	26.82
Module Builder-Strip	5R-38	MFWD 150	34,700	200	10	0.207	4.47	5.11	1.79	0.92	12.32	3.51	5.38	21.22
Module Builder-Strip	6R-30	MFWD 150	34,700	200	10	0.218	4.71	5.39	1.89	0.97	12.97	3.70	5.66	22.35
Module Builder-Strip	6R-38	MFWD 190	34,700	200	10	0.172	3.72	5.39	1.49	0.89	11.51	2.92	5.48	19.91
Module Builder-Strip	8R-36/38	MFWD 190	34,700	200	10	0.129	2.79	4.04	1.12	0.67	8.64	2.19	4.11	14.95
NT Grain Drill	6'	MFWD 170	24,100	150	8	0.327	7.07	9.16	2.95	1.59	20.79	5.45	9.72	35.97
NT Grain Drill	10'	2WD 130	35,700	150	8	0.235	5.09	5.04	3.15	0.70	14.00	5.81	4.12	23.94
NT Grain Drill	12'	2WD 130	42,000	150	8	0.163	3.53	3.50	2.57	0.49	10.11	4.74	2.86	17.72
NT Grain Drill	15'	MFWD 150	48,800	150	8	0.130	2.82	3.23	2.39	0.58	9.04	4.41	3.40	16.86
NT Grain Drill	20'	MFWD 170	64,400	150	8	0.098	2.12	2.74	2.37	0.47	7.72	4.36	2.91	15.01
NT Grain Drill	24'	MFWD 190	79,200	150	8	0.081	1.76	2.56	2.43	0.42	7.18	4.47	2.60	14.27
NT Grain Drill	30'	MFWD 225	90,600	150	8	0.065	1.41	2.42	2.22	0.46	6.52	4.09	2.81	13.44
NT Grain Drill & Pre	6'	MFWD 170	30,000	150	8	0.352	7.61	9.87	3.96	1.71	23.17	7.30	10.47	40.96
NT Grain Drill & Pre	10'	2WD 130	41,600	150	8	0.211	4.57	4.52	3.30	0.63	13.03	6.07	3.69	22.81
NT Grain Drill & Pre	12'	2WD 130	47,900	150	8	0.176	3.80	3.77	3.16	0.53	11.28	5.83	3.08	20.19
NT Grain Drill & Pre	15'	MFWD 150	54,800	150	8	0.141	3.04	3.48	2.89	0.63	10.06	5.33	3.66	19.06
NT Grain Drill & Pre	20'	MFWD 170	70,400	150	8	0.105	2.28	2.96	2.79	0.51	8.55	5.14	3.14	16.84
NT Grain Drill & Pre	24'	MFWD 190	85,200	150	8	0.088	1.90	2.75	2.81	0.45	7.93	5.18	2.80	15.93
NT Grain Drill & Pre	30'	MFWD 225	98,000	150	8	0.070	1.52	2.61	2.59	0.49	7.22	4.77	3.03	15.03
NT Plant&Pre-Folding	8R-38	MFWD 170	48,000	150	8	0.083	1.80	2.34	1.50	0.40	6.06	2.77	2.48	11.31
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	80,800	150	8	0.055	1.20	1.55	1.68	0.27	4.72	3.10	1.65	9.48
NT Plant&Pre-Folding	12R-20	MFWD 190	70,200	150	8	0.105	2.28	3.31	2.78	0.55	8.93	5.12	3.36	17.42
NT Plant&Pre-Folding	12R-30	MFWD 190	72,000	150	8	0.070	1.52	2.20	1.90	0.36	6.00	3.50	2.24	11.75
NT Plant&Pre-Folding	12R-38	MFWD 190	80,800	150	8	0.055	1.20	1.74	1.68	0.29	4.92	3.10	1.77	9.80
NT Plant&Pre-Folding	16R-30	MFWD 190	101,000	150	8	0.052	1.14	1.65	2.00	0.27	5.07	3.69	1.68	10.44
NT Plant&Pre-Folding	23R-15	MFWD 190	129,000	150	8	0.073	1.58	2.29	3.55	0.38	7.82	6.54	2.33	16.70
NT Plant&Pre-Folding	24R-15	MFWD 225	133,000	150	8	0.070	1.52	2.61	3.51	0.49	8.15	6.47	3.03	17.66
NT Plant&Pre-Folding	24R-20	MFWD 190	143,000	150	8	0.052	1.14	1.65	2.83	0.27	5.90	5.22	1.68	12.81
NT Plant&Pre-Folding	24R-30	MFWD 190	188,000	150	8	0.035	0.76	1.10	2.48	0.18	4.53	4.57	1.12	10.23
NT Plant&Pre-Folding	31R-15	MFWD 225	147,000	150	8	0.054	1.18	2.02	3.01	0.38	6.60	5.55	2.35	14.51
NT Plant&Pre-Folding	32R-15	MFWD 225	163,000	150	8	0.052	1.14	1.95	3.23	0.37	6.70	5.95	2.27	14.93
NT Plant&Pre-Rigid	4R-30	2WD 130	26,600	150	8	0.211	4.57	4.52	2.11	0.63	11.84	3.88	3.69	19.43
NT Plant&Pre-Rigid	4R-38	2WD 130	28,800	150	8	0.166	3.59	3.56	1.79	0.50	9.46	3.31	2.91	15.69
NT Plant&Pre-Rigid	6R-30	MFWD 150	36,900	150	8	0.141	3.04	3.48	1.95	0.63	9.11	3.59	3.66	16.37
NT Plant&Pre-Rigid	6R-38	MFWD 150	33,100	150	8	0.111	2.40	2.75	1.38	0.49	7.03	2.54	2.89	12.47
NT Plant&Pre-Rigid	8R-30	MFWD 170	42,200	150	8	0.105	2.28	2.96	1.67	0.51	7.43	3.08	3.14	13.66
NT Plant&Pre-Rigid	8R-38	MFWD 170	39,800	150	8	0.083	1.80	2.34	1.24	0.40	5.80	2.29	2.48	10.58
NT Plant&Pre-Rigid	10R-30	MFWD 190	46,300	150	8	0.084	1.82	2.64	1.46	0.44	6.38	2.70	2.69	11.78
NT Plant&Pre-Rigid	11R-15	MFWD 170	49,900	150	8	0.143	3.10	4.02	2.69	0.70	10.53	4.96	4.27	19.77
NT Plant&Pre-Rigid	11R-20	MFWD 170	45,500	150	8	0.115	2.49	3.23	1.97	0.56	8.27	3.63	3.43	15.33
NT Plant&Pre-Rigid	12R-20	MFWD 190	52,100	150	8	0.105	2.28	3.31	2.06	0.55	8.21	3.80	3.36	15.38
NT Plant&Pre-Rigid	12R-30	MFWD 190	64,700	150	8	0.070	1.52	2.20	1.71	0.36	5.80	3.15	2.24	11.20
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	55,800	150	8	0.097	2.10	3.61	2.03	0.68	8.44	3.75	4.19	16.40
NT Plant&Pre-Rigid	15R-15	MFWD 190	61,400	150	8	0.113	2.44	3.54	2.60	0.59	9.17	4.79	3.59	17.57
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	140,000	150	8	0.055	1.20	2.06	2.92	0.39	6.58	5.38	2.39	14.36
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	120,000	150	8	0.083	1.80	3.09	3.76	0.59	9.25	6.93	3.59	19.78
NT Plant-Folding	8R-38	MFWD 170	42,100	150	8	0.077	1.67	2.17	1.22	0.37	5.45	2.25	2.30	10.02
NT Plant-Folding	8R-38 2x1	MFWD 170	73,500	150	8	0.051	1.11	1.44	1.42	0.25	4.24	2.62	1.53	8.40
NT Plant-Folding	12R-20	MFWD 190	64,200	150	8	0.098	2.12	3.07	2.36	0.51	8.07	4.35	3.12	15.55
NT Plant-Folding	12R-30	MFWD 190	64,600	150	8	0.065	1.41	2.04	1.58	0.34	5.39	2.92	2.08	10.39
NT Plant-Folding	12R-38	MFWD 190	63,500	150	8	0.051	1.11	1.61	1.23	0.26	4.23	2.26	1.64	8.14
NT Plant-Folding	16R-30	MFWD 190	93,200	150	8	0.049	1.06	1.53	1.71	0.25	4.57	3.16	1.56	9.29
NT Plant-Folding	23R-15	MFWD 190	122,000	150	8	0.068	1.47	2.13	3.12	0.35	7.08	5.74	2.16	15.00
NT Plant-Folding	24R-15	MFWD 225	126,000	150	8	0.065	1.41	2.42	3.09	0.46	7.39	5.70	2.81	15.91
NT Plant-Folding	24R-20	MFWD 190	136,000	150	8	0.049	1.06	1.53	2.50	0.25	5.35	4.61	1.56	11.53
NT Plant-Folding	24R-30	MFWD 190	178,000	150	8	0.032	0.70	1.02	2.18	0.17	4.08	4.02	1.04	9.15
NT Plant-Folding	31R-15	MFWD 225	140,000	150	8	0.050	1.09	1.88	2.66	0.35	6.00	4.90	2.18	13.09
NT Plant-Folding	32R-15	MFWD 225	155,000	150	8	0.049	1.06	1.82	2.85	0.34	6.08	5.25	2.11	13.45
NT Plant-Rigid	4R-30	2WD 130	20,600	150	8	0.196	4.24	4.20	1.51	0.59	10.55	2.79	3.43	16.79
NT Plant-Rigid	4R-38	2WD 130	22,900	150	8	0.154	3.34	3.31	1.32	0.46	8.44	2.44	2.70	13.60
NT Plant-Rigid	6R-30	MFWD 150	31,000	150	8	0.130	2.82	3.23	1.52	0.58	8.17	2.80	3.40	14.37

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
NT Plant-Rigid	6R-38	MFWD 150	27,100	150	8	0.103	2.23	2.55	1.05	0.46	6.30	1.93	2.68	10.92
NT Plant-Rigid	8R-30	MFWD 170	36,300	150	8	0.098	2.12	2.74	1.33	0.47	6.68	2.46	2.91	12.06
NT Plant-Rigid	8R-38	MFWD 170	33,800	150	8	0.077	1.67	2.17	0.98	0.37	5.21	1.81	2.30	9.33
NT Plant-Rigid	10R-30	MFWD 190	40,300	150	8	0.078	1.69	2.45	1.18	0.41	5.75	2.18	2.49	10.44
NT Plant-Rigid	11R-15	MFWD 170	43,900	150	8	0.133	2.88	3.74	2.19	0.65	9.48	4.05	3.97	17.50
NT Plant-Rigid	11R-20	MFWD 170	39,600	150	8	0.107	2.31	3.00	1.59	0.52	7.44	2.93	3.18	13.56
NT Plant-Rigid	12R-20	MFWD 190	46,200	150	8	0.098	2.12	3.07	1.70	0.51	7.40	3.13	3.12	13.66
NT Plant-Rigid	12R-30	MFWD 190	56,800	150	8	0.065	1.41	2.04	1.39	0.34	5.20	2.56	2.08	9.85
NT Plant-Rigid	13R-18/20	MFWD 225	49,800	150	8	0.090	1.96	3.37	1.69	0.64	7.67	3.12	3.91	14.72
NT Plant-Rigid	15R-15	MFWD 190	54,400	150	8	0.105	2.26	3.28	2.14	0.54	8.24	3.94	3.34	15.53
NT Plant-TwinRow	12R-30/40	MFWD 225	130,000	150	8	0.051	1.11	1.91	2.51	0.36	5.91	4.64	2.22	12.78
NT Plant-TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.077	1.67	2.87	3.31	0.54	8.42	6.11	3.34	17.88
One-Trip Prep	4R-38	MFWD 170	21,200	150	10	0.146	1.84	4.10	1.45	0.71	8.11	2.11	4.36	14.59
One-Trip Prep	6R-38	MFWD 190	26,900	150	10	0.097	1.22	3.04	1.22	0.50	5.99	1.77	3.09	10.86
One-Trip Prep	8R-38	MFWD 225	31,700	150	10	0.073	0.92	2.74	1.09	0.52	5.28	1.59	3.18	10.06
Peanut Cond.& Lifter	6-Row	MFWD 190	12,600	300	20	0.100	1.25	3.12	0.21	0.52	5.11	0.29	3.18	8.59
Peanut Conditioner	6-Row	MFWD 190	14,400	300	20	0.100	1.25	3.12	0.28	0.52	5.19	0.29	3.18	8.66
Peanut Dig/Invertor	4R-30	MFWD 190	26,100	300	15	0.235	2.95	7.38	1.53	1.23	13.10	1.76	7.50	22.36
Peanut Dig/Invertor	4R-38	MFWD 190	26,100	300	15	0.186	2.33	5.82	1.20	0.97	10.34	1.39	5.92	17.66
Peanut Dig/Invertor	6R-38	MFWD 190	38,400	300	15	0.124	1.55	3.88	0.83	0.64	6.92	1.36	3.94	12.23
Peanut Dump Cart	6-Row	MFWD 190	45,500	300	20	0.310	3.89	9.70	0.82	1.61	16.03	3.16	9.86	29.05
Peanut Harvester	4R-30	MFWD 225	121,000	300	20	0.849	10.66	31.50	5.82	6.00	53.99	20.89	36.59	111.48
Peanut Harvester	4R-38	MFWD 225	121,000	300	20	0.934	11.72	34.63	6.40	6.60	59.37	24.17	40.23	123.78
Peanut Harvester	6R-38	MFWD 225	138,000	300	20	0.625	7.84	23.16	4.16	4.41	39.58	18.43	26.90	84.93
Peanut Lifter	6-Row	MFWD 225	6,090	300	20	0.100	1.25	3.70	0.12	0.70	5.79	0.12	4.30	10.22
Peanut Plt&Pre Fold.	12R-38	MFWD 190	77,600	150	8	0.080	1.73	2.51	2.33	0.41	7.01	4.31	2.55	13.88
Peanut Plt&Pre Rigid	8R-30	MFWD 190	40,100	150	8	0.152	3.30	4.78	2.29	0.79	11.17	4.23	4.86	20.27
Peanut Plt&Pre Rigid	8R-38	MFWD 190	37,600	150	8	0.120	2.60	3.77	1.70	0.63	8.72	3.13	3.84	15.70
Pipe Spool 160ac	1/4m roll	2WD 130	3,380	15	12	0.003	0.09	0.06	0.00	0.00	0.17	0.06	0.05	0.29
Pipe Trailer 1m/160a	30'	2WD 130	1,330	100	15	0.003	0.18	0.08	0.00	0.01	0.27	0.00	0.06	0.34
Plant & Pre-Folding	8R-38	MFWD 170	45,900	150	8	0.080	1.73	2.24	1.38	0.39	5.75	2.54	2.38	10.68
Plant & Pre-Folding	8R-38 2x1	MFWD 170	77,600	150	8	0.053	1.15	1.49	1.55	0.26	4.46	2.86	1.58	8.92
Plant & Pre-Folding	12R-20	MFWD 190	66,900	150	8	0.101	2.19	3.17	2.54	0.52	8.44	4.69	3.23	16.37
Plant & Pre-Folding	12R-30	MFWD 190	68,700	150	8	0.067	1.46	2.11	1.74	0.35	5.67	3.21	2.15	11.04
Plant & Pre-Folding	12R-38	MFWD 190	77,600	150	8	0.053	1.15	1.67	1.55	0.27	4.66	2.86	1.70	9.22
Plant & Pre-Folding	16R-30	MFWD 190	96,200	150	8	0.050	1.09	1.58	1.83	0.26	4.78	3.37	1.61	9.77
Plant & Pre-Folding	23R-15	MFWD 190	123,000	150	8	0.070	1.52	2.20	3.25	0.36	7.35	5.99	2.24	15.58
Plant & Pre-Folding	24R-15	MFWD 225	126,000	150	8	0.067	1.46	2.50	3.19	0.47	7.64	5.89	2.91	16.45
Plant & Pre-Folding	24R-20	MFWD 190	137,000	150	8	0.050	1.09	1.58	2.60	0.26	5.55	4.80	1.61	11.97
Plant & Pre-Folding	24R-30	MFWD 190	182,000	150	8	0.033	0.73	1.05	2.31	0.17	4.27	4.25	1.07	9.61
Plant & Pre-Folding	31R-15	MFWD 225	139,000	150	8	0.052	1.13	1.94	2.73	0.37	6.18	5.03	2.25	13.48
Plant & Pre-Folding	32R-15	MFWD 225	154,000	150	8	0.050	1.09	1.88	2.93	0.35	6.26	5.40	2.18	13.85
Plant & Pre-Rigid	4R-30	2WD 130	25,500	150	8	0.203	4.38	4.34	1.94	0.61	11.29	3.57	3.55	18.41
Plant & Pre-Rigid	4R-38	2WD 130	27,700	150	8	0.159	3.45	3.42	1.66	0.48	9.02	3.06	2.79	14.87
Plant & Pre-Rigid	6R-30	MFWD 150	35,300	150	8	0.135	2.92	3.34	1.79	0.60	8.66	3.30	3.51	15.48
Plant & Pre-Rigid	6R-38	MFWD 150	31,400	150	8	0.106	2.30	2.64	1.25	0.47	6.68	2.31	2.77	11.78
Plant & Pre-Rigid	8R-30	MFWD 170	40,100	150	8	0.101	2.19	2.84	1.52	0.49	7.05	2.81	3.01	12.89
Plant & Pre-Rigid	8R-38	MFWD 170	37,600	150	8	0.080	1.73	2.24	1.13	0.39	5.50	2.08	2.38	9.97
Plant & Pre-Rigid	10R-30	MFWD 190	43,600	150	8	0.081	1.75	2.54	1.32	0.42	6.04	2.44	2.58	11.08
Plant & Pre-Rigid	11R-15	MFWD 170	46,900	150	8	0.148	3.20	4.15	2.60	0.72	10.68	4.80	4.40	19.89
Plant & Pre-Rigid	11R-20	MFWD 170	42,500	150	8	0.110	2.39	3.10	1.76	0.54	7.81	3.25	3.29	14.37
Plant & Pre-Rigid	12R-20	MFWD 190	48,900	150	8	0.101	2.19	3.17	1.86	0.52	7.76	3.43	3.23	14.42
Plant & Pre-Rigid	12R-30	MFWD 190	61,400	150	8	0.067	1.46	2.11	1.55	0.35	5.49	2.87	2.15	10.51
Plant & Pre-Rigid	13R-18/20	MFWD 225	52,200	150	8	0.093	2.02	3.46	1.83	0.66	7.98	3.37	4.02	15.38
Plant & Pre-Rigid	15R-15	MFWD 190	57,300	150	8	0.108	2.34	3.39	2.33	0.56	8.64	4.29	3.45	16.39
Plant & Pre-TwinRow	12R-30/40	MFWD 225	133,000	150	8	0.053	1.15	1.98	2.66	0.37	6.17	4.91	2.30	13.38
Plant & Pre-TwinRow	8R-30/40	MFWD 225	116,000	150	8	0.080	1.73	2.97	3.49	0.56	8.76	6.43	3.45	18.65
Plant - Folding	8R-38	MFWD 170	39,900	150	8	0.074	1.61	2.08	1.11	0.36	5.17	2.05	2.21	9.44
Plant - Folding	8R-38 2x1	MFWD 170	70,200	150	8	0.049	1.07	1.38	1.30	0.24	4.00	2.40	1.47	7.89
Plant - Folding	12R-20	MFWD 190	61,000	150	8	0.094	2.03	2.95	2.15	0.49	7.63	3.97	2.99	14.61
Plant - Folding	12R-30	MFWD 190	61,400	150	8	0.062	1.35	1.96	1.44	0.32	5.10	2.66	1.99	9.76
Plant - Folding	12R-38	MFWD 190	70,200	150	8	0.049	1.07	1.55	1.30	0.25	4.19	2.40	1.57	8.17
Plant - Folding	16R-30	MFWD 190	88,900	150	8	0.047	1.01	1.47	1.57	0.24	4.31	2.89	1.49	8.70
Plant - Folding	23R-15	MFWD 190	116,000	150	8	0.065	1.41	2.04	2.84	0.34	6.65	5.24	2.08	13.98
Plant - Folding	24R-15	MFWD 225	119,000	150	8	0.062	1.35	2.32	2.80	0.44	6.93	5.16	2.70	14.81
Plant - Folding	24R-20	MFWD 190	129,000	150	8	0.047	1.01	1.47	2.28	0.24	5.02	4.20	1.49	10.72
Plant - Folding	24R-30	MFWD 190	172,000	150	8	0.031	0.67	0.98	2.02	0.16	3.85	3.73	0.99	8.58
Plant - Folding	31R-15	MFWD 225	132,000	150	8	0.048	1.05	1.80	2.41	0.34	5.61	4.44	2.09	12.15
Plant - Folding	32R-15	MFWD 225	147,000	150	8	0.047	1.01	1.74	2.59	0.33	5.69	4.78	2.02	12.51
Plant - Rigid	4R-30	2WD 130	19,600	150	8	0.188	4.07	4.03	1.38	0.56	10.06	2.55	3.29	15.91
Plant - Rigid	4R-38	2WD 130	21,800	150	8	0.148	3.20	3.17	1.21	0.44	8.04	2.23	2.59	12.88
Plant - Rigid	6R-30	MFWD 150	29,300	150	8	0.125	2.71	3.10	1.38	0.56	7.76	2.54	3.26	13.57
Plant - Rigid	6R-38	MFWD 150	25,500	150	8	0.099	2.14	2.45	0.94	0.44	5.98	1.74	2.57	10.31
Plant - Rigid	8R-30	MFWD 170	34,100	150	8	0.094	2.03	2.64	1.20	0.45	6.34	2.22	2.80	11.36
Plant - Rigid	8R-38	MFWD 170	31,700	150	8	0.074	1.61	2.08	0.88	0.36	4.94	1.63	2.21	8.79
Plant - Rigid	10R-30	MFWD 190	37,600	150	8	0.075	1.63	2.36	1.06	0.39	5.44	1.95	2.39	9.80

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Plant - Rigid	11R-15	MFWD 170	41,000	150	8	0.137	2.97	3.85	2.11	0.67	9.61	3.89	4.09	17.60
Plant - Rigid	11R-20	MFWD 170	36,600	150	8	0.103	2.22	2.88	1.41	0.50	7.02	2.60	3.06	12.69
Plant - Rigid	12R-20	MFWD 190	42,900	150	8	0.094	2.03	2.95	1.51	0.49	6.99	2.79	2.99	12.79
Plant - Rigid	12R-30	MFWD 190	54,100	150	8	0.062	1.35	1.96	1.27	0.32	4.92	2.34	1.99	9.27
Plant - Rigid	13R-18/20	MFWD 225	46,300	150	8	0.086	1.87	3.22	1.50	0.61	7.22	2.77	3.74	13.74
Plant - Rigid	15R-15	2WD 150	51,400	150	8	0.094	2.03	2.32	1.81	0.37	6.55	3.34	2.17	12.08
Plant - TwinRow	12R-30/40	MFWD 225	123,000	150	8	0.049	1.07	1.83	2.28	0.35	5.55	4.21	2.13	11.90
Plant - TwinRow	8R-30/40	MFWD 225	110,000	150	8	0.074	1.61	2.76	3.07	0.52	7.97	5.66	3.20	16.84
Plant - TwinRow	8R-30/40	MFWD 225	103,000	150	8	0.074	1.60	2.84	2.87	0.50	7.84	5.30	3.09	16.24
Spray (Spot)	60'	MFWD 225	10,400	200	8	0.028	0.48	1.07	0.13	0.19	1.88	0.15	1.17	3.21
Stalk Shredder	14'	MFWD 150	13,000	200	10	0.117	1.47	3.00	1.34	0.50	6.32	0.78	2.93	10.03
Stalk Shredder Flex	20'	MFWD 150	34,700	200	10	0.082	1.03	2.10	2.50	0.35	5.99	1.45	2.05	9.50
Stalk Shredder-Flail	12'	MFWD 150	15,800	200	10	0.137	1.71	3.50	1.90	0.58	7.71	1.10	3.42	12.24
Stalk Shredder-Flail	15'	MFWD 150	19,500	200	10	0.110	1.37	2.80	1.87	0.47	6.52	1.09	2.73	10.35
Stalk Shredder-Flail	18'	MFWD 150	25,300	200	10	0.091	1.14	2.33	2.02	0.39	5.90	1.18	2.28	9.36
Stalk Shredder-Flail	20'	MFWD 150	26,300	200	10	0.082	1.03	2.10	1.89	0.35	5.38	1.10	2.05	8.54
Stalk Shredder-Flail	25'	MFWD 150	37,600	200	10	0.066	0.82	1.68	2.17	0.28	4.96	1.26	1.64	7.86
Strip Till	8R38/12R30	MFWD 225	42,100	150	10	0.061	0.77	2.35	1.12	0.41	4.66	1.76	2.55	8.99
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.55	6.59	0.24	1.02	10.41	0.57	6.22	17.21
Subsoiler	4 shank	MFWD 225	8,050	100	15	0.153	1.92	5.87	0.41	1.04	9.25	0.97	6.37	16.60
Roller/Cultipacker	12'	2WD 130	4,130	300	12	0.124	1.56	2.66	0.12	0.37	4.72	0.16	2.17	7.05
Roller/Cultipacker	20'	MFWD 150	16,200	300	12	0.074	0.93	1.84	0.28	0.33	3.40	0.37	1.93	5.71
Roller/Cultipacker	30'	MFWD 170	18,100	300	12	0.049	0.62	1.39	0.21	0.24	2.47	0.28	1.47	4.23
Roller/Cultipacker	38'	MFWD 225	19,600	300	12	0.039	0.49	1.45	0.18	0.27	2.40	0.24	1.69	4.34
Roller/Stubble	20'	2WD 50	13,200	300	12	0.074	0.93	0.61	0.23	0.04	1.82	0.30	0.25	2.39
Roller/Stubble	32'	MFWD 225	22,400	300	12	0.046	0.58	1.72	0.24	0.32	2.89	0.32	2.00	5.22
Rotary Cutter	7'	MFWD 130	4,380	185	10	0.168	2.11	3.60	0.59	0.59	6.91	0.40	3.48	10.80
Rotary Cutter	12'	2WD 150	12,600	185	10	0.098	1.23	2.42	1.00	0.38	5.05	0.68	2.26	7.99
Rotary Cutter-Flex	15'	MFWD 150	19,500	185	10	0.078	0.98	1.94	1.24	0.35	4.52	0.84	2.04	7.40
Rotary Cutter-Flex	20'	MFWD 150	27,000	185	10	0.058	0.73	1.45	1.29	0.26	3.74	0.87	1.53	6.15
Row Cond & Inc-Fold.	26'	MFWD 190	24,700	100	10	0.063	1.08	1.98	0.39	0.33	3.79	1.59	2.01	7.41
Row Cond & Inc-Fold.	38'	MFWD 225	35,300	100	10	0.043	0.74	1.60	0.38	0.30	3.04	1.56	1.86	6.47
Row Cond & Inc-Rigid	13'	2WD 130	13,300	100	10	0.126	2.16	2.71	0.42	0.38	5.68	1.72	2.21	9.63
Row Cond & Inc-Rigid	21'	2WD 170	19,700	100	10	0.078	1.34	2.20	0.38	0.29	4.22	1.57	1.78	7.58
Row Cond & Inc-Rigid	26'	MFWD 190	18,700	100	10	0.026	0.45	0.83	0.12	0.13	1.55	0.50	0.84	2.90
Row Cond Folding	26'	MFWD 225	18,800	100	10	0.059	0.74	2.21	0.28	0.42	3.66	1.14	2.57	7.38
Row Cond Folding	38'	MFWD 225	28,000	100	10	0.040	0.51	1.51	0.28	0.28	2.60	1.16	1.75	5.52
Row Cond Rigid	13'	2WD 130	7,300	100	10	0.119	1.49	2.55	0.21	0.35	4.63	0.88	2.08	7.61
Row Cond Rigid	21'	2WD 170	12,000	100	10	0.073	0.92	2.07	0.22	0.27	3.49	0.90	1.67	6.07
Row Cond Rigid	26'	MFWD 190	12,800	100	10	0.059	0.74	1.86	0.19	0.31	3.12	0.77	1.90	5.80
Row Cond./Roll-Fold.	26'	MFWD 190	33,500	160	10	0.072	0.90	2.25	0.60	0.37	4.14	1.53	2.29	7.97
Row Cond./Roll-Fold.	30'	MFWD 190	36,100	160	10	0.062	0.78	1.95	0.56	0.32	3.63	1.43	1.98	7.05
Row Cond./Roll-Fold.	40'	MFWD 225	44,800	160	10	0.046	0.58	1.73	0.52	0.33	3.18	1.33	2.01	6.53
Row Cond./Roll-Rigid	21'	MFWD 190	23,900	160	10	0.089	1.12	2.79	0.53	0.46	4.91	1.35	2.84	9.11
Row Cond./Roll-Rigid	26'	MFWD 190	27,200	160	10	0.072	0.90	2.25	0.49	0.37	4.02	1.25	2.29	7.57
Spin Spreader	5 ton	MFWD 190	10,800	100	8	0.042	0.90	1.31	0.25	0.21	2.70	0.49	1.33	4.53
Spray (ATV Ropewick)	75"	800 CC	620	200	8	0.260	4.44	0.61	0.07	0.26	5.40	0.08	1.01	6.50
Spray (ATV)	12'/17'	800 CC	430	200	8	0.112	1.92	0.26	0.02	0.11	2.33	0.02	0.43	2.79
Spray (ATV)	20'	800 CC	1,350	200	8	0.084	1.44	0.20	0.05	0.08	1.78	0.06	0.32	2.17
Spray (Band)	27' Fold	MFWD 170	5,940	200	8	0.062	1.07	1.75	0.17	0.30	3.30	0.20	1.86	5.37
Spray (Band)	40' Fold	MFWD 170	7,350	200	8	0.042	0.72	1.18	0.14	0.20	2.25	0.16	1.25	3.68
Spray (Band)	50' Fold	MFWD 170	6,730	200	8	0.033	0.57	0.94	0.10	0.16	1.79	0.12	1.00	2.92
Spray (Band)	53' Fold	MFWD 170	7,650	200	8	0.031	0.54	0.89	0.11	0.15	1.70	0.13	0.94	2.79
Spray (Band)	60' Fold	MFWD 170	10,000	200	8	0.028	0.48	0.78	0.13	0.13	1.54	0.15	0.83	2.53
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,810	200	8	0.130	2.22	3.21	0.35	0.58	6.37	0.41	3.38	10.16
Spray (Bcast/HB)	20' Rigid	MFWD 150	6,840	200	8	0.084	1.44	2.09	0.27	0.37	4.18	0.31	2.19	6.69
Spray (Bcast/HB)	27' Fold	MFWD 170	11,300	200	8	0.062	1.07	1.75	0.33	0.30	3.46	0.38	1.86	5.71
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,870	200	8	0.062	1.07	1.75	0.23	0.30	3.36	0.26	1.86	5.49
Spray (Bcast/HB)	30' Fold	MFWD 170	19,200	200	8	0.056	0.96	1.57	0.50	0.27	3.32	0.59	1.67	5.59
Spray (Bcast/HB)	40' Fold	MFWD 170	20,500	200	8	0.042	0.72	1.18	0.40	0.20	2.52	0.47	1.25	4.25
Spray (Bcast/HB/HD)	27'	MFWD 170	22,400	200	8	0.062	1.07	1.75	0.65	0.30	3.78	0.76	1.86	6.41
Spray (Bcast/HB/HD)	40'	MFWD 170	32,200	200	8	0.042	0.72	1.18	0.63	0.20	2.75	0.74	1.25	4.75
Spray (Broadcast)	27'	MFWD 170	5,940	200	8	0.062	1.07	1.75	0.17	0.30	3.30	0.20	1.86	5.37
Spray (Broadcast)	40'	MFWD 170	7,350	200	8	0.042	0.72	1.18	0.14	0.20	2.25	0.16	1.25	3.68
Spray (Broadcast)	50'	MFWD 170	6,730	200	8	0.033	0.57	0.94	0.10	0.16	1.79	0.12	1.00	2.92
Spray (Broadcast)	53'	MFWD 170	7,650	200	8	0.031	0.54	0.89	0.11	0.15	1.70	0.13	0.94	2.79
Spray (Broadcast)	60'	MFWD 170	10,000	200	8	0.028	0.48	0.78	0.13	0.13	1.54	0.15	0.83	2.53
Spray (Direct/Hood)	8R-30	MFWD 170	17,700	200	8	0.084	1.44	2.36	0.70	0.41	4.92	0.81	2.51	8.26
Spray (Direct/Hood)	8R-38	MFWD 170	18,900	200	8	0.066	1.14	1.87	0.59	0.32	3.93	0.68	1.98	6.61
Spray (Direct/Hood)	12R-30	MFWD 170	25,600	200	8	0.056	0.96	1.57	0.67	0.27	3.49	0.78	1.67	5.95
Spray (Direct/Hood)	12R-38	MFWD 170	26,200	200	8	0.044	0.76	1.24	0.54	0.21	2.77	0.63	1.32	4.73
Spray (Direct/Layby)	8R-38	MFWD 170	12,200	200	8	0.066	1.14	1.87	0.38	0.32	3.72	0.44	1.98	6.15
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	16,200	200	8	0.044	0.76	1.24	0.33	0.21	2.56	0.39	1.32	4.27
Spray (Direct/Layby)	12R-30	MFWD 170	17,900	200	8	0.056	0.96	1.57	0.47	0.27	3.29	0.55	1.67	5.51
Spray (Direct/Layby)	12R-38	MFWD 170	16,200	200	8	0.044	0.76	1.24	0.33	0.21	2.56	0.39	1.32	4.27
Spray (Direct/Layby)	16R-20	2WD 50	10,000	200	8	0.062	1.07	0.51	0.29	0.03	1.91	0.34	0.21	2.47

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2015 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Spray (Levee Leaper)	50'	MFWD 225	14,000	200	8	0.033	0.57	1.25	0.22	0.23	2.29	0.25	1.45	4.00
Spray (Pull Type)	60'	MFWD 225	29,700	200	8	0.028	0.48	1.04	0.39	0.19	2.11	0.45	1.21	3.79
Spray (Pull Type)	80'	MFWD 225	39,400	200	8	0.021	0.36	0.78	0.39	0.14	1.68	0.45	0.91	3.04
Spray (Pull Type)	90'	2WD 50	39,900	200	8	0.018	0.32	0.15	0.35	0.01	0.83	0.40	0.06	1.31
Spray (Pull Type)	120'	MFWD 225	72,900	200	8	0.014	0.24	0.52	0.48	0.09	1.34	0.56	0.60	2.51
Spray (Ropewick)	20'	MFWD 190	2,650	200	8	0.084	1.44	2.64	0.10	0.44	4.64	0.12	2.69	7.45
Spray (Spot)	27'	MFWD 170	5,940	200	8	0.062	1.07	1.75	0.17	0.30	3.30	0.20	1.86	5.37
Spray (Spot)	40'	MFWD 170	7,350	200	8	0.042	0.72	1.18	0.14	0.20	2.25	0.16	1.25	3.68
Spray (Spot)	50'	MFWD 170	67,300	200	8	0.033	0.57	0.94	1.06	0.16	2.75	1.24	1.00	5.00
Spray (Spot)	53'	MFWD 170	7,650	200	8	0.031	0.54	0.89	0.11	0.15	1.70	0.13	0.94	2.79
Spray (Spot)	60'	MFWD 225	10,000	200	8	0.028	0.48	1.04	0.13	0.19	1.85	0.15	1.21	3.22
Stalk Shredder	14'	MFWD 150	13,200	200	10	0.117	1.47	2.91	1.36	0.52	6.27	0.79	3.06	10.13
Stalk Shredder Flex	20'	MFWD 150	34,000	200	10	0.082	1.03	2.03	2.45	0.36	5.89	1.43	2.14	9.46
Stalk Shredder-Flail	12'	MFWD 150	15,800	200	10	0.137	1.72	3.39	1.90	0.61	7.63	1.10	3.57	12.31
Stalk Shredder-Flail	15'	MFWD 150	19,900	200	10	0.110	1.38	2.71	1.91	0.49	6.50	1.11	2.85	10.47
Stalk Shredder-Flail	18'	MFWD 150	25,700	200	10	0.091	1.15	2.26	2.06	0.40	5.88	1.20	2.38	9.46
Stalk Shredder-Flail	20'	MFWD 150	26,900	200	10	0.082	1.03	2.03	1.94	0.36	5.38	1.13	2.14	8.65
Stalk Shredder-Flail	25'	MFWD 150	37,700	200	10	0.066	0.82	1.63	2.17	0.29	4.93	1.26	1.71	7.91
Strip Till	8R-38	MFWD 225	38,600	150	10	0.061	0.77	2.28	1.03	0.43	4.52	1.61	2.65	8.79
Strip Till	12R-30	MFWD 225	47,500	150	10	0.061	0.77	2.28	1.26	0.43	4.76	1.98	2.65	9.40
Strip Till	12R-40	MFWD 225	54,100	150	10	0.046	0.58	1.71	1.08	0.32	3.70	1.69	1.98	7.39
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.56	6.39	0.24	1.06	10.26	0.57	6.50	17.33
Subsoiler	4 shank	MFWD 225	8,230	100	15	0.153	1.92	5.69	0.42	1.08	9.12	0.99	6.61	16.73
Subsoiler	5 shank	MFWD 225	11,100	100	15	0.122	1.53	4.53	0.45	0.86	7.38	1.06	5.26	13.72
Subsoiler low-till	4 shank	MFWD 225	12,400	100	15	0.153	1.92	5.69	0.63	1.08	9.34	1.49	6.61	17.45
Subsoiler low-till	6 shank	MFWD 225	14,800	100	15	0.102	1.28	3.78	0.50	0.72	6.29	1.18	4.39	11.88
Subsoiler low-till	8 shank	MFWD 225	22,200	100	15	0.076	0.96	2.83	0.56	0.54	4.90	1.33	3.29	9.53

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, 2015 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			CruiserMaxx	oz	4.15
Crop Oil Conc.(Pet.)	pt	3.60	Dithane F-45	qt	7.94
Crop Oil Conc.(Veg.)	pt	4.60	Dithane Rainshield	lb	2.75
Drift/Defoamer	pt	4.90	Enable 2F	oz	1.94
Spreader Sticker	pt	3.55	Folicur 3.6	oz	1.08
Surfactant	pt	3.60	Headline EC	oz	3.62
CLEANING			Headline SC	oz	3.53
Cleaning Peanuts	ton	18.00	Manzate 75 DF	lb	4.83
CROP CONSULTANT			Moncut 70 DF	lb	25.00
Crop Consultant	acre	7.00	Prevail	lb	28.50
Rice Consultant	acre	7.00	Prosaro	oz	2.77
CUSTOM FERTILIZE			Provost	oz	2.46
App Fert by Air	cwt	6.50	Quadris	oz	2.86
App Fert by Air(Mi	appl	6.50	Quilt	pt	22.34
Custom Apply Fert	acre	6.50	Quilt XCEL	pt	30.41
CUSTOM LIME			Ridomil Gold	oz	6.54
Lime (Spread)	ton	45.00	Ridomil Gold PC GR	lb	4.00
CUSTOM PLANT			Rovral 4F	pt	14.20
Custom Plant	acre	13.00	Stiletto	oz	0.58
Custom Plant Air	cwt	6.50	Stratego	pt	24.91
CUSTOM SPRAY			Stratego YLD	oz	4.91
App by Air (2 gal)	appl	3.25	Tebuconazole	oz	0.78
App by Air (3 gal)	appl	4.75	Terrachlor 2EC	pt	1.87
App by Air (5 gal)	appl	6.00	Tilt 3.6 EC	oz	0.84
App by Air (10 gal)	appl	8.00	Tilt/ Bravo SE	oz	0.43
Custom Spray Ground	acre	7.50	Uniform	oz	5.12
Custom Spray Self Pr	acre	6.25	Vitavax RTU-Thiram	oz	0.40
Custom Spray Tractor	acre	7.75	GINNING		
DRYING			Gin & Haul	lb	0.11
Dry Corn	bu	0.19	GROWTH REGULATORS		
Dry Grain Sorghum	cwt	0.25	Early Harvest PGR	oz	1.55
Dry Peanuts	ton	24.00	Mepex	oz	0.09
Dry Rice	bu	0.40	Mepex Gin Out	oz	0.16
ERADICATION FEE			Mepichlor 4.2%	oz	0.11
Eradication	acre	1.00	Mepiquat	oz	0.90
FERTILIZERS			Mepiquat Extra	oz	0.10
Amm Sulfate (21% N)	cwt	18.60	Pentia	pt	5.89
Amm Sulfate dry/mix	lb	0.20	Pix Plus	oz	0.19
Boron 15G	lb	0.75	Stance	oz	1.22
Boron Plus	pt	4.25	SuperBoll	oz	2.57
DAP	cwt	29.00	HARVEST AIDS		
Fert 10-34-0	cwt	26.00	Adios	oz	1.38
Fert 11-37-0	cwt	28.00	Aim 2EC	oz	6.33
Fert 30-0-0-5	cwt	18.00	Ammonium Sulfate	lb	0.20
Fert 33-0-0-12S	cwt	23.75	CottonQuik	pt	4.52
Fert 41-0-0-4	cwt	23.50	Def 6	pt	8.25
Lime	ton	35.00	Def/Folex	pt	8.62
Phosphorus(46% P2O5)	cwt	24.50	Defol 3	gal	3.49
Potash (60% K2O)	cwt	23.60	Defol 5	gal	6.07
Sulfur 90%	lb	0.26	Defol 750	pt	2.04
Sulfur 90%	lb	0.26	Dropp SC	oz	1.60
Sulfur Plus	pt	2.60	ET	pt	47.26
SuperMax AMS	pt	2.70	Ethephon 6E	pt	3.27
UAN (32% N)	cwt	18.50	Finish 6	pt	8.59
UAN + Sulfur (28%)	cwt	17.90	First Pick	pt	3.55
Urea, Solid (46% N)	cwt	25.25	Flash	pt	6.34
Zinc Plus	pt	3.00	Folex 6EC	pt	8.99
Zinc Sulfate 31%	lb	0.50	Freefall SC	oz	1.34
FUNGICIDES			Ginstar EC	pt	27.89
Abound	pt	31.43	Gramoxone SL	oz	0.30
Alfa Guard	lb	1.61	Paraquat	oz	0.33
Allegiance Flowable	pt	55.63	Prep	pt	3.32
Apron Maxx RTA	oz	0.81	Sharpen	oz	5.63
Apron Maxx RTA+Moly	pt	14.74	Shed-a-leaf	gal	3.60
Apron XL LS	oz	7.93	Sodium Chlorate 3L	gal	3.50
Artisan	oz	1.02	Sodium Chlorate 5L	gal	5.57
Bravo Ultrex	lb	5.83	TDZ SC	oz	1.50
Bravo Weather Stick	pt	4.43	Thidiazuron 4lb	oz	1.50
Captan 50 WP	lb	6.00	Tribufos 6lb	pt	9.13
Cotton Seed Trt.	acre	20.00	Vacate	oz	1.17

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2015(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
HAULING			Glyfos Xtra	pt	2.25
Haul Corn	bu	0.23	Glyphosate 3lbs a.e	pt	2.25
Haul Peanuts	ton	14.50	Glyphosate 3lbs a.e	oz	0.14
Haul Rice	bu	0.35	Glystar Plus	pt	2.25
Haul Sorghum	bu	0.25	Goal 2XL	pt	10.00
Haul Soybeans	bu	0.27	Gramonone SL 2.0	oz	0.32
Haul Wheat	bu	0.26	Grandstand R	qt	28.38
HERBICIDES			Guardsman Max	pt	6.93
2,4-D Amine 4	pt	2.44	Halex GT	pt	5.96
2,4-D Weedar 64	pt	3.00	Halomax	oz	19.00
AAtrex 4L	pt	2.08	Harmony Extra SG	oz	12.84
AAtrex NINE-O	lb	3.93	Harmony Extra XP	oz	14.35
Accent Q	oz	32.47	Harness XTRA	pt	7.24
Aim 2EC	oz	6.33	Hoelon 3EC	pt	11.03
Assure II	oz	0.74	Ignite 280	pt	8.93
Atrazine 4L	pt	1.93	Impact	oz	11.67
Atrazine 90DF	lb	3.93	Karmex XP	lb	5.93
Axial XL	oz	1.05	Lariat	qt	7.49
Axiom 68DF	oz	1.86	Laudis	oz	5.43
Banvel	pt	11.10	Layby Pro	qt	14.18
Basagran	pt	11.88	Leadoff	oz	4.00
Basis	oz	17.91	Lexar	pt	7.08
Beyond	oz	4.29	Liberty 280	oz	0.66
Bicep II Magnum	qt	10.97	Linex 4L	pt	12.12
Bicep Lite Magnum	pt	7.24	Londax 60DF	oz	17.25
Blazer Ultra	pt	9.56	Lorox 50DF	lb	18.70
Bolero 8EC	pt	7.50	Makaze	pt	1.88
Boundary 6.5 EC	pt	10.05	Metribuzin 75	lb	10.75
Buccaneer Plus	pt	2.19	MSMA 6.6	pt	3.50
Bullet	pt	3.73	MSMA6 Plus	pt	3.21
Butyrac 175 (2,4-D	pt	3.27	Newpath 2SL	oz	3.47
Butyrac 200 (2,4-DB)	pt	4.20	Osprey	oz	3.08
Cadre	oz	4.01	Outlook	pt	16.88
Callisto 4SC	oz	5.68	Paraquat	oz	0.33
Canopy 75%	oz	2.69	Parazone 3SL	oz	0.32
Canopy EX	oz	7.63	Parrlay	pt	8.13
Caparol 4L	pt	3.69	Parrot 4L	pt	2.95
Capreno	oz	6.48	Peak Accu Pak	oz	15.45
Celebrity Plus	lb	84.50	Permit 75 DF	oz	19.73
Clarity	pt	11.88	Poast 1.53	pt	11.95
Classic	oz	16.28	Poast Plus	pt	8.66
Clearpath	lb	55.06	PowerFlex	pt	10.39
Clincher SF	oz	2.30	Prefix	pt	6.26
Cobra 2EC	oz	1.61	Propimax EC	pt	15.81
Command 3ME	pt	19.06	Prowl 3.3 EC	pt	5.63
Cornerstone Plus	pt	1.56	Prowl H20	pt	5.95
Corvus	oz	6.46	Pursuit 2S	oz	3.25
Cotoran 4L	pt	5.98	Python WDG	oz	13.04
Cotton Pro	pt	3.50	Quinstar	lb	45.94
Credit Extra	pt	2.10	Raptor	oz	4.18
Dicamba	pt	11.41	RealmQ	oz	4.75
Direx 4L	pt	4.44	Reflex 2LC	pt	7.04
Diuron 4L	pt	4.19	Regiment 80WP	oz	41.38
Diuron 80 DF	lb	2.70	Remedy Ultra	pt	8.60
Diuron 80%	lb	2.70	Resolve SG	oz	7.95
Dual II Magnum	pt	14.50	Resource .86EC	pt	28.75
Dual Magnum	pt	13.49	Ricebeaux	pt	5.40
Duet	pt	4.99	RicePro	pt	4.87
Envoke	oz	93.50	Riceshot	pt	3.81
Evik DF 80W	lb	11.75	Ricestar HT	pt	22.55
Exceed	oz	10.71	Rifel	pt	8.24
Expert	pt	4.27	Roundup Power Max	oz	0.21
Facet L	pt	10.36	Roundup PowerMax	pt	3.25
Finesse	oz	8.06	Roundup WeatherMax	oz	0.27
First Rate	oz	38.78	Roundup WeatherMax	pt	4.07
Flexstar	pt	10.68	Salvo	pt	5.13
Frontier 6.0	oz	0.63	Scepter 70 DG	oz	4.52
Fultime	pt	5.25	Select Max	pt	12.32
Fusilade DX	oz	1.14	Sequence	pt	5.96

(continued

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2015 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Sharpen	oz	5.68	Imidan 70 WSB	oz	0.68
Simazine 4L	pt	3.17	Incidental Pest Trt	acre	12.00
Stalwart	pt	7.44	Intrepid 2F	oz	2.00
Stam 80 EDF	lb	8.04	Intruder 70WSP	oz	9.65
Stam M4	qt	7.75	Karate Z	oz	2.85
Staple LX	oz	8.55	Kelthane MF 4EC	pt	5.00
Steadfast	oz	11.85	Lambda	oz	1.10
Sterling Blue	pt	9.81	Lannate LV	pt	10.34
Storm	pt	11.50	Lannate SP	oz	1.93
Strada WG	oz	6.50	Larvin 3.2	oz	0.63
Strongarm	oz	51.20	Leverage 2.7	oz	1.66
Superwham	qt	8.83	Lorsban 15G	lb	3.59
Suprend	lb	12.92	Lorsban 4E	pt	5.63
Surpass EC	qt	26.25	Macho	oz	0.91
Synchrony XP	oz	12.07	Malathion 5E	pt	4.99
Touchdown Total	qt	6.74	Malathion 8E	pt	5.60
Treflan 4D	pt	3.40	Methyl Parathion 4	pt	5.79
Tricor DF	lb	15.28	Monitor 4	pt	16.50
Trifluralin 4EC	pt	3.34	Montana	oz	0.91
Valor SX	oz	6.15	Mustang Max	oz	1.60
Valor XLT	oz	4.69	Nuprid 4F	oz	1.15
Verdict	oz	1.65	Oberon 4 SC	pt	76.00
Zidua	oz	7.80	Orthene 90S	lb	6.55
Zorial Rapid 80DF	lb	14.10	Penncap-M	pt	6.71
INOCULANT			Pounce 25WP	lb	12.85
Nitrastick S	lbseed	0.02	Prolex	oz	2.62
Nitro Fix	lbseed	0.03	Provoke	oz	1.75
Optimize LIFT	oz	0.54	Radiant	oz	6.20
INSECT SCOUTING			Respect .8EC	pt	34.00
Insect Scouting	acre	7.00	Sevin 4F	pt	6.00
INSECTICIDES			Sevin 80S	lb	7.40
Abamectin .15EC	pt	12.50	Sevin XLR Plus	qt	12.50
Acephate 90%	lb	6.88	Sniper	oz	1.05
Acephate 90SP	lb	7.23	Steward	pt	30.12
Acramite-4SC	oz	1.88	Temik 15G Grit	lb	4.00
Asana .66 XL	oz	0.64	Temik 15G Gypsum	lb	4.00
Aztec 2.1% G	lb	3.68	Thimet 20-G Lock N L	lb	3.60
Baythroid XL	oz	2.40	Thionex 3 EC	pt	4.65
Bidrin 8WM	oz	1.04	Thionex 50W	lb	10.45
Bidrin XP	oz	0.80	Tombstone Helios	pt	43.75
Bifenthrin	oz	0.95	Tracer 4SC	oz	9.73
Bifenture 2EC	pt	14.69	Trimax Pro	oz	1.85
Brigade EC	pt	21.01	Tundra	oz	0.78
Brigade WSB	lb	22.20	Vydate C-LV	oz	0.89
Capture LFR	oz	2.40	Phorate	lb	3.00
Carbaryl 4L	pt	5.35	Zeal Miticid I	oz	15.89
Carbine 50WG	oz	5.25	Zephyr	oz	0.85
Centric 40WG	oz	4.83	IRRIGATION SUPPLIES		
Comite ll	pt	8.46	Roll-Out Pipe	ft	0.26
Confirm 2F	oz	2.05	SEED/PLANTS		
Counter 15G	lb	4.22	Corn Seed BtRR	thous	3.47
Cruiser Maxx Rice	lbseed	0.15	Corn Seed Conv.	thous	2.88
Curacron 8E	pt	10.75	Corn Seed LLRRBT	thous	3.43
Cypermethrin	oz	0.55	Corn Seed RR2	thous	3.08
Denim 0.16 EC	pt	32.63	Corn Seed VT3	thous	3.72
Diamond .83EC	pt	16.61	Corn Seed VT3Pro	thous	3.56
Dimethoate 4E	pt	6.27	Cotton Seed B2RF	thous	0.74
Dimilin 2L	oz	2.01	Cotton Seed LLB2	thous	1.19
Dipel DF	lb	13.50	Peanut Seed	lb	0.70
Dipel ES	pt	5.00	Rice Clearfield	lb	0.90
Discipline 2 EC	oz	0.86	Rice Clearfield Hyb	lb	6.12
Endigo ZC	pt	15.07	Rice Conv. Hybrid	lb	5.80
Epi-Mek	pt	15.66	Rice Seed (Levees)	lb	0.38
Fanfare 2EC	oz	0.88	Rice Seed CF(Levees)	lb	0.90
Force 3G	lb	6.73	Rice Seed CFH(Levee)	lb	6.12
Furadan 4F	pt	9.81	Rice Seed Conv.	lb	0.38
Furadan 4FLFR	pt	9.81	Sorghum Concept	lb	2.28
Gaucho 600	oz	5.80	Soybean Seed LL	lb	1.12
Hero	pt	24.59	Soybean Seed RR2	lb	1.19
Holster	pt	14.38			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2015(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Wheat Seed Private	lb	0.32	B2RF Cot Tech Fee	thous	1.49
SURVEY & MARK LEVEES			B2RF Cot Tech Fee	cap/ac	62.69
Survey & Mark Levees	acre	4.50	LLB2 Cot Tech Fee	thous	0.76
Survey & Mark Levees	acre	4.50	RF Cot Tech Fee	thous	1.04
TECHNOLOGY FEE			RF Cot Tech Fee	cap/ac	43.66
B2 Cot Tech Fee	thous	0.76	WRF Cot Tech Fee	thous	1.45
B2 Cot Tech Fee	cap/ac	31.91	WS Cot Tech Fee	thous	0.41
			WS Cotton Tech Fee	cap/ac	24.00

Appendix Table 5. Estimated fuel prices and interest rates, Mississippi, 2015

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel (DI) Price	($/gal):	3.20
Gasoline (GA) Price.	($/gal):	3.40
LP Gas (LP) Price.	($/gal):	2.30
INTEREST RATES		
Short-term Interest Rate	(%):	4.40
Intermediate-term Interest Rate.	(%):	4.50

Appendix Table 6. Labor types, wage rates and unallocated labor multipliers for crop enterprises, Mississippi, 2015

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	12.55
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, 2015

Crop	unit	Futures Contract Month	Futures Contract Price[a]	Basis[b]	Forward Contract Price[c]	Loan Rate[d]	Budget Price[e]
Corn	bu	Dec '15	3.84420	-0.3411	3.50	2.1	3.50
Cotton Lint	lb	Dec '15	0.67240	-0.0310	0.641	0.52	0.64
Cottonseed	lb						0.113[f]
Grain Sorghum	bu				3.34	2.02	3.34
Peanuts	ton				425.00	355.00	425.00
Soybeans	bu	Nov '15	9.86050	-0.2036	9.66	5.21	9.66
Rice	bu	Sep '15	5.83450	-0.2583	5.58	2.98	5.58
Wheat	bu	Jul '15	5.37180	-0.3954	4.98	2.65	4.98

[a] Average of the daily closing futures contract prices during September 2014 for the stated contract months.

[b] Basis is the mid-week Greenville, MS cash price minus the futures contract price for the stated contract month. The reported basis is an Olympic average from 2006 to 2013, which removes the highest and lowest within week basis value. All basis values are composed of the typical harvest timeframe for each crop according to USDA, NASS crop progress reports.

[c] The forward contract price for cotton, soybeans, corn, wheat, and rice is the futures contract price plus the basis. is estimated from a poll of industry peanut buyers.

[d] Average Mississippi loan rate for the 2014 crop year for soybeans, corn, grain sorghum, and wheat. 2014 National average Loan rate for cotton. 2014 Mississippi farm stored loan rate for long grain rice. 2014 national average loan rate for peanuts.

[e] Price used in the 2015 MAFES Planning Budgets.

[f] Cottonseed price is the marketing year average price averaged over the years 2010-2014.

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, 2015

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		0.45	0.10	0.20		0.02	0.77	0.60	1.37
Survey & Mark Levees	acre	4.50					0.10	4.60		4.60
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		1.20	0.27	0.54		0.04	2.05	1.58	3.63
Butt Levees										
Blade-Box	6'-7'		0.43	0.07	0.25		0.02	0.77	0.36	1.13
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Install Gates										
IRRIGATE LABOR	hour				2.72		0.06	2.78		2.78
Apply Water										
IRRIGATE LABOR	hour				6.80		0.15	6.95		6.95
Apply Water										
IRRIGATE LABOR	hour				6.80		0.12	6.92		6.92
Apply Water										
IRRIGATE LABOR	hour				6.80		0.10	6.90		6.90
Apply Water										
IRRIGATE LABOR	hour				6.80		0.07	6.87		6.87
Remove Gates										
IRRIGATE LABOR	hour				0.91		0.01	0.92		0.92
Tear Down Levees										
Levee Splitter (1/80	32"		0.82	0.18	0.42		0.01	1.43	1.01	2.44
Tear Down Levees										
Levee Splitter (1/80	32"		0.31	0.07	0.16			0.54	0.38	0.92
Land Forming ($113)	each								7.62	7.62
Levee Gates	each								0.54	0.54
Well & Pump, Flood	each			4.88			0.09	4.97	13.70	18.67
Engine, Rice CL, 75	each								15.47	15.47
May Irrigation	ac-in		15.64	1.37			0.37	17.38		17.38
June Irrigation	ac-in		23.46	2.06			0.47	25.99		25.99
July Irrigation	ac-in		23.46	2.06			0.37	25.89		25.89
August Irrigation	ac-in		23.46	2.06			0.28	25.80		25.80
TOTALS		4.50	89.23	13.12	33.53	0.00	2.30	142.68	41.26	183.94

Note: Cost of production estimates are based on 2014 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, 2015

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		0.90	0.21	0.40		0.03	1.54	1.19	2.73
Butt Levees										
Blade-Box	6'-7'		0.43	0.07	0.25		0.02	0.77	0.36	1.13
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Install Gates										
IRRIGATE LABOR	hour				1.36		0.03	1.39		1.39
Apply Water										
IRRIGATE LABOR	hour				4.53		0.10	4.63		4.63
Apply Water										
IRRIGATE LABOR	hour				4.53		0.08	4.61		4.61
Apply Water										
IRRIGATE LABOR	hour				4.53		0.07	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"		0.62	0.14	0.31		0.01	1.08	0.76	1.84
Land Forming ($390)	each								30.35	30.35
Levee Gates	each								0.54	0.54
Well & Pump, Flood	each			4.88			0.09	4.97	13.70	18.67
Engine, Rice SL, 75	each								14.51	14.51
May Irrigation	ac-in		15.64	1.57			0.38	17.59		17.59
June Irrigation	ac-in		18.25	1.84			0.37	20.46		20.46
July Irrigation	ac-in		18.25	1.84			0.29	20.38		20.38
August Irrigation	ac-in		18.25	1.84			0.22	20.31		20.31
TOTALS		2.25	72.34	12.39	22.48	0.00	1.82	111.28	61.41	172.69

Note: Cost of production estimates are based on 2014 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, 2015

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
		dollars								
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46		0.46
Survey & Mark Levees	acre	2.25					0.05	2.30		2.30
uild Inside Levees										
Levee Pull (1m/80a)	8 blade		0.90	0.21	0.40		0.03	1.54	1.19	2.73
Butt Levees										
Blade-Box	6'-7'		0.43	0.07	0.25		0.02	0.77	0.36	1.13
IRRIGATE LABOR	hour				0.68		0.01	0.69		0.69
Ditcher (1m/160a)			0.20	0.05	0.12		0.01	0.38	0.18	0.56
Roll-Out Pipe	ft	8.58					0.19	8.77		8.77
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.27	0.06	0.39		0.02	0.74	0.47	1.21
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		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				1.81		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				1.81		0.02	1.83		1.83
Remove Gates										
IRRIGATE LABOR	hour				0.45			0.45		0.45
Tear Down Levees										
Levee Splitter (1/80	32"		0.62	0.14	0.31		0.01	1.08	0.76	1.84
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.13	0.03	0.19			0.35	0.24	0.59
Land Forming ($390)	each								30.35	30.35
Levee Gates	each								0.27	0.27
Well & Pump, Flood	each			4.88			0.09	4.97	13.70	18.67
Engine, Mult In Rice	each								15.47	15.47
May Irrigation	ac-in		13.03	1.57			0.32	14.92		14.92
June Irrigation	ac-in		15.64	1.89			0.32	17.85		17.85
July Irrigation	ac-in		15.64	1.89			0.26	17.79		17.79
August Irrigation	ac-in		15.64	1.89			0.19	17.72		17.72
TOTALS		10.83	62.50	12.68	11.84	0.00	1.68	99.53	62.99	162.52

Note: Cost of production estimates are based on 2014 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, 2015

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		0.03	2.30		2.30
Apply Water										
IRRIGATE LABOR	hour				2.27		0.02	2.29		2.29
Land Forming ($390)	each								30.35	30.35
Well & Pump, Flood	each			4.88			0.09	4.97	13.70	18.67
Engine, Rice SL, 75	each								14.51	14.51
May Irrigation	ac-in		10.43	1.05			0.25	11.73		11.73
June Irrigation	ac-in		13.03	1.31			0.26	14.60		14.60
July Irrigation	ac-in		13.03	1.31			0.21	14.55		14.55
August Irrigation	ac-in		13.03	1.31			0.16	14.50		14.50
TOTALS		0.00	49.52	9.86	9.53	0.00	1.12	70.03	58.56	128.59

Note: Cost of production estimates are based on 2014 input prices.

Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.

2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.

3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968.".

4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961

5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.

6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.

7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.

8. "Corn, Grain Sorghum & Wheat 2014 Planning Budgets." Budget Report No. 2013-03, Department of Agricultural Economics, Mississippi State University, December 2013.

9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.

10. "Cotton 2014 Planning Budgets." Budget Report No. 2013-01, Department of Agricultural Economics, Mississippi State University, December 2013.

11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.

12. "Forage 2012 Planning Budgets." Budget Report No. 2012-01, Department of Agricultural Economics, Mississippi State University, May 2012.

13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.

14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.

15. "Mississippi Agricultural Statistics." Mississippi Department of Agriculture and Commerce and Department of Agriculture, Mississippi Agriculture Statistical Service, Jackson, Mississippi.

16. "Rice 2014 Planning Budgets." Budget Report No. 2013-04, Department of Agricultural Economics, Mississippi State University, December 2013.

17. "Soybeans 2014 Planning Budgets." Budget Report No. 2013-02, Department of Agricultural Economics, Mississippi State University, December 2013.

18. "Vegetables 2013 Planning Budgets." Budget Report No. 2012-02, Department of Agricultural Economics, Mississippi State University December 2012.

19. "Peanuts 2014 Planning Budgets." Budget Report No. 2013-07, Department of Agricultural Economics, Mississippi State University, December 2013.

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