

**DELTA  
2017  
PLANNING BUDGETS**

**Mississippi State University  
Department of Agricultural Economics  
Budget Report 2016-05**

**October 2016**



## Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses.**" Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2017 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

## Acknowledgments

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

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

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

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

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# 2017 Planning Budgets

## Budgets for Agricultural Enterprises

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

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

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

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

## Methods and Procedures

### Production Practices

The production practices listed in each budget are the result of a combined effort by researchers and extension personnel to represent those practices that producers could use in a specific production system. Producers might use different practices in their own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage. The Mississippi Agricultural Statistics Service conducts a survey of producers of major field crops in Mississippi. Data collected from producers are a part of the information used in selecting the practices included in each budget.

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

### Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2016. (Appendix Tables 1, 2, and 3).

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

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

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

### Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

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

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

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

### Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

### Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2016 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

### Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 through 18. A dryland crop budget may be converted to an irrigated crop budget by adding the appropriate direct and fixed costs to the costs of the dryland crop. Also, adjustments in crop yields and other costs may be required with the addition of supplemental irrigation.

### 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  
 Cotton, 12R-38" solid, conservation tillage  
 B2XF variety, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	2.5000	16.25	_____
App by Air ( 3 gal)	appl	5.00	5.2500	26.25	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.44	2.3000	3.31	_____
Ethephon 6E	pt	3.38	2.3125	7.82	_____
Tribufos 6lb	pt	9.32	0.5000	4.66	_____
GINNING					
Gin & Haul	lb	0.11	1100.0000	121.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	16.97	1.5000	25.46	_____
UAN (32%)	gal	1.58	34.3582	54.29	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.18	0.5000	5.59	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	14.99	1.0000	14.99	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Cotoran	pt	6.31	2.0000	12.62	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
Diuron	pt	3.36	1.6000	5.38	_____
INSECTICIDES					
Acephate 90%	lb	9.80	1.7500	17.15	_____
Bidrin 8WM	oz	1.12	2.2000	2.46	_____
Centric 40WG	oz	5.21	2.0000	10.42	_____
Diamond .83EC	oz	1.37	6.0000	8.22	_____
Admire Pro	oz	1.72	2.0000	3.44	_____
Bifenthrin	oz	1.03	12.8000	13.18	_____
Karate Z	oz	2.58	0.5000	1.29	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.90	1.5000	11.85	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	0.89	45.0000	40.05	_____
TECHNOLOGY FEE					
B2XF Cot Tech Fee	thous	1.49	42.1000	62.73	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4000	1.48	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3993	5.25	_____
Self-Propelled	hour	13.14	0.2310	3.02	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	13.14	0.5043	6.63	_____
DIESEL FUEL					
Tractors	gal	1.70	4.6248	7.87	_____
Self-Propelled	gal	1.70	5.0512	8.58	_____
REPAIR & MAINTENANCE					
Implements	acre	6.67	1.0000	6.67	_____
Tractors	acre	2.72	1.0000	2.72	_____
Self-Propelled	acre	20.76	1.0000	20.76	_____
INTEREST ON OP. CAP.	acre	13.59	1.0000	13.59	_____
TOTAL DIRECT EXPENSES				693.90	_____
FIXED EXPENSES					
Implements	acre	9.49	1.0000	9.49	_____
Tractors	acre	17.14	1.0000	17.14	_____
Self-Propelled	acre	83.80	1.0000	83.80	_____
TOTAL FIXED EXPENSES				110.43	_____
TOTAL SPECIFIED EXPENSES				804.33	_____

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

**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 1.B Summary of estimated costs and returns per acre  
Cotton, 12R-38" solid, conservation tillage  
B2XF variety, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.67	1100.0000	737.00	_____
Cotton Seed	lb	0.09	1650.0000	163.35	_____
				-----	
TOTAL INCOME				900.35	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.79	1.0000	15.79	_____
GINNING	acre	121.00	1.0000	121.00	_____
FERTILIZERS	acre	79.74	1.0000	79.74	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	99.40	1.0000	99.40	_____
INSECTICIDES	acre	80.01	1.0000	80.01	_____
SEED/PLANTS	acre	40.05	1.0000	40.05	_____
TECHNOLOGY FEE	acre	62.73	1.0000	62.73	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	1.48	1.0000	1.48	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
OPERATOR LABOR	hour	13.14	0.6304	8.27	_____
UNALLOCATED LABOR	hour	13.14	0.5043	6.63	_____
DIESEL FUEL	gal	1.70	9.6761	16.45	_____
REPAIR & MAINTENANCE	acre	30.15	1.0000	30.15	_____
INTEREST ON OP. CAP.	acre	13.59	1.0000	13.59	_____
				-----	
TOTAL DIRECT EXPENSES				693.90	_____
RETURNS ABOVE DIRECT EXPENSES				206.45	_____
				-----	
TOTAL FIXED EXPENSES				110.43	_____
				-----	
TOTAL SPECIFIED EXPENSES				804.33	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				96.02	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 1.C Estimated resource use for field operations, per acre  
Cotton, 12R-38" solid, conservation tillage  
B2XF variety, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.6600				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B2XF	thous					45.0000				
B2XF Cot Tech Fee	thous					42.1000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8WM	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Karate Z	oz					0.5000				
Bidrin 8WM	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air ( 3 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1100.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.63	0.39	0.95	0.50

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 1.D Estimated costs for field operations, per acre  
Cotton, 12R-38" solid, conservation tillage  
B2XF variety, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	30.36						1.44	31.80	31.80
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Potash (60% K2O)	cwt	25.46						1.21	26.67	26.67
Bed-Paratill Fold	12R-38		1.06	1.71	1.28			0.19	4.24	4.64
Bed/Disk (Hipper)	12R-38		0.49	0.38	0.58			0.07	1.52	1.61
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Clarity	pt	5.59						0.18	5.77	5.77
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62	4.62
Select Max	pt	14.99						0.47	15.46	15.46
Surfactant	pt	0.74						0.02	0.76	0.76
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.10	3.53	2.91
UAN (32%)	gal	27.14						0.75	27.89	27.89
Row Cond Folding	38'		0.80	0.53	0.97			0.05	2.35	2.81
Plant - Folding	12R-38		0.98	1.68	1.62			0.10	4.38	4.69
Cotton Seed B2XF	thous	40.05						0.95	41.00	41.00
B2XF Cot Tech Fee	thous	62.73						1.49	64.22	64.22
Cotton Seed Trt.	acre	20.00						0.48	20.48	20.48
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Cotoran	pt	12.62						0.30	12.92	12.92
Surfactant	pt	0.74						0.02	0.76	0.76
Cotton Consultant	acre	8.00						0.19	8.19	8.19
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.02	0.76	1.13
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Acephate 90%	lb	2.45						0.06	2.51	2.51
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Bidrin 8WM	oz	0.22						0.01	0.23	0.23
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.01	0.75	1.13
Centric 40WG	oz	10.42						0.21	10.63	10.63
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.07	3.50	2.91
UAN (32%)	gal	27.14						0.54	27.68	27.68
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Diamond .83EC	oz	8.22						0.16	8.38	8.38
Admire Pro	oz	3.44						0.07	3.51	3.51
Spray (Direct/Layby)	12R-38		0.88	0.66	1.26			0.04	2.84	2.34
Diuron	pt	5.38						0.09	5.47	5.47
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55	4.55
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	7.35						0.12	7.47	7.47
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	6.59						0.10	6.69	6.69
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.29						0.02	1.31	1.31
Bidrin 8WM	oz	2.24						0.04	2.28	2.28
Incidental Pest										
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Incidental Pest Trt	acre	12.00						0.19	12.19	12.19
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	7.35						0.09	7.44	7.44
Bifenthrin	oz	6.59						0.08	6.67	6.67
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Transform WG	oz	11.85						0.14	11.99	11.99
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	3.31						0.03	3.34	3.34
Ethephon 6E	pt	6.76						0.05	6.81	6.81
App by Air ( 5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	4.66						0.04	4.70	4.70
Ethephon 6E	pt	1.06						0.01	1.07	1.07
Cotton Picker/Module	6R-38(500)		7.54	20.06	5.63			0.13	33.36	79.14
Gin & Haul	lb	121.00						0.48	121.48	121.48
Stalk Shredder-Flail	20'		1.62	2.51	1.95			0.02	6.10	4.72
TOTALS		615.88	16.45	30.15	17.83	0.00	13.59	693.90	110.43	804.33

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 1.E Estimated monthly income and expense flows per acre  
Cotton, 12R-38" solid, conservation tillage  
B2XF variety, Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	900.35
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	121.00
FERTILIZERS	25.46	0.00	0.00	0.00	0.00	27.14	0.00	27.14	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	64.48	0.00	9.86	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.67	22.08	29.47	25.79	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	40.05	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	62.73	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	1.76	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.74	0.00	0.74	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.86	0.00	0.00	0.00	0.00	1.45	3.91	1.77	1.26	0.00	0.00	7.58
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	1.55	0.00	0.00	0.00	0.00	1.02	2.57	1.27	0.88	0.00	0.00	9.16
REPAIR & MAINTENANCE	2.09	0.00	0.00	0.00	0.00	0.96	2.74	1.13	0.66	0.00	0.00	22.57
INTEREST ON OP. CAP.	3.40	0.00	0.00	0.00	1.02	0.85	4.98	1.19	0.88	0.43	0.21	0.63
TOTAL DIRECT EXPENSES	75.02	0.00	0.00	0.00	33.32	31.42	213.87	61.34	56.02	36.22	25.75	160.94
NET INCOME	-75.02	0.00	0.00	0.00	-33.32	-31.42	-213.87	-61.34	-56.02	-36.22	-25.75	739.41
NET INCOME TO DATE	-75.02	-75.02	-75.02	-75.02	-108.34	-139.76	-353.63	-414.97	-470.99	-507.21	-532.96	206.45

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B2XF variety, Delta Area, Mississippi, 2017

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Cotton Lint			0.50	0.53	0.56	0.60	0.63	0.67	0.70	0.73	0.77	0.80	0.83
PERCENT	YIELD	UNIT	-----dollars-----										
50	550.00	lb	-193 -303	-175 -285	-156 -267	-138 -248	-119 -230	-101 -211	-82 -193	-64 -174	-46 -156	-27 -138	-9 -119
60	660.00	lb	-150 -260	-128 -238	-106 -216	-83 -194	-61 -172	-39 -150	-17 -128	4 -105	26 -83	48 -61	70 -39
70	770.00	lb	-107 -217	-81 -191	-55 -166	-29 -140	-4 -114	21 -88	47 -62	73 -37	99 -11	124 14	150 40
80	880.00	lb	-64 -174	-34 -145	-5 -115	24 -86	53 -56	83 -27	112 2	142 31	171 61	201 90	230 120
90	990.00	lb	-20 -131	12 -98	45 -65	78 -31	111 1	144 34	178 67	211 100	244 133	277 167	310 200
100	1100.00	lb	22 -88	59 -51	95 -14	132 22	169 59	206 96	243 132	280 169	317 206	353 243	390 280
110	1210.00	lb	65 -45	105 -4	146 35	186 76	227 117	268 157	308 198	349 238	389 279	430 319	470 360
120	1320.00	lb	108 -1	152 42	196 86	241 130	285 174	329 219	373 263	417 307	462 351	506 396	550 440
130	1430.00	lb	151 41	199 89	247 136	295 184	343 232	391 280	439 328	486 376	534 424	582 472	630 520
140	1540.00	lb	194 84	246 135	297 187	349 239	401 290	452 342	504 393	555 445	607 496	659 548	710 600
150	1650.00	lb	237 127	293 182	348 237	403 293	458 348	514 403	569 459	624 514	680 569	735 624	790 680

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

Table 2.A Estimated costs per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 B2XF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	2.5000	16.25	_____
App by Air ( 3 gal)	appl	5.00	6.7500	33.75	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.44	2.3000	3.31	_____
Ethephon 6E	pt	3.38	2.3125	7.82	_____
Tribufos 6lb	pt	9.32	0.5000	4.66	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	16.97	1.5000	25.46	_____
UAN (32%)	gal	1.58	34.3582	54.29	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.18	0.5000	5.59	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	14.99	1.0000	14.99	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Cotoran	pt	6.31	2.0000	12.62	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
Diuron	pt	3.36	1.6000	5.38	_____
INSECTICIDES					
Acephate 90%	lb	9.80	1.7500	17.15	_____
Bidrin 8WM	oz	1.12	2.2000	2.46	_____
Centric 40WG	oz	5.21	2.0000	10.42	_____
Diamond .83EC	oz	1.37	6.0000	8.22	_____
Admire Pro	oz	1.72	2.0000	3.44	_____
Bifenthrin	oz	1.03	12.8000	13.18	_____
Karate Z	oz	2.58	0.5000	1.29	_____
Incidental Pest Trt	acre	12.00	1.5000	18.00	_____
Transform WG	oz	7.90	1.5000	11.85	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	0.89	45.0000	40.05	_____
TECHNOLOGY FEE					
B2XF Cot Tech Fee	thous	1.49	42.1000	62.73	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	48.0000	5.28	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4000	1.48	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5025	6.61	_____
Self-Propelled	hour	13.14	0.2310	3.02	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	13.14	0.5240	6.89	_____
DIESEL FUEL					
Tractors	gal	1.70	5.6368	9.59	_____
Self-Propelled	gal	1.70	5.0512	8.58	_____
Roll-Out Pipe Irr.	gal	1.70	8.5535	14.55	_____
REPAIR & MAINTENANCE					
Implements	acre	7.07	1.0000	7.07	_____
Tractors	acre	3.33	1.0000	3.33	_____
Self-Propelled	acre	20.76	1.0000	20.76	_____
Roll-Out Pipe Irr.	acre	6.34	1.0000	6.34	_____
INTEREST ON OP. CAP.	acre	14.55	1.0000	14.55	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>757.91</b>	_____
<b>FIXED EXPENSES</b>					
Implements	acre	11.05	1.0000	11.05	_____
Tractors	acre	20.95	1.0000	20.95	_____
Self-Propelled	acre	83.80	1.0000	83.80	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
<b>TOTAL FIXED EXPENSES</b>				<b>167.33</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>925.24</b>	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 B2XF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.67	1200.0000	804.00	_____
Cotton Seed	lb	0.09	1800.0000	178.20	_____
				-----	
TOTAL INCOME				982.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	50.00	1.0000	50.00	_____
HARVEST AIDS	acre	15.79	1.0000	15.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	79.74	1.0000	79.74	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	99.40	1.0000	99.40	_____
INSECTICIDES	acre	86.01	1.0000	86.01	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	40.05	1.0000	40.05	_____
TECHNOLOGY FEE	acre	62.73	1.0000	62.73	_____
GROWTH REGULATORS	acre	5.28	1.0000	5.28	_____
ADJUVANTS	acre	1.48	1.0000	1.48	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	13.14	0.7336	9.63	_____
UNALLOCATED LABOR	hour	13.14	0.5240	6.89	_____
DIESEL FUEL	gal	1.70	19.2417	32.72	_____
REPAIR & MAINTENANCE	acre	37.50	1.0000	37.50	_____
INTEREST ON OP. CAP.	acre	14.55	1.0000	14.55	_____
				-----	
TOTAL DIRECT EXPENSES				757.91	_____
RETURNS ABOVE DIRECT EXPENSES				224.29	_____
				-----	
TOTAL FIXED EXPENSES				167.33	_____
				-----	
TOTAL SPECIFIED EXPENSES				925.24	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				56.96	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 B2XF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.6600				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	1.00	Nov		0.04	0.04	0.04	0.03
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B2XF	thous					45.0000				
B2XF Cot Tech Fee	thous					42.1000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8WM	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Karate Z	oz					0.5000				
Bidrin 8WM	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air ( 3 gal)	appl					1.5000				
Incidental Pest Trt	acre					1.5000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38 (500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
Roll-Out Pipe Irr.	acre				Jan	1.0000	0.07	0.07	0.44	
TOTALS							0.73	0.50	1.42	0.52

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 B2XF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	30.36						1.44	31.80	31.80
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Potash (60% K2O)	cwt	25.46						1.21	26.67	26.67
Bed-Paratill Fold	12R-38		1.06	1.71	1.28			0.19	4.24	4.64
Bed/Disk (Hipper)	12R-38		0.97	0.75	1.17			0.14	3.03	3.21
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Clarity	pt	5.59						0.18	5.77	5.77
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62	4.62
Select Max	pt	14.99						0.47	15.46	15.46
Surfactant	pt	0.74						0.02	0.76	0.76
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.10	3.53	2.91
UAN (32%)	gal	27.14						0.75	27.89	27.89
Row Cond Folding	38'		0.80	0.53	0.97			0.05	2.35	2.81
Plant - Folding	12R-38		0.98	1.68	1.62			0.10	4.38	4.69
Cotton Seed B2XF	thous	40.05						0.95	41.00	41.00
B2XF Cot Tech Fee	thous	62.73						1.49	64.22	64.22
Cotton Seed Trt.	acre	20.00						0.48	20.48	20.48
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Cotoran	pt	12.62						0.30	12.92	12.92
Surfactant	pt	0.74						0.02	0.76	0.76
Cotton Consultant	acre	8.00						0.19	8.19	8.19
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.02	0.76	1.13
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Acephate 90%	lb	2.45						0.06	2.51	2.51
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Bidrin 8WM	oz	0.22						0.01	0.23	0.23
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.01	0.75	1.13
Centric 40WG	oz	10.42						0.21	10.63	10.63
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.07	3.50	2.91
UAN (32%)	gal	27.14						0.54	27.68	27.68
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Diamond .83EC	oz	8.22						0.16	8.38	8.38
Admire Pro	oz	3.44						0.07	3.51	3.51
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Spray (Direct/Layby)	12R-38		0.88	0.66	1.26			0.04	2.84	2.34
Diuron	pt	5.38						0.09	5.47	5.47
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55	4.55
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	7.35						0.12	7.47	7.47
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	6.59						0.10	6.69	6.69
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.29						0.02	1.31	1.31
Bidrin 8WM	oz	2.24						0.04	2.28	2.28
Incidental Pest										
App by Air ( 3 gal)	appl	7.50						0.12	7.62	7.62
Incidental Pest Trt	acre	18.00						0.28	18.28	18.28
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	7.35						0.09	7.44	7.44
Bifenthrin	oz	6.59						0.08	6.67	6.67
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Transform WG	oz	11.85						0.14	11.99	11.99
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	3.31						0.03	3.34	3.34
Ethephon 6E	pt	6.76						0.05	6.81	6.81
App by Air ( 5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	4.66						0.04	4.70	4.70
Ethephon 6E	pt	1.06						0.01	1.07	1.07
Cotton Picker/Module	6R-38(500)		7.54	20.06	5.63			0.13	33.36	79.14
Gin & Haul	lb	132.00						0.52	132.52	132.52
Stalk Shredder-Flail	20'		1.62	2.51	1.95			0.02	6.10	4.72
Roll-Out Pipe Irr.	acre	8.25	15.79	6.98	4.33			0.59	35.94	55.30
TOTALS		650.39	32.72	37.50	22.75	0.00	14.55	757.91	167.33	925.24

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 B2XF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	982.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	10.00	13.75	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	25.46	0.00	0.00	0.00	0.00	27.14	0.00	27.14	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	64.48	0.00	9.86	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.67	22.08	35.47	25.79	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	40.05	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	62.73	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	1.76	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.74	0.00	0.74	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.45	0.00	0.00	0.00	0.00	1.45	4.14	4.32	1.49	0.23	0.59	8.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.03	0.00	0.00	0.00	0.00	1.02	2.57	6.45	5.73	4.85	0.28	9.79
REPAIR & MAINTENANCE	2.46	0.00	0.00	0.00	0.00	0.96	2.74	5.04	1.96	1.30	0.14	22.90
INTEREST ON OP. CAP.	3.47	0.00	0.00	0.00	1.02	0.85	4.99	1.71	1.11	0.50	0.22	0.68
TOTAL DIRECT EXPENSES	76.53	0.00	0.00	0.00	33.32	31.42	214.11	88.51	71.13	42.67	26.77	173.45
NET INCOME	-76.53	0.00	0.00	0.00	-33.32	-31.42	-214.11	-88.51	-71.13	-42.67	-26.77	808.75
NET INCOME TO DATE	-76.53	-76.53	-76.53	-76.53	-109.85	-141.27	-355.38	-443.89	-515.02	-557.69	-584.46	224.29

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.



Table 2.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 B2XF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.50	0.53	0.56	0.60	0.63	0.67	0.70	0.73	0.77	0.80	0.83
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-211 -379	-191 -359	-171 -339	-151 -318	-131 -298	-111 -278	-91 -258	-71 -238	-51 -218	-31 -198	-10 -178
60	720.00	lb	-164 -332	-140 -308	-116 -283	-92 -259	-68 -235	-44 -211	-20 -187	3 -163	28 -139	52 -115	76 -91
70	840.00	lb	-117 -285	-89 -257	-61 -228	-33 -200	-5 -172	22 -144	50 -116	79 -88	107 -60	135 -31	163 -3
80	960.00	lb	-70 -238	-38 -205	-6 -173	25 -141	57 -109	89 -77	122 -45	154 -13	186 19	218 51	250 83
90	1080.00	lb	-23 -191	12 -154	48 -118	84 -82	120 -46	157 -10	193 25	229 62	265 98	301 134	338 170
100	1200.00	lb	23 -144	63 -103	103 -63	143 -23	184 16	224 56	264 97	304 137	344 177	385 217	425 257
110	1320.00	lb	70 -96	114 -52	158 -8	202 35	247 79	291 124	335 168	379 212	424 256	468 300	512 345
120	1440.00	lb	117 -49	165 -1	213 46	262 94	310 143	358 191	406 239	455 287	503 335	551 384	599 432
130	1560.00	lb	164 -2	216 49	268 101	321 153	373 206	425 258	477 310	530 362	582 415	634 467	687 519
140	1680.00	lb	211 44	267 100	324 156	380 212	436 269	492 325	549 381	605 438	661 494	718 550	774 606
150	1800.00	lb	258 91	318 151	379 211	439 272	499 332	560 392	620 453	680 513	740 573	801 633	861 694

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

Table 3.A Estimated costs per acre  
Cotton, 12R-38" solid, conservation tillage  
GLB2 variety, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	2.5000	16.25	_____
App by Air ( 3 gal)	appl	5.00	5.2500	26.25	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.44	2.3000	3.31	_____
Ethephon 6E	pt	3.38	2.3125	7.82	_____
Tribufos 6lb	pt	9.32	0.5000	4.66	_____
GINNING					
Gin & Haul	lb	0.11	1100.0000	121.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	16.97	1.5000	25.46	_____
UAN (32%)	gal	1.58	34.3582	54.29	_____
HERBICIDES					
Clarity	pt	11.18	0.5000	5.59	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	14.99	1.0000	14.99	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Cotoran	pt	6.31	2.0000	12.62	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Diuron	pt	3.36	1.6000	5.38	_____
INSECTICIDES					
Acephate 90%	lb	9.80	1.7500	17.15	_____
Bidrin 8WM	oz	1.12	2.2000	2.46	_____
Centric 40WG	oz	5.21	2.0000	10.42	_____
Diamond .83EC	oz	1.37	6.0000	8.22	_____
Admire Pro	oz	1.72	2.0000	3.44	_____
Bifenthrin	oz	1.03	12.8000	13.18	_____
Karate Z	oz	2.58	0.5000	1.29	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.90	1.5000	11.85	_____
SEED/PLANTS					
Cotton Seed GLB2	thous	2.81	45.0000	126.45	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4000	1.48	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3993	5.25	_____
Self-Propelled	hour	13.14	0.2310	3.02	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	13.14	0.5043	6.63	_____
DIESEL FUEL					
Tractors	gal	1.70	4.6248	7.87	_____
Self-Propelled	gal	1.70	5.0512	8.58	_____
REPAIR & MAINTENANCE					
Implements	acre	6.67	1.0000	6.67	_____
Tractors	acre	2.72	1.0000	2.72	_____
Self-Propelled	acre	20.76	1.0000	20.76	_____
INTEREST ON OP. CAP.	acre	14.14	1.0000	14.14	_____
TOTAL DIRECT EXPENSES				722.22	_____
FIXED EXPENSES					
Implements	acre	9.49	1.0000	9.49	_____
Tractors	acre	17.14	1.0000	17.14	_____
Self-Propelled	acre	83.80	1.0000	83.80	_____
TOTAL FIXED EXPENSES				110.43	_____
TOTAL SPECIFIED EXPENSES				832.65	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 3.B Summary of estimated costs and returns per acre  
Cotton, 12R-38" solid, conservation tillage  
GLB2 variety, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.67	1100.0000	737.00	_____
Cotton Seed	lb	0.09	1650.0000	163.35	_____
				-----	
TOTAL INCOME				900.35	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.79	1.0000	15.79	_____
GINNING	acre	121.00	1.0000	121.00	_____
FERTILIZERS	acre	79.74	1.0000	79.74	_____
HERBICIDES	acre	123.50	1.0000	123.50	_____
INSECTICIDES	acre	80.01	1.0000	80.01	_____
SEED/PLANTS	acre	126.45	1.0000	126.45	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	1.48	1.0000	1.48	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
OPERATOR LABOR	hour	13.14	0.6304	8.27	_____
UNALLOCATED LABOR	hour	13.14	0.5043	6.63	_____
DIESEL FUEL	gal	1.70	9.6761	16.45	_____
REPAIR & MAINTENANCE	acre	30.15	1.0000	30.15	_____
INTEREST ON OP. CAP.	acre	14.14	1.0000	14.14	_____
				-----	
TOTAL DIRECT EXPENSES				722.22	_____
RETURNS ABOVE DIRECT EXPENSES				178.13	_____
				-----	
TOTAL FIXED EXPENSES				110.43	_____
				-----	
TOTAL SPECIFIED EXPENSES				832.65	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				67.70	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 3.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 GLB2 variety, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.6600				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed GLB2	thous					45.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8WM	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Karate Z	oz					0.5000				
Bidrin 8WM	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air ( 3 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1100.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.63	0.39	0.95	0.50

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 3.D Estimated costs for field operations, per acre  
Cotton, 12R-38" solid, conservation tillage  
GLB2 variety, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	30.36						1.44	31.80	31.80
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Potash (60% K2O)	cwt	25.46						1.21	26.67	26.67
Bed-Paratill Fold	12R-38		1.06	1.71	1.28			0.19	4.24	4.64
Bed/Disk (Hipper)	12R-38		0.49	0.38	0.58			0.07	1.52	1.61
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Clarity	pt	5.59						0.18	5.77	5.77
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62	4.62
Select Max	pt	14.99						0.47	15.46	15.46
Surfactant	pt	0.74						0.02	0.76	0.76
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.10	3.53	2.91
UAN (32%)	gal	27.14						0.75	27.89	27.89
Row Cond Folding	38'		0.80	0.53	0.97			0.05	2.35	2.81
Plant - Folding	12R-38		0.98	1.68	1.62			0.10	4.38	4.69
Cotton Seed GLB2	thous	126.45						3.00	129.45	129.45
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Cotoran	pt	12.62						0.30	12.92	12.92
Surfactant	pt	0.74						0.02	0.76	0.76
Cotton Consultant	acre	8.00						0.19	8.19	8.19
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.02	0.76	1.13
Dual Magnum	pt	14.97						0.36	15.33	15.33
Liberty 280	oz	16.53						0.39	16.92	16.92
Acephate 90%	lb	2.45						0.06	2.51	2.51
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Bidrin 8WM	oz	0.22						0.01	0.23	0.23
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.01	0.75	1.13
Centric 40WG	oz	10.42						0.21	10.63	10.63
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.07	3.50	2.91
UAN (32%)	gal	27.14						0.54	27.68	27.68
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Diamond .83EC	oz	8.22						0.16	8.38	8.38
Admire Pro	oz	3.44						0.07	3.51	3.51
Spray (Direct/Layby)	12R-38		0.88	0.66	1.26			0.04	2.84	2.34
Diuron	pt	5.38						0.09	5.47	5.47
Liberty 280	oz	16.53						0.26	16.79	16.79
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	7.35						0.12	7.47	7.47
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	6.59						0.10	6.69	6.69
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.29						0.02	1.31	1.31
Bidrin 8WM	oz	2.24						0.04	2.28	2.28
Incidental Pest										
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Incidental Pest Trt	acre	12.00						0.19	12.19	12.19
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	7.35						0.09	7.44	7.44
Bifenthrin	oz	6.59						0.08	6.67	6.67
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Transform WG	oz	11.85						0.14	11.99	11.99
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	3.31						0.03	3.34	3.34
Ethephon 6E	pt	6.76						0.05	6.81	6.81
App by Air ( 5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	4.66						0.04	4.70	4.70
Ethephon 6E	pt	1.06						0.01	1.07	1.07
Cotton Picker/Module	6R-38(500)		7.54	20.06	5.63			0.13	33.36	79.14
Gin & Haul	lb	121.00						0.48	121.48	121.48
Stalk Shredder-Flail	20'		1.62	2.51	1.95			0.02	6.10	4.72
TOTALS		643.65	16.45	30.15	17.83	0.00	14.14	722.22	110.43	832.65

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 3.E Estimated monthly income and expense flows per acre  
Cotton, 12R-38" solid, conservation tillage  
GLB2 variety, Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	900.35
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	121.00
FERTILIZERS	25.46	0.00	0.00	0.00	0.00	27.14	0.00	27.14	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	76.53	0.00	21.91	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.67	22.08	29.47	25.79	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.45	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	1.76	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.74	0.00	0.74	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.86	0.00	0.00	0.00	0.00	1.45	3.91	1.77	1.26	0.00	0.00	7.58
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	1.55	0.00	0.00	0.00	0.00	1.02	2.57	1.27	0.88	0.00	0.00	9.16
REPAIR & MAINTENANCE	2.09	0.00	0.00	0.00	0.00	0.96	2.74	1.13	0.66	0.00	0.00	22.57
INTEREST ON OP. CAP.	3.40	0.00	0.00	0.00	1.02	0.85	5.34	1.19	1.07	0.43	0.21	0.63
TOTAL DIRECT EXPENSES	75.02	0.00	0.00	0.00	33.32	31.42	229.95	61.34	68.26	36.22	25.75	160.94
NET INCOME	-75.02	0.00	0.00	0.00	-33.32	-31.42	-229.95	-61.34	-68.26	-36.22	-25.75	739.41
NET INCOME TO DATE	-75.02	-75.02	-75.02	-75.02	-108.34	-139.76	-369.71	-431.05	-499.31	-535.53	-561.28	178.13

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 GLB2 variety, Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.50	0.53	0.56	0.60	0.63	0.67	0.70	0.73	0.77	0.80	0.83		
PERCENT	YIELD	UNIT	dollars										
50	550.00	lb	-221	-203	-184	-166	-148	-129	-111	-92	-74	-55	-37
			-332	-313	-295	-276	-258	-240	-221	-203	-184	-166	-147
60	660.00	lb	-178	-156	-134	-112	-90	-68	-45	-23	-1	20	42
			-289	-266	-244	-222	-200	-178	-156	-134	-112	-90	-67
70	770.00	lb	-135	-109	-83	-58	-32	-6	19	45	70	96	122
			-245	-220	-194	-168	-142	-116	-91	-65	-39	-13	12
80	880.00	lb	-92	-62	-33	-3	25	55	84	113	143	172	202
			-202	-173	-143	-114	-84	-55	-25	3	33	62	91
90	990.00	lb	-49	-16	17	50	83	116	149	182	216	249	282
			-159	-126	-93	-60	-27	6	39	72	105	138	171
100	1100.00	lb	-6	30	67	104	141	178	214	251	288	325	362
			-116	-79	-42	-6	30	67	104	141	178	215	251
110	1210.00	lb	37	77	118	158	199	239	280	320	361	401	442
			-73	-32	7	48	88	129	169	210	250	291	331
120	1320.00	lb	80	124	168	212	257	301	345	389	433	478	522
			-30	13	58	102	146	190	235	279	323	367	411
130	1430.00	lb	123	171	219	266	314	362	410	458	506	554	602
			12	60	108	156	204	252	300	348	396	443	491
140	1540.00	lb	166	217	269	321	372	424	475	527	579	630	682
			55	107	159	210	262	313	365	417	468	520	571
150	1650.00	lb	209	264	320	375	430	485	541	596	651	706	762
			99	154	209	264	320	375	430	486	541	596	651

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

Table 4.A Estimated costs per acre  
Cotton, 12R-38" solid, conservation tillage,  
GLB2 variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	2.5000	16.25	_____
App by Air ( 3 gal)	appl	5.00	6.7500	33.75	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.44	2.3000	3.31	_____
Ethephon 6E	pt	3.38	2.3125	7.82	_____
Tribufos 6lb	pt	9.32	0.5000	4.66	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	16.97	1.5000	25.46	_____
UAN (32%)	gal	1.58	34.3582	54.29	_____
HERBICIDES					
Clarity	pt	11.18	0.5000	5.59	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	14.99	1.0000	14.99	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Cotoran	pt	6.31	2.0000	12.62	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Diuron	pt	3.36	1.6000	5.38	_____
INSECTICIDES					
Acephate 90%	lb	9.80	1.7500	17.15	_____
Bidrin 8WG	oz	1.12	2.2000	2.46	_____
Centric 40WG	oz	5.21	2.0000	10.42	_____
Diamond .83EC	oz	1.37	6.0000	8.22	_____
Admire Pro	oz	1.72	2.0000	3.44	_____
Bifenthrin	oz	1.03	12.8000	13.18	_____
Karate Z	oz	2.58	0.5000	1.29	_____
Incidental Pest Trt	acre	12.00	1.5000	18.00	_____
Transform WG	oz	7.90	1.5000	11.85	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Cotton Seed GLB2	thous	2.81	45.0000	126.45	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	48.0000	5.28	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4000	1.48	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5025	6.61	_____
Self-Propelled	hour	13.14	0.2310	3.02	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	13.14	0.5240	6.89	_____
DIESEL FUEL					
Tractors	gal	1.70	5.6368	9.59	_____
Self-Propelled	gal	1.70	5.0512	8.58	_____
Roll-Out Pipe Irr.	gal	1.70	8.5535	14.55	_____
REPAIR & MAINTENANCE					
Implements	acre	7.07	1.0000	7.07	_____
Tractors	acre	3.33	1.0000	3.33	_____
Self-Propelled	acre	20.76	1.0000	20.76	_____
Roll-Out Pipe Irr.	acre	6.34	1.0000	6.34	_____
INTEREST ON OP. CAP.	acre	15.10	1.0000	15.10	_____
TOTAL DIRECT EXPENSES				786.23	_____
FIXED EXPENSES					
Implements	acre	11.05	1.0000	11.05	_____
Tractors	acre	20.95	1.0000	20.95	_____
Self-Propelled	acre	83.80	1.0000	83.80	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				167.33	_____
TOTAL SPECIFIED EXPENSES				953.56	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 4.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 GLB2 variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.67	1200.0000	804.00	_____
Cotton Seed	lb	0.09	1800.0000	178.20	_____
				-----	
TOTAL INCOME				982.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	50.00	1.0000	50.00	_____
HARVEST AIDS	acre	15.79	1.0000	15.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	79.74	1.0000	79.74	_____
HERBICIDES	acre	123.50	1.0000	123.50	_____
INSECTICIDES	acre	86.01	1.0000	86.01	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	126.45	1.0000	126.45	_____
GROWTH REGULATORS	acre	5.28	1.0000	5.28	_____
ADJUVANTS	acre	1.48	1.0000	1.48	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	13.14	0.7336	9.63	_____
UNALLOCATED LABOR	hour	13.14	0.5240	6.89	_____
DIESEL FUEL	gal	1.70	19.2417	32.72	_____
REPAIR & MAINTENANCE	acre	37.50	1.0000	37.50	_____
INTEREST ON OP. CAP.	acre	15.10	1.0000	15.10	_____
				-----	
TOTAL DIRECT EXPENSES				786.23	_____
RETURNS ABOVE DIRECT EXPENSES				195.97	_____
				-----	
TOTAL FIXED EXPENSES				167.33	_____
				-----	
TOTAL SPECIFIED EXPENSES				953.56	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				28.64	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 GLB2 variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.6600				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	1.00	Nov		0.04	0.04	0.04	0.03
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed GLB2	thous					45.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8WM	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Karate Z	oz					0.5000				
Bidrin 8WM	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air ( 3 gal)	appl					1.5000				
Incidental Pest Trt	acre					1.5000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
Roll-Out Pipe Irr.	acre				Jan	1.0000	0.07	0.07	0.44	
TOTALS							0.73	0.50	1.42	0.52

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 GLB2 variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	30.36						1.44	31.80	31.80
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Potash (60% K2O)	cwt	25.46						1.21	26.67	26.67
Bed-Paratill Fold	12R-38		1.06	1.71	1.28			0.19	4.24	4.64
Bed/Disk (Hipper)	12R-38		0.97	0.75	1.17			0.14	3.03	3.21
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Clarity	pt	5.59						0.18	5.77	5.77
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62	4.62
Select Max	pt	14.99						0.47	15.46	15.46
Surfactant	pt	0.74						0.02	0.76	0.76
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.10	3.53	2.91
UAN (32%)	gal	27.14						0.75	27.89	27.89
Row Cond Folding	38'		0.80	0.53	0.97			0.05	2.35	2.81
Plant - Folding	12R-38		0.98	1.68	1.62			0.10	4.38	4.69
Cotton Seed GLB2	thous	126.45						3.00	129.45	129.45
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Cotoran	pt	12.62						0.30	12.92	12.92
Surfactant	pt	0.74						0.02	0.76	0.76
Cotton Consultant	acre	8.00						0.19	8.19	8.19
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.02	0.76	1.13
Dual Magnum	pt	14.97						0.36	15.33	15.33
Liberty 280	oz	16.53						0.39	16.92	16.92
Acephate 90%	lb	2.45						0.06	2.51	2.51
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Bidrin 8WM	oz	0.22						0.01	0.23	0.23
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.01	0.75	1.13
Centric 40WG	oz	10.42						0.21	10.63	10.63
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.07	3.50	2.91
UAN (32%)	gal	27.14						0.54	27.68	27.68
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Diamond .83EC	oz	8.22						0.16	8.38	8.38
Admire Pro	oz	3.44						0.07	3.51	3.51
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Spray (Direct/Layby)	12R-38		0.88	0.66	1.26			0.04	2.84	2.34
Diuron	pt	5.38						0.09	5.47	5.47
Liberty 280	oz	16.53						0.26	16.79	16.79
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	7.35						0.12	7.47	7.47
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	6.59						0.10	6.69	6.69
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.29						0.02	1.31	1.31
Bidrin 8WM	oz	2.24						0.04	2.28	2.28
Incidental Pest										
App by Air ( 3 gal)	appl	7.50						0.12	7.62	7.62
Incidental Pest Trt	acre	18.00						0.28	18.28	18.28
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	7.35						0.09	7.44	7.44
Bifenthrin	oz	6.59						0.08	6.67	6.67
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Transform WG	oz	11.85						0.14	11.99	11.99
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	3.31						0.03	3.34	3.34
Ethephon 6E	pt	6.76						0.05	6.81	6.81
App by Air ( 5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	4.66						0.04	4.70	4.70
Ethephon 6E	pt	1.06						0.01	1.07	1.07
Cotton Picker/Module	6R-38(500)		7.54	20.06	5.63			0.13	33.36	79.14
Gin & Haul	lb	132.00						0.52	132.52	132.52
Stalk Shredder-Flail	20'		1.62	2.51	1.95			0.02	6.10	4.72
Roll-Out Pipe Irr.	acre	8.25	15.79	6.98	4.33			0.59	35.94	55.30
TOTALS		678.16	32.72	37.50	22.75	0.00	15.10	786.23	167.33	953.56

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 GLB2 variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	982.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	10.00	13.75	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	25.46	0.00	0.00	0.00	0.00	27.14	0.00	27.14	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	76.53	0.00	21.91	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.67	22.08	35.47	25.79	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.45	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	1.76	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.74	0.00	0.74	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.45	0.00	0.00	0.00	0.00	1.45	4.14	4.32	1.49	0.23	0.59	8.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.03	0.00	0.00	0.00	0.00	1.02	2.57	6.45	5.73	4.85	0.28	9.79
REPAIR & MAINTENANCE	2.46	0.00	0.00	0.00	0.00	0.96	2.74	5.04	1.96	1.30	0.14	22.90
INTEREST ON OP. CAP.	3.47	0.00	0.00	0.00	1.02	0.85	5.35	1.71	1.30	0.50	0.22	0.68
TOTAL DIRECT EXPENSES	76.53	0.00	0.00	0.00	33.32	31.42	230.19	88.51	83.37	42.67	26.77	173.45
NET INCOME	-76.53	0.00	0.00	0.00	-33.32	-31.42	-230.19	-88.51	-83.37	-42.67	-26.77	808.75
NET INCOME TO DATE	-76.53	-76.53	-76.53	-76.53	-109.85	-141.27	-371.46	-459.97	-543.34	-586.01	-612.78	195.97

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage,  
 GLB2 variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.50	0.53	0.56	0.60	0.63	0.67	0.70	0.73	0.77	0.80	0.83
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-240 -407	-220 -387	-200 -367	-179 -347	-159 -327	-139 -307	-119 -287	-99 -266	-79 -246	-59 -226	-39 -206
60	720.00	lb	-193 -360	-169 -336	-144 -312	-120 -288	-96 -264	-72 -239	-48 -215	-24 -191	-0 -167	23 -143	47 -119
70	840.00	lb	-146 -313	-118 -285	-89 -257	-61 -229	-33 -200	-5 -172	22 -144	50 -116	78 -88	107 -60	135 -32
80	960.00	lb	-99 -266	-66 -234	-34 -202	-2 -169	29 -137	61 -105	93 -73	125 -41	158 -9	190 22	222 55
90	1080.00	lb	-52 -219	-15 -183	20 -147	56 -110	92 -74	128 -38	165 -2	201 33	237 70	273 106	309 142
100	1200.00	lb	-5 -172	35 -132	75 -91	115 -51	155 -11	195 28	236 68	276 109	316 149	356 189	396 229
110	1320.00	lb	42 -125	86 -81	130 -36	174 7	218 51	263 95	307 140	351 184	395 228	439 272	484 316
120	1440.00	lb	89 -78	137 -30	185 18	233 66	282 114	330 162	378 211	426 259	474 307	523 355	571 404
130	1560.00	lb	136 -31	188 21	240 73	292 125	345 177	397 230	449 282	501 334	554 386	606 439	658 491
140	1680.00	lb	183 15	239 72	295 128	352 184	408 240	464 297	520 353	577 409	633 466	689 522	745 578
150	1800.00	lb	230 62	290 123	350 183	411 243	471 304	531 364	592 424	652 484	712 545	772 605	833 665

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

Table 5.A Estimated costs per acre  
 Cotton, 12R-38" solid, conservation tillage, B2XF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air ( 3 gal)	appl	5.00	4.7500	23.75	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.44	2.3000	3.31	_____
Ethephon 6E	pt	3.38	2.3125	7.82	_____
Tribufos 6lb	pt	9.32	0.5000	4.66	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	16.97	1.5000	25.46	_____
UAN (32%)	gal	1.58	34.3582	54.29	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.18	0.5000	5.59	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	14.99	1.0000	14.99	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Cotoran	pt	6.31	2.0000	12.62	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
Diuron	pt	3.36	1.6000	5.38	_____
INSECTICIDES					
Acephate 90%	lb	9.80	1.7500	17.15	_____
Bidrin 8WM	oz	1.12	2.2000	2.46	_____
Centric 40WG	oz	5.21	2.0000	10.42	_____
Diamond .83EC	oz	1.37	6.0000	8.22	_____
Admire Pro	oz	1.72	2.0000	3.44	_____
Bifenthrin	oz	1.03	12.8000	13.18	_____
Karate Z	oz	2.58	0.5000	1.29	_____
Incidental Pest Trt	acre	12.00	1.5000	18.00	_____
Transform WG	oz	7.90	1.5000	11.85	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	0.89	45.0000	40.05	_____
TECHNOLOGY FEE					
B2XF Cot Tech Fee	thous	1.49	42.1000	62.73	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	48.0000	5.28	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4000	1.48	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3993	5.25	_____
Self-Propelled	hour	13.14	0.2310	3.02	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	13.14	0.5043	6.63	_____
DIESEL FUEL					
Tractors	gal	1.70	4.6248	7.87	_____
Self-Propelled	gal	1.70	5.0512	8.58	_____
1/4-mi. Pivot Irr.	gal	1.70	11.2011	19.04	_____
REPAIR & MAINTENANCE					
Implements	acre	6.67	1.0000	6.67	_____
Tractors	acre	2.72	1.0000	2.72	_____
Self-Propelled	acre	20.76	1.0000	20.76	_____
1/4-mi. Pivot Irr.	acre	18.77	1.0000	18.77	_____
INTEREST ON OP. CAP.	acre	14.63	1.0000	14.63	_____
TOTAL DIRECT EXPENSES				763.85	_____
FIXED EXPENSES					
Implements	acre	9.49	1.0000	9.49	_____
Tractors	acre	17.14	1.0000	17.14	_____
Self-Propelled	acre	83.80	1.0000	83.80	_____
1/4-mi. Pivot Irr.	acre	63.55	1.0000	63.55	_____
TOTAL FIXED EXPENSES				173.98	_____
TOTAL SPECIFIED EXPENSES				937.83	_____

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

**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conservation tillage, B2XF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.67	1200.0000	804.00	_____
Cotton Seed	lb	0.09	1800.0000	178.20	_____
				-----	
TOTAL INCOME				982.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.00	1.0000	53.00	_____
HARVEST AIDS	acre	15.79	1.0000	15.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	79.74	1.0000	79.74	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	99.40	1.0000	99.40	_____
INSECTICIDES	acre	86.01	1.0000	86.01	_____
SEED/PLANTS	acre	40.05	1.0000	40.05	_____
TECHNOLOGY FEE	acre	62.73	1.0000	62.73	_____
GROWTH REGULATORS	acre	5.28	1.0000	5.28	_____
ADJUVANTS	acre	1.48	1.0000	1.48	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	13.14	0.6304	8.27	_____
UNALLOCATED LABOR	hour	13.14	0.5043	6.63	_____
DIESEL FUEL	gal	1.70	20.8772	35.49	_____
REPAIR & MAINTENANCE	acre	48.92	1.0000	48.92	_____
INTEREST ON OP. CAP.	acre	14.63	1.0000	14.63	_____
				-----	
TOTAL DIRECT EXPENSES				763.85	_____
RETURNS ABOVE DIRECT EXPENSES				218.35	_____
TOTAL FIXED EXPENSES				173.98	_____
				-----	
TOTAL SPECIFIED EXPENSES				937.83	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				44.37	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage, B2XF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.6600				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B2XF	thous					45.0000				
B2XF Cot Tech Fee	thous					42.1000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8WM	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air ( 5 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Karate Z	oz					0.5000				
Bidrin 8WM	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air ( 3 gal)	appl					1.5000				
Incidental Pest Trt	acre					1.5000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
1/4-mi. Pivot Irr.	acre				Jan	1.0000			0.20	
TOTALS							0.63	0.39	1.15	0.50

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 5.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage, B2XF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	30.36						1.44	31.80	31.80
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Potash (60% K2O)	cwt	25.46						1.21	26.67	26.67
Bed-Paratill Fold	12R-38		1.06	1.71	1.28			0.19	4.24	4.64
Bed/Disk (Hipper)	12R-38		0.49	0.38	0.58			0.07	1.52	1.61
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Clarity	pt	5.59						0.18	5.77	5.77
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62	4.62
Select Max	pt	14.99						0.47	15.46	15.46
Surfactant	pt	0.74						0.02	0.76	0.76
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.10	3.53	2.91
UAN (32%)	gal	27.14						0.75	27.89	27.89
Row Cond Folding	38'		0.80	0.53	0.97			0.05	2.35	2.81
Plant - Folding	12R-38		0.98	1.68	1.62			0.10	4.38	4.69
Cotton Seed B2XF	thous	40.05						0.95	41.00	41.00
B2XF Cot Tech Fee	thous	62.73						1.49	64.22	64.22
Cotton Seed Trt.	acre	20.00						0.48	20.48	20.48
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Cotoran	pt	12.62						0.30	12.92	12.92
Surfactant	pt	0.74						0.02	0.76	0.76
Cotton Consultant	acre	8.00						0.19	8.19	8.19
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.02	0.76	1.13
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Acephate 90%	lb	2.45						0.06	2.51	2.51
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Bidrin 8WM	oz	0.22						0.01	0.23	0.23
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.01	0.75	1.13
Centric 40WG	oz	10.42						0.21	10.63	10.63
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.07	3.50	2.91
UAN (32%)	gal	27.14						0.54	27.68	27.68
App by Air ( 5 gal)	appl	6.50						0.13	6.63	6.63
Diamond .83EC	oz	8.22						0.16	8.38	8.38
Admire Pro	oz	3.44						0.07	3.51	3.51
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Spray (Direct/Layby)	12R-38		0.88	0.66	1.26			0.04	2.84	2.34
Diuron	pt	5.38						0.09	5.47	5.47
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55	4.55
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	7.35						0.12	7.47	7.47
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	6.59						0.10	6.69	6.69
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.29						0.02	1.31	1.31
Bidrin 8WM	oz	2.24						0.04	2.28	2.28
Incidental Pest										
App by Air ( 3 gal)	appl	7.50						0.12	7.62	7.62
Incidental Pest Trt	acre	18.00						0.28	18.28	18.28
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	7.35						0.09	7.44	7.44
Bifenthrin	oz	6.59						0.08	6.67	6.67
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Transform WG	oz	11.85						0.14	11.99	11.99
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	3.31						0.03	3.34	3.34
Ethephon 6E	pt	6.76						0.05	6.81	6.81
App by Air ( 5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	4.66						0.04	4.70	4.70
Ethephon 6E	pt	1.06						0.01	1.07	1.07
Cotton Picker/Module	6R-38(500)		7.54	20.06	5.63			0.13	33.36	79.14
Gin & Haul	lb	132.00						0.52	132.52	132.52
Stalk Shredder-Flail	20'		1.62	2.51	1.95			0.02	6.10	4.72
1/4-mi. Pivot Irr.	acre		19.04	18.77	1.84			0.69	40.34	63.55
TOTALS		645.14	35.49	48.92	19.67	0.00	14.63	763.85	173.98	937.83

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conservation tillage, B2XF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	982.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	11.50	13.75	11.50	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	25.46	0.00	0.00	0.00	0.00	27.14	0.00	27.14	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	64.48	0.00	9.86	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.67	22.08	35.47	25.79	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	40.05	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	62.73	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	1.76	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.74	0.00	0.74	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.86	0.00	0.00	0.00	0.00	1.45	5.25	1.92	1.46	0.15	0.00	7.58
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	1.55	0.00	0.00	0.00	0.00	1.02	2.57	6.98	8.50	5.71	0.00	9.16
REPAIR & MAINTENANCE	2.09	0.00	0.00	0.00	0.00	0.96	2.74	16.65	2.52	1.39	0.00	22.57
INTEREST ON OP. CAP.	3.40	0.00	0.00	0.00	1.02	0.85	5.02	1.77	1.16	0.53	0.21	0.67
TOTAL DIRECT EXPENSES	75.02	0.00	0.00	0.00	33.32	31.42	215.25	91.56	74.48	45.07	25.75	171.98
NET INCOME	-75.02	0.00	0.00	0.00	-33.32	-31.42	-215.25	-91.56	-74.48	-45.07	-25.75	810.22
NET INCOME TO DATE	-75.02	-75.02	-75.02	-75.02	-108.34	-139.76	-355.01	-446.57	-521.05	-566.12	-591.87	218.35

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage, B2XF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.50	0.53	0.56	0.60	0.63	0.67	0.70	0.73	0.77	0.80	0.83		
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-217	-197	-177	-157	-137	-117	-97	-77	-57	-36	-16
			-391	-371	-351	-331	-311	-291	-271	-251	-231	-210	-190
60	720.00	lb	-170	-146	-122	-98	-74	-50	-26	-2	22	46	70
			-344	-320	-296	-272	-248	-224	-200	-175	-151	-127	-103
70	840.00	lb	-123	-95	-67	-39	-11	16	45	73	101	129	157
			-297	-269	-241	-213	-185	-157	-128	-100	-72	-44	-16
80	960.00	lb	-76	-44	-12	19	51	84	116	148	180	212	244
			-250	-218	-186	-154	-122	-89	-57	-25	6	38	70
90	1080.00	lb	-29	6	42	78	115	151	187	223	259	295	332
			-203	-167	-131	-95	-58	-22	13	49	85	121	158
100	1200.00	lb	17	57	97	137	178	218	258	298	338	379	419
			-156	-116	-76	-36	4	44	84	124	164	205	245
110	1320.00	lb	64	108	152	197	241	285	329	373	418	462	506
			-109	-65	-21	23	67	111	155	199	244	288	332
120	1440.00	lb	111	159	207	256	304	352	400	449	497	545	593
			-62	-14	33	82	130	178	226	275	323	371	419
130	1560.00	lb	158	210	263	315	367	419	472	524	576	628	681
			-15	36	89	141	193	245	298	350	402	454	507
140	1680.00	lb	205	261	318	374	430	486	543	599	655	712	768
			31	87	144	200	256	312	369	425	481	538	594
150	1800.00	lb	252	312	373	433	493	554	614	674	734	795	855
			78	138	199	259	319	380	440	500	561	621	681

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

Table 6.A Estimated costs per acre  
Cotton, 12R-38" solid, no-till  
B2XF variety, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	2.5000	16.25	_____
App by Air ( 3 gal)	appl	5.00	5.2500	26.25	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.44	2.3000	3.31	_____
Ethephon 6E	pt	3.38	2.3125	7.82	_____
Tribufos 6lb	pt	9.32	0.5000	4.66	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	16.97	1.5000	25.46	_____
UAN (32%)	gal	1.58	25.4000	40.13	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.18	0.5000	5.59	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	14.99	1.0000	14.99	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Cotoran	pt	6.31	2.0000	12.62	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
Diuron	pt	3.36	1.6000	5.38	_____
INSECTICIDES					
Acephate 90%	lb	9.80	1.7500	17.15	_____
Bidrin 8WM	oz	1.12	2.2000	2.46	_____
Centric 40WG	oz	5.21	2.0000	10.42	_____
Diamond .83EC	oz	1.37	6.0000	8.22	_____
Admire Pro	oz	1.72	2.0000	3.44	_____
Bifenthrin	oz	1.03	12.8000	13.18	_____
Karate Z	oz	2.58	0.5000	1.29	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.90	1.5000	11.85	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	0.89	45.0000	40.05	_____
TECHNOLOGY FEE					
B2XF Cot Tech Fee	thous	1.49	42.1000	62.73	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4000	1.48	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2712	3.57	_____
Self-Propelled	hour	13.14	0.2310	3.02	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	13.13	0.4018	5.28	_____
DIESEL FUEL					
Tractors	gal	1.70	3.1417	5.34	_____
Self-Propelled	gal	1.70	5.0512	8.58	_____
REPAIR & MAINTENANCE					
Implements	acre	4.70	1.0000	4.70	_____
Tractors	acre	1.84	1.0000	1.84	_____
Self-Propelled	acre	20.76	1.0000	20.76	_____
INTEREST ON OP. CAP.	acre	12.71	1.0000	12.71	_____
TOTAL DIRECT EXPENSES				648.25	_____
FIXED EXPENSES					
Implements	acre	6.29	1.0000	6.29	_____
Tractors	acre	11.64	1.0000	11.64	_____
Self-Propelled	acre	83.80	1.0000	83.80	_____
TOTAL FIXED EXPENSES				101.73	_____
TOTAL SPECIFIED EXPENSES				749.98	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, no-till  
 B2XF variety, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.67	900.0000	603.00	_____
Cotton Seed	lb	0.09	1350.0000	133.65	_____
				-----	
TOTAL INCOME				736.65	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.79	1.0000	15.79	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	65.59	1.0000	65.59	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	99.40	1.0000	99.40	_____
INSECTICIDES	acre	80.01	1.0000	80.01	_____
SEED/PLANTS	acre	40.05	1.0000	40.05	_____
TECHNOLOGY FEE	acre	62.73	1.0000	62.73	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	1.48	1.0000	1.48	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3014	2.72	_____
OPERATOR LABOR	hour	13.14	0.5023	6.59	_____
UNALLOCATED LABOR	hour	13.13	0.4018	5.28	_____
DIESEL FUEL	gal	1.70	8.1930	13.92	_____
REPAIR & MAINTENANCE	acre	27.30	1.0000	27.30	_____
INTEREST ON OP. CAP.	acre	12.71	1.0000	12.71	_____
				-----	
TOTAL DIRECT EXPENSES				648.25	_____
RETURNS ABOVE DIRECT EXPENSES				88.40	_____
TOTAL FIXED EXPENSES					
				101.73	_____
				-----	
TOTAL SPECIFIED EXPENSES				749.98	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-13.33	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, no-till  
 B2XF variety, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.6600				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed B2XF	thous					45.0000				
B2XF Cot Tech Fee	thous					42.1000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8WM	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					25.4000				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Karate Z	oz					0.5000				
Bidrin 8WM	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air ( 3 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38 (500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	900.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.50	0.27	0.80	0.40

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, no-till  
 B2XF variety, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	30.36						1.44	31.80	31.80
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Potash (60% K20)	cwt	25.46						1.21	26.67	26.67
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Clarity	pt	5.59						0.18	5.77	5.77
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62	4.62
Select Max	pt	14.99						0.47	15.46	15.46
Surfactant	pt	0.74						0.02	0.76	0.76
Row Cond Folding	38'		0.80	0.53	0.97			0.05	2.35	2.81
NT Plant-Folding	12R-38		1.02	1.88	1.69			0.11	4.70	5.15
Cotton Seed B2XF	thous	40.05						0.95	41.00	41.00
B2XF Cot Tech Fee	thous	62.73						1.49	64.22	64.22
Cotton Seed Trt.	acre	20.00						0.48	20.48	20.48
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Cotoran	pt	12.62						0.30	12.92	12.92
Surfactant	pt	0.74						0.02	0.76	0.76
Cotton Consultant	acre	8.00						0.19	8.19	8.19
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.02	0.76	1.13
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Acephate 90%	lb	2.45						0.06	2.51	2.51
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Bidrin 8WM	oz	0.22						0.01	0.23	0.23
Sprayer 600-825gal	90' 250hp		0.25	0.17	0.32			0.01	0.75	1.13
Centric 40WG	oz	10.42						0.21	10.63	10.63
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Fert Appl (Liquid)	12R-38		1.02	0.96	1.45			0.07	3.50	2.91
UAN (32%)	gal	40.13						0.79	40.92	40.92
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Diamond .83EC	oz	8.22						0.16	8.38	8.38
Admire Pro	oz	3.44						0.07	3.51	3.51
Spray (Direct/Layby)	12R-38		0.88	0.66	1.26			0.06	2.86	2.34
Diuron	pt	5.38						0.11	5.49	5.49
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	7.35						0.12	7.47	7.47
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	6.59						0.10	6.69	6.69
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.29						0.02	1.31	1.31
Bidrin 8WM	oz	2.24						0.04	2.28	2.28
Incidental Pest										
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Incidental Pest Trt	acre	12.00						0.19	12.19	12.19
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	7.35						0.09	7.44	7.44
Bifenthrin	oz	6.59						0.08	6.67	6.67
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Transform WG	oz	11.85						0.14	11.99	11.99
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	3.31						0.03	3.34	3.34
Ethephon 6E	pt	6.76						0.05	6.81	6.81
App by Air ( 5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	4.66						0.04	4.70	4.70
Ethephon 6E	pt	1.06						0.01	1.07	1.07
Cotton Picker/Module	6R-38(500)		7.54	20.06	5.63			0.13	33.36	79.14
Gin & Haul	lb	99.00						0.39	99.39	99.39
Stalk Shredder-Flail	20'		1.62	2.51	1.95			0.02	6.10	4.72
TOTALS		579.73	13.92	27.30	14.59	0.00	12.71	648.25	101.73	749.98

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.E Estimated monthly income and expense flows per acre  
Cotton, 12R-38" solid, no-till  
B2XF variety, Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	736.65
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.00
FERTILIZERS	25.46	0.00	0.00	0.00	0.00	0.00	0.00	40.13	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	64.48	9.86	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.67	22.08	29.47	25.79	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	40.05	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	62.73	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	1.76	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.74	0.00	0.74	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	3.98	3.03	0.00	0.00	0.00	7.58
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	0.00	0.00	0.00	0.00	0.00	0.00	2.61	2.15	0.00	0.00	0.00	9.16
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	2.94	1.79	0.00	0.00	0.00	22.57
INTEREST ON OP. CAP.	3.14	0.00	0.00	0.00	1.02	0.00	4.99	1.70	0.68	0.43	0.21	0.54
TOTAL DIRECT EXPENSES	69.26	0.00	0.00	0.00	33.32	0.00	214.19	87.50	43.16	36.22	25.75	138.85
NET INCOME	-69.26	0.00	0.00	0.00	-33.32	0.00	-214.19	-87.50	-43.16	-36.22	-25.75	597.80
NET INCOME TO DATE	-69.26	-69.26	-69.26	-69.26	-102.58	-102.58	-316.77	-404.27	-447.43	-483.65	-509.40	88.40

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.



Table 6.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, no-till  
 B2XF variety, Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.50	0.53	0.56	0.60	0.63	0.67	0.70	0.73	0.77	0.80	0.83		
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-238	-223	-208	-193	-178	-163	-148	-133	-118	-103	-88
			-340	-325	-310	-295	-280	-265	-250	-234	-219	-204	-189
60	540.00	lb	-203	-185	-167	-149	-131	-113	-94	-76	-58	-40	-22
			-305	-287	-269	-250	-232	-214	-196	-178	-160	-142	-124
70	630.00	lb	-168	-147	-125	-104	-83	-62	-41	-20	0	21	42
			-269	-248	-227	-206	-185	-164	-143	-122	-101	-79	-58
80	720.00	lb	-132	-108	-84	-60	-36	-12	11	35	60	84	108
			-234	-210	-186	-162	-138	-114	-89	-65	-41	-17	6
90	810.00	lb	-97	-70	-43	-16	10	38	65	92	119	146	173
			-199	-172	-145	-117	-90	-63	-36	-9	17	44	71
100	900.00	lb	-62	-32	-2	28	58	88	118	148	178	209	239
			-164	-133	-103	-73	-43	-13	16	46	77	107	137
110	990.00	lb	-27	6	39	72	105	138	171	205	238	271	304
			-128	-95	-62	-29	3	37	70	103	136	169	202
120	1080.00	lb	8	44	80	116	152	189	225	261	297	333	370
			-93	-57	-21	15	51	87	123	159	195	232	268
130	1170.00	lb	43	82	121	161	200	239	278	317	357	396	435
			-58	-19	20	59	98	137	176	216	255	294	333
140	1260.00	lb	78	121	163	205	247	289	332	374	416	458	500
			-22	19	61	103	145	188	230	272	314	356	399
150	1350.00	lb	114	159	204	249	294	340	385	430	475	521	566
			12	57	102	148	193	238	283	328	374	419	464

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

Table 7.A Estimated costs per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2XF variety, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	2.5000	16.25	_____
App by Air ( 3 gal)	appl	5.00	5.2500	26.25	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.44	2.3000	3.31	_____
Ethephon 6E	pt	3.38	2.3125	7.82	_____
Tribufos 6lb	pt	9.32	0.5000	4.66	_____
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	_____
FERTILIZERS					
Potash (60% K2O)	cwt	16.97	1.3500	22.91	_____
UAN (32%)	gal	1.58	32.5498	51.43	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____
HERBICIDES					
Clarity	pt	11.18	0.5000	5.59	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	14.99	1.0000	14.99	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Cotoran	pt	6.31	2.0000	12.62	_____
Dual Magnum	pt	14.97	1.6700	25.00	_____
Diuron	pt	3.36	1.1000	3.70	_____
INSECTICIDES					
Acephate 90%	lb	9.80	1.7500	17.15	_____
Bidrin 8WM	oz	1.12	2.2000	2.46	_____
Centric 40WG	oz	5.21	1.3400	6.98	_____
Diamond .83EC	oz	1.37	6.0000	8.22	_____
Admire Pro	oz	1.72	2.0000	3.44	_____
Bifenthrin	oz	1.03	12.8000	13.18	_____
Karate Z	oz	2.58	0.5000	1.29	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.90	1.5000	11.85	_____
SEED/PLANTS					
Cotton Seed B2XF	thous	0.89	30.0000	26.70	_____
TECHNOLOGY FEE					
B2XF Cot Tech Fee	thous	1.49	30.0000	44.70	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	26.7200	2.94	_____
ADJUVANTS					
Surfactant	pt	3.69	0.4000	1.48	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.8605	11.32	_____
Self-Propelled	hour	13.14	0.2075	2.72	_____
HAND LABOR					
Implements	hour	9.06	0.3404	3.07	_____
Self-Propelled	hour	9.06	0.1899	1.72	_____
UNALLOCATED LABOR					
	hour	13.15	0.8544	11.24	_____
DIESEL FUEL					
Tractors	gal	1.70	9.9659	16.96	_____
Self-Propelled	gal	1.70	3.4215	5.82	_____
REPAIR & MAINTENANCE					
Implements	acre	10.15	1.0000	10.15	_____
Tractors	acre	5.85	1.0000	5.85	_____
Self-Propelled	acre	9.97	1.0000	9.97	_____
INTEREST ON OP. CAP.	acre	12.28	1.0000	12.28	_____
TOTAL DIRECT EXPENSES				621.16	_____
FIXED EXPENSES					
Implements	acre	16.03	1.0000	16.03	_____
Tractors	acre	36.92	1.0000	36.92	_____
Self-Propelled	acre	40.33	1.0000	40.33	_____
TOTAL FIXED EXPENSES				93.28	_____
TOTAL SPECIFIED EXPENSES				714.44	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year..**

Table 7.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2XF variety, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.67	811.0000	543.37	_____
Cotton Seed	lb	0.09	1217.0000	120.48	_____
				-----	
TOTAL INCOME				663.85	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.79	1.0000	15.79	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	74.33	1.0000	74.33	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	92.78	1.0000	92.78	_____
INSECTICIDES	acre	76.57	1.0000	76.57	_____
SEED/PLANTS	acre	26.70	1.0000	26.70	_____
TECHNOLOGY FEE	acre	44.70	1.0000	44.70	_____
GROWTH REGULATORS	acre	2.94	1.0000	2.94	_____
ADJUVANTS	acre	1.48	1.0000	1.48	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.5303	4.79	_____
OPERATOR LABOR	hour	13.14	1.0680	14.04	_____
UNALLOCATED LABOR	hour	13.15	0.8544	11.24	_____
DIESEL FUEL	gal	1.70	13.3875	22.78	_____
REPAIR & MAINTENANCE	acre	25.97	1.0000	25.97	_____
INTEREST ON OP. CAP.	acre	12.28	1.0000	12.28	_____
				-----	
TOTAL DIRECT EXPENSES				621.16	_____
RETURNS ABOVE DIRECT EXPENSES				42.69	_____
TOTAL FIXED EXPENSES				93.28	_____
				-----	
TOTAL SPECIFIED EXPENSES				714.44	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-50.59	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 7.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2XF variety, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.6600				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.3500				
Bed-Paratill Fold	8R-38 2x1	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	8R-38 2x1	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	8R-38 2x1	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B2XF	thous					30.0000				
B2XF Cot Tech Fee	thous					30.0000				
Cotton Seed Trt.	acre					0.6700				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	May		0.04	0.04	0.06	0.03
Dual Magnum	pt					0.6700				
Glyphosate 3lbs a.e	oz					32.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8WM	oz					0.2000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Centric 40WG	oz					1.3400				
Mepiquat Chloride	oz					10.7200				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.1000				
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Karate Z	oz					0.5000				
Bidrin 8WM	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air ( 3 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R2x1 (350)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	4R2x1 (350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1 (350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	811.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.06	0.86	1.59	0.85

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 7.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2XF variety, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	30.36						1.44	31.80	31.80
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Potash (60% K2O)	cwt	22.91						1.09	24.00	24.00
Bed-Paratill Fold	8R-38 2x1		1.06	1.71	1.28			0.19	4.24	4.64
Bed/Disk (Hipper)	8R-38 2x1		0.49	0.38	0.58			0.07	1.52	1.61
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Clarity	pt	5.59						0.18	5.77	5.77
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62	4.62
Select Max	pt	14.99						0.47	15.46	15.46
Surfactant	pt	0.74						0.02	0.76	0.76
Fert Appl (Liquid)	8R-38 2x1		1.02	0.96	1.45			0.10	3.53	2.91
UAN (32%)	gal	25.71						0.71	26.42	26.42
Row Cond Folding	38'		0.80	0.53	0.97			0.05	2.35	2.81
Plant - Folding	8R-38 2x1		0.98	1.68	1.62			0.10	4.38	4.69
Cotton Seed B2XF	thous	26.70						0.63	27.33	27.33
B2XF Cot Tech Fee	thous	44.70						1.06	45.76	45.76
Cotton Seed Trt.	acre	13.40						0.32	13.72	13.72
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Gramoxone SL 2.0	oz	12.96						0.31	13.27	13.27
Cotoran	pt	12.62						0.30	12.92	12.92
Surfactant	pt	0.74						0.02	0.76	0.76
Cotton Consultant	acre	8.00						0.19	8.19	8.19
Eradication	acre	1.00						0.02	1.02	1.02
Spray (Direct/Layby)	8R-38 2x1		0.88	0.66	1.26			0.07	2.87	2.34
Dual Magnum	pt	10.03						0.24	10.27	10.27
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Acephate 90%	lb	2.45						0.06	2.51	2.51
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20
Dual Magnum	pt	14.97						0.36	15.33	15.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Bidrin 8WM	oz	0.22						0.01	0.23	0.23
Spray (Direct/Layby)	8R-38 2x1		0.88	0.66	1.26			0.06	2.86	2.34
Centric 40WG	oz	6.98						0.14	7.12	7.12
Mepiquat Chloride	oz	1.18						0.02	1.20	1.20
Fert Appl (Liquid)	8R-38 2x1		1.02	0.96	1.45			0.07	3.50	2.91
UAN (32%)	gal	25.71						0.51	26.22	26.22
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Diamond .83EC	oz	8.22						0.16	8.38	8.38
Admire Pro	oz	3.44						0.07	3.51	3.51
Spray (Direct/Layby)	8R-38 2x1		0.88	0.66	1.26			0.04	2.84	2.34
Diuron	pt	3.70						0.06	3.76	3.76
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55	4.55
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	7.35						0.12	7.47	7.47
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	6.59						0.10	6.69	6.69
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.29						0.02	1.31	1.31
Bidrin 8WM	oz	2.24						0.04	2.28	2.28
Incidental Pest										
App by Air ( 3 gal)	appl	5.00						0.08	5.08	5.08
Incidental Pest Trt	acre	12.00						0.19	12.19	12.19
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	7.35						0.09	7.44	7.44
Bifenthrin	oz	6.59						0.08	6.67	6.67
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Transform WG	oz	11.85						0.14	11.99	11.99
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	3.31						0.03	3.34	3.34
Ethephon 6E	pt	6.76						0.05	6.81	6.81
App by Air ( 5 gal)	appl	3.25						0.03	3.28	3.28
Ethephon 6E	pt	1.06						0.01	1.07	1.07
Tribufos 6lb	pt	4.66						0.04	4.70	4.70
Cotton Picker	4R2x1 (350)		5.28	9.61	5.63			0.08	20.60	37.93
Boll Buggy	4R2x1 (350)		3.39	2.48	4.07			0.04	9.98	10.06
Module Builder	4R2x1 (350)		3.39	2.66	5.63			0.05	11.73	10.43
Gin & Haul	lb	89.21						0.35	89.56	89.56
Stalk Shredder-Flail	15'		2.17	2.66	2.61			0.03	7.47	5.87
TOTALS		530.06	22.78	25.97	30.07	0.00	12.28	621.16	93.28	714.44

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 7.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2XF variety, Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	663.85
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.21
FERTILIZERS	22.91	0.00	0.00	0.00	0.00	25.71	0.00	25.71	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	13.40	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	59.54	0.00	8.18	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.67	18.64	29.47	25.79	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	26.70	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	44.70	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	1.76	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.74	0.00	0.74	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.86	0.00	0.00	0.00	0.00	1.45	4.85	2.71	1.26	0.00	0.00	17.94
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	1.55	0.00	0.00	0.00	0.00	1.02	3.20	1.90	0.88	0.00	0.00	14.23
REPAIR & MAINTENANCE	2.09	0.00	0.00	0.00	0.00	0.96	3.23	1.62	0.66	0.00	0.00	17.41
INTEREST ON OP. CAP.	3.28	0.00	0.00	0.00	1.02	0.81	4.00	1.13	0.85	0.43	0.21	0.55
TOTAL DIRECT EXPENSES	72.35	0.00	0.00	0.00	33.32	29.95	172.03	57.89	54.31	36.22	25.75	139.34
NET INCOME	-72.35	0.00	0.00	0.00	-33.32	-29.95	-172.03	-57.89	-54.31	-36.22	-25.75	524.51
NET INCOME TO DATE	-72.35	-72.35	-72.35	-72.35	-105.67	-135.62	-307.65	-365.54	-419.85	-456.07	-481.82	42.69

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2XF variety, Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Cotton Lint	0.50	0.53	0.56	0.60	0.63	0.67	0.70	0.73	0.77	0.80	0.83		
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-252 -345	-238 -331	-224 -318	-211 -304	-197 -291	-184 -277	-170 -263	-157 -250	-143 -236	-129 -223	-116 -209
60	486.60	lb	-220 -313	-204 -297	-187 -281	-171 -264	-155 -248	-138 -232	-122 -215	-106 -199	-89 -183	-73 -166	-57 -150
70	567.70	lb	-188 -281	-169 -262	-150 -243	-131 -224	-112 -205	-93 -186	-74 -167	-55 -148	-36 -129	-17 -110	1 -91
80	648.80	lb	-156 -250	-135 -228	-113 -206	-91 -184	-69 -163	-48 -141	-26 -119	-4 -97	17 -76	38 -54	60 -32
90	729.90	lb	-124 -218	-100 -193	-76 -169	-51 -144	-27 -120	-2 -95	21 -71	46 -47	70 -22	95 1	119 26
100	811.00	lb	-93 -186	-65 -159	-38 -132	-11 -104	15 -77	42 -50	69 -23	97 3	124 30	151 58	178 85
110	892.10	lb	-61 -154	-31 -124	-1 -94	28 -64	58 -35	88 -5	117 24	147 54	177 84	207 114	237 144
120	973.20	lb	-29 -122	3 -90	35 -57	68 -25	100 7	133 40	166 72	198 105	231 137	263 170	296 203
130	1054.30	lb	2 -91	37 -55	72 -20	108 14	143 50	178 85	214 120	249 156	284 191	320 226	355 262
140	1135.40	lb	34 -59	72 -21	110 16	148 54	186 92	224 130	262 168	300 207	338 245	376 283	414 321
150	1216.50	lb	65 -27	106 13	147 54	188 94	228 135	269 176	310 217	351 257	391 298	432 339	473 380

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

Table 8.A Estimated costs per acre  
Soybeans, early-planted, RR, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.0000	19.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Valor SX	oz	6.60	2.0000	13.20	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.0000	3.69	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3302	4.35	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	13.12	0.3892	5.11	_____
DIESEL FUEL					
Tractors	gal	1.70	3.8252	6.51	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.80	1.0000	4.80	_____
Tractors	acre	2.24	1.0000	2.24	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	8.84	1.0000	8.84	_____
TOTAL DIRECT EXPENSES				329.51	_____
FIXED EXPENSES					
Implements	acre	9.56	1.0000	9.56	_____
Tractors	acre	14.16	1.0000	14.16	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				37.28	_____
TOTAL SPECIFIED EXPENSES				366.79	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.



Table 8.B Summary of estimated costs and returns per acre  
Soybeans, early-planted, RR, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	42.0000	409.08	_____
				-----	
TOTAL INCOME				409.08	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	93.21	1.0000	93.21	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	3.70	1.0000	3.70	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	13.14	0.4324	5.69	_____
UNALLOCATED LABOR	hour	13.12	0.3892	5.11	_____
DIESEL FUEL	gal	1.70	5.2188	8.88	_____
REPAIR & MAINTENANCE	acre	10.48	1.0000	10.48	_____
INTEREST ON OP. CAP.	acre	8.84	1.0000	8.84	_____
				-----	
TOTAL DIRECT EXPENSES				329.51	_____
RETURNS ABOVE DIRECT EXPENSES				79.57	_____
TOTAL FIXED EXPENSES				37.28	_____
				-----	
TOTAL SPECIFIED EXPENSES				366.79	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				42.29	_____

Note: Cost of production estimates are based on 2016 input prices.  
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.C Estimated resource use for field operations, per acre  
Soybeans, early-planted, RR, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
<b>TOTALS</b>							<b>0.43</b>	<b>0.43</b>	<b>0.52</b>	<b>0.38</b>

Note: Cost of production estimates are based on 2016 input prices.  
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.D Estimated costs for field operations, per acre  
Soybeans, early-planted, RR, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Field Cultivate Fld	24'		1.23	0.81	1.56			0.17	3.77	4.33	8.10
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Select Max	pt	14.99						0.47	15.46		15.46
Valor SX	oz	13.20						0.42	13.62		13.62
Surfactant	pt	1.48						0.05	1.53		1.53
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed RR2	lb	63.00						1.50	64.50		64.50
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
Prefix	pt	12.68						0.25	12.93		12.93
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Acephate 90SP	lb	6.52						0.05	6.57		6.57
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	11.34						0.04	11.38		11.38
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
<b>TOTALS</b>		<b>289.64</b>	<b>8.88</b>	<b>10.48</b>	<b>11.67</b>	<b>0.00</b>	<b>8.84</b>	<b>329.51</b>	<b>37.28</b>	<b>366.79</b>	

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 8.E Estimated monthly income and expense flows per acre  
Soybeans, early-planted, RR, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	409.08
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	38.25	0.00	33.32	21.64	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.48	0.00	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.63	0.00	0.00	0.00	0.00	0.00	2.30	1.66	0.00	0.00	0.00	3.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.64	0.00	0.00	0.00	0.00	0.00	1.33	1.12	0.00	0.00	0.00	2.79
REPAIR & MAINTENANCE	2.67	0.00	0.00	0.00	0.00	0.00	2.26	0.88	0.00	0.00	0.00	4.67
INTEREST ON OP. CAP.	3.70	0.00	0.00	0.00	1.47	0.00	2.71	0.64	0.00	0.00	0.23	0.09
TOTAL DIRECT EXPENSES	81.73	0.00	0.00	0.00	47.70	0.00	116.76	32.44	0.00	0.00	28.91	21.97
NET INCOME	-81.73	0.00	0.00	0.00	-47.70	0.00	-116.76	-32.44	0.00	0.00	-28.91	387.11
NET INCOME TO DATE	-81.73	-81.73	-81.73	-81.73	-129.43	-129.43	-246.19	-278.63	-278.63	-278.63	-307.54	79.57

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, early-planted, RR, stale seedbed, 12R 30"  
 Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
			dollars										
PERCENT	YIELD	UNIT											
50	21.00	bu	-170 -207	-160 -197	-149 -187	-139 -177	-129 -166	-119 -156	-109 -146	-98 -136	-88 -125	-78 -115	-68 -105
60	25.20	bu	-140 -178	-128 -165	-116 -153	-104 -141	-91 -129	-79 -116	-67 -104	-54 -92	-42 -79	-30 -67	-18 -55
70	29.40	bu	-111 -148	-97 -134	-82 -119	-68 -105	-54 -91	-39 -77	-25 -62	-11 -48	3 -34	17 -19	31 -5
80	33.60	bu	-81 -119	-65 -102	-49 -86	-32 -69	-16 -53	0 -37	16 -20	32 -4	49 11	65 28	81 44
90	37.80	bu	-52 -89	-33 -71	-15 -52	2 -34	21 -15	39 2	58 20	76 39	95 57	113 76	131 94
100	42.00	bu	-22 -59	-2 -39	18 -19	38 1	59 21	79 42	100 62	120 83	140 103	161 124	181 144
110	46.20	bu	6 -30	29 -7	51 14	74 37	96 59	119 82	141 104	164 127	186 149	209 172	231 194
120	50.40	bu	36 -0	60 23	85 48	110 72	134 97	159 121	183 146	208 170	232 195	257 220	281 244
130	54.60	bu	65 28	92 55	119 81	145 108	172 135	198 161	225 188	252 214	278 241	305 267	331 294
140	58.80	bu	95 58	124 86	152 115	181 144	210 172	238 201	267 230	295 258	324 287	353 315	381 344
150	63.00	bu	125 87	155 118	186 149	217 179	247 210	278 241	309 271	339 302	370 333	401 363	431 394

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

Table 9.A Estimated costs per acre  
Soybeans, early-planted, RR, stale seedbed, 12R 30"  
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Valor SX	oz	6.60	2.0000	13.20	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.1000	4.06	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4713	6.20	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	13.13	0.4454	5.85	_____
DIESEL FUEL					
Tractors	gal	1.70	5.2753	8.98	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Roll-Out Pipe Irr.	gal	1.70	7.3316	12.45	_____
REPAIR & MAINTENANCE					
Implements	acre	5.46	1.0000	5.46	_____
Tractors	acre	3.11	1.0000	3.11	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Roll-Out Pipe Irr.	acre	6.34	1.0000	6.34	_____
INTEREST ON OP. CAP.	acre	9.88	1.0000	9.88	_____
TOTAL DIRECT EXPENSES				399.29	_____
FIXED EXPENSES					
Implements	acre	11.79	1.0000	11.79	_____
Tractors	acre	19.59	1.0000	19.59	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				96.47	_____
TOTAL SPECIFIED EXPENSES				495.76	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.B Summary of estimated costs and returns per acre  
 Soybeans, early-planted, RR, stale seedbed, 12R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	60.0000	584.40	_____
				-----	
TOTAL INCOME				584.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	93.21	1.0000	93.21	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	4.07	1.0000	4.07	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	13.14	0.5735	7.54	_____
UNALLOCATED LABOR	hour	13.13	0.4454	5.85	_____
DIESEL FUEL	gal	1.70	14.0006	23.80	_____
REPAIR & MAINTENANCE	acre	18.35	1.0000	18.35	_____
INTEREST ON OP. CAP.	acre	9.88	1.0000	9.88	_____
				-----	
TOTAL DIRECT EXPENSES				399.29	_____
RETURNS ABOVE DIRECT EXPENSES				185.11	_____
TOTAL FIXED EXPENSES				96.47	_____
				-----	
TOTAL SPECIFIED EXPENSES				495.76	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				88.64	_____

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.C Estimated resource use for field operations, per acre  
 Soybeans, early-planted, RR, stale seedbed, 12R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
<b>TOTALS</b>							0.57	0.57	1.03	0.44

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.



Table 9.D Estimated costs for field operations, per acre  
 Soybeans, early-planted, RR, stale seedbed, 12R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Field Cultivate Fld	24'		1.23	0.81	1.56			0.17	3.77	4.33	8.10
Bed/Lister-Roll-Fold	12R-30		1.23	0.89	1.56			0.17	3.85	3.89	7.74
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Select Max	pt	14.99						0.47	15.46		15.46
Valor SX	oz	13.20						0.42	13.62		13.62
Surfactant	pt	1.48						0.05	1.53		1.53
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed RR2	lb	63.00						1.50	64.50		64.50
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
Prefix	pt	12.68						0.25	12.93		12.93
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Quadris Top	oz	20.08						0.24	20.32		20.32
Surfactant	pt	0.37							0.37		0.37
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Acephate 90SP	lb	6.52						0.05	6.57		6.57
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	16.20						0.06	16.26		16.26
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
Roll-Out Pipe Irr.	acre	8.25	13.69	6.98	4.33			0.53	33.78	55.30	89.08
TOTALS		329.70	23.80	18.35	17.56	0.00	9.88	399.29	96.47	495.76	

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 9.E Estimated monthly income and expense flows per acre  
Soybeans, early-planted, RR, stale seedbed, 12R 30"  
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	584.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	0.00	20.08	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	38.25	0.00	33.32	21.64	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.48	0.00	1.48	0.00	0.00	0.37	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.69	0.00	0.00	0.00	0.00	0.00	2.30	1.89	2.78	0.23	0.00	3.67
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	5.50	0.00	0.00	0.00	0.00	0.00	1.33	1.12	8.63	4.15	0.00	3.07
REPAIR & MAINTENANCE	3.89	0.00	0.00	0.00	0.00	0.00	2.26	0.88	5.21	1.30	0.00	4.81
INTEREST ON OP. CAP.	3.94	0.00	0.00	0.00	1.47	0.00	2.71	0.64	0.40	0.38	0.23	0.11
TOTAL DIRECT EXPENSES	87.11	0.00	0.00	0.00	47.70	0.00	116.76	32.67	25.27	33.01	28.91	27.86
NET INCOME	-87.11	0.00	0.00	0.00	-47.70	0.00	-116.76	-32.67	-25.27	-33.01	-28.91	556.54
NET INCOME TO DATE	-87.11	-87.11	-87.11	-87.11	-134.81	-134.81	-251.57	-284.24	-309.51	-342.52	-371.43	185.11

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre\* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, early-planted, RR, stale seedbed, 12R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-172	-157	-142	-128	-113	-98	-84	-69	-55	-40	-25
			-268	-253	-239	-224	-210	-195	-180	-166	-151	-136	-122
60	36.00	bu	-129	-112	-94	-77	-59	-42	-24	-7	10	27	45
			-226	-208	-191	-173	-156	-138	-121	-103	-86	-68	-50
70	42.00	bu	-87	-67	-46	-26	-5	14	35	55	76	96	116
			-184	-163	-143	-122	-102	-81	-61	-40	-20	0	20
80	48.00	bu	-45	-22	1	24	48	71	94	118	141	164	188
			-141	-118	-95	-71	-48	-24	-1	21	45	68	91
90	54.00	bu	-3	23	49	75	101	128	154	180	207	233	259
			-99	-73	-47	-20	5	31	58	84	110	137	163
100	60.00	bu	39	68	97	126	155	185	214	243	272	301	331
			-57	-28	0	30	59	88	117	147	176	205	234
110	66.00	bu	81	113	145	177	209	241	274	306	338	370	402
			-15	16	49	81	113	145	177	209	241	274	306
120	72.00	bu	123	158	193	228	263	298	333	368	403	438	474
			26	62	97	132	167	202	237	272	307	342	377
130	78.00	bu	165	203	241	279	317	355	393	431	469	507	545
			69	107	145	183	221	259	297	335	373	411	449
140	84.00	bu	207	248	289	330	371	412	453	494	535	575	616
			111	152	193	234	274	315	356	397	438	479	520
150	90.00	bu	250	293	337	381	425	469	513	556	600	644	688
			153	197	241	285	328	372	416	460	504	548	591

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

Table 10.A Estimated costs per acre  
Soybeans, May-planted, RR, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.7500	24.38	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	10.5000	13.76	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.4000	5.17	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2631	3.46	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR	hour	13.07	0.3287	4.30	_____
DIESEL FUEL					
Tractors	gal	1.70	3.0471	5.19	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.18	1.0000	4.18	_____
Tractors	acre	1.78	1.0000	1.78	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	9.43	1.0000	9.43	_____
TOTAL DIRECT EXPENSES				372.45	_____
FIXED EXPENSES					
Implements	acre	6.97	1.0000	6.97	_____
Tractors	acre	11.28	1.0000	11.28	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				31.81	_____
TOTAL SPECIFIED EXPENSES				404.26	_____

Note: Cost of production estimates are based on 2016 input prices.  
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.B Summary of estimated costs and returns per acre  
Soybeans, May-planted, RR, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	40.0000	389.60	_____
				-----	
TOTAL INCOME				389.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.38	1.0000	24.38	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	111.82	1.0000	111.82	_____
INSECTICIDES	acre	28.28	1.0000	28.28	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	5.18	1.0000	5.18	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
OPERATOR LABOR	hour	13.14	0.3652	4.80	_____
UNALLOCATED LABOR	hour	13.07	0.3287	4.30	_____
DIESEL FUEL	gal	1.70	4.4407	7.56	_____
REPAIR & MAINTENANCE	acre	9.40	1.0000	9.40	_____
INTEREST ON OP. CAP.	acre	9.43	1.0000	9.43	_____
				-----	
TOTAL DIRECT EXPENSES				372.45	_____
RETURNS ABOVE DIRECT EXPENSES				17.15	_____
TOTAL FIXED EXPENSES				31.81	_____
				-----	
TOTAL SPECIFIED EXPENSES				404.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-14.66	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.C Estimated resource use for field operations, per acre  
Soybeans, May-planted, RR, 12R 30"  
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Nov		0.04	0.04	0.04	0.03
Disk Harrow	24'	MFWD 225	0.081	0.25	Nov		0.02	0.02	0.02	0.01
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			0.75	Aug	0.7500				
Prevathon	oz					10.5000				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
TOTALS							0.36	0.36	0.48	0.32

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.D Estimated costs for field operations, per acre  
Soybeans, May-planted, RR, 12R 30"  
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Disk Harrow	24'		0.40	0.38	0.51			0.06	1.35	1.39	2.74
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus(46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed RR2	lb	63.00						1.50	64.50		64.50
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Prefix	pt	12.68						0.30	12.98		12.98
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air ( 5 gal)	appl	4.88						0.06	4.94		4.94
Prevathon	oz	13.76						0.16	13.92		13.92
Incidental Pest											
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	10.80						0.04	10.84		10.84
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
TOTALS		335.83	7.56	9.40	10.23	0.00		9.43	372.45	31.81	404.26

Note: Cost of production estimates are based on 2016 input prices.  
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 10.E Estimated monthly income and expense flows per acre  
Soybeans, May-planted, RR, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	389.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.38	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	50.48	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.53	0.00	0.00	0.83	0.00	0.83	3.13	0.83	0.00	0.00	0.00	3.08
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	1.20	0.00	0.00	0.56	0.00	0.56	1.89	0.56	0.00	0.00	0.00	2.79
REPAIR & MAINTENANCE	0.71	0.00	0.00	0.44	0.00	0.44	2.70	0.44	0.00	0.00	0.00	4.67
INTEREST ON OP. CAP.	3.34	0.00	0.00	0.81	0.00	1.13	3.31	0.13	0.00	0.38	0.24	0.09
TOTAL DIRECT EXPENSES	73.87	0.00	0.00	23.59	0.00	41.83	142.85	6.44	0.00	32.04	30.40	21.43
NET INCOME	-73.87	0.00	0.00	-23.59	0.00	-41.83	-142.85	-6.44	0.00	-32.04	-30.40	368.17
NET INCOME TO DATE	-73.87	-73.87	-73.87	-97.46	-97.46	-139.29	-282.14	-288.58	-288.58	-320.62	-351.02	17.15

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.



Table 10.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-220	-211	-201	-191	-181	-172	-162	-152	-143	-133	-123
			-252	-243	-233	-223	-213	-204	-194	-184	-174	-165	-155
60	24.00	bu	-192	-181	-169	-157	-146	-134	-122	-110	-99	-87	-75
			-224	-212	-201	-189	-177	-166	-154	-142	-131	-119	-107
70	28.00	bu	-164	-151	-137	-123	-110	-96	-82	-69	-55	-41	-28
			-196	-182	-169	-155	-141	-128	-114	-101	-87	-73	-60
80	32.00	bu	-136	-120	-105	-89	-74	-58	-43	-27	-11	3	19
			-168	-152	-137	-121	-105	-90	-74	-59	-43	-28	-12
90	36.00	bu	-108	-90	-73	-55	-38	-20	-3	14	31	49	66
			-140	-122	-105	-87	-70	-52	-35	-17	0	17	35
100	40.00	bu	-80	-60	-41	-21	-2	17	36	56	75	95	114
			-112	-92	-73	-53	-34	-14	4	24	43	63	82
110	44.00	bu	-52	-30	-9	12	33	55	76	97	119	140	162
			-83	-62	-41	-19	1	23	44	66	87	108	130
120	48.00	bu	-23	-0	22	46	69	92	116	139	163	186	209
			-55	-32	-9	14	37	61	84	107	131	154	177
130	52.00	bu	4	29	54	80	105	130	156	181	206	232	257
			-27	-2	22	48	73	98	124	149	174	200	225
140	56.00	bu	32	59	86	114	141	168	195	223	250	277	305
			0	27	55	82	109	136	164	191	218	245	273
150	60.00	bu	60	89	118	148	177	206	235	264	294	323	352
			28	57	87	116	145	174	203	233	262	291	320

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

Table 11.A Estimated costs per acre  
Soybeans, May-planted, RR, 12R 30"  
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.5000	5.54	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4864	6.38	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL					
Tractors	gal	1.70	4.6503	7.94	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Contour Flood Irr.	gal	1.70	10.9974	18.69	_____
REPAIR & MAINTENANCE					
Implements	acre	5.08	1.0000	5.08	_____
Tractors	acre	2.78	1.0000	2.78	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Contour Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	10.69	1.0000	10.69	_____
TOTAL DIRECT EXPENSES				454.66	_____
FIXED EXPENSES					
Implements	acre	9.49	1.0000	9.49	_____
Tractors	acre	17.55	1.0000	17.55	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Contour Flood Irr.	acre	39.18	1.0000	39.18	_____
TOTAL FIXED EXPENSES				79.78	_____
TOTAL SPECIFIED EXPENSES				534.44	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.B Summary of estimated costs and returns per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	53.0000	516.22	_____
				-----	
TOTAL INCOME				516.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	111.82	1.0000	111.82	_____
INSECTICIDES	acre	32.86	1.0000	32.86	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	5.55	1.0000	5.55	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	13.14	0.5886	7.72	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL	gal	1.70	17.0414	29.00	_____
REPAIR & MAINTENANCE	acre	24.01	1.0000	24.01	_____
INTEREST ON OP. CAP.	acre	10.69	1.0000	10.69	_____
				-----	
TOTAL DIRECT EXPENSES				454.66	_____
RETURNS ABOVE DIRECT EXPENSES				61.56	_____
TOTAL FIXED EXPENSES				79.78	_____
				-----	
TOTAL SPECIFIED EXPENSES				534.44	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-18.22	_____

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.C Estimated resource use for field operations, per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Nov	0.3300				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
<b>TOTALS</b>							<b>0.58</b>	<b>0.58</b>	<b>1.02</b>	<b>0.34</b>

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.D Estimated costs for field operations, per acre  
Soybeans, May-planted, RR, 12R 30"  
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	5.04	10.13
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93	11.68
Soybean Seed RR2	lb	63.00						1.50	64.50		64.50
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33	3.08
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Prefix	pt	12.68						0.30	12.98		12.98
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33	3.07
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57		4.57
App by Air ( 5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top	oz	20.08						0.32	20.40		20.40
Surfactant	pt	0.37						0.01	0.38		0.38
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Prevathon	oz	18.34						0.22	18.56		18.56
Incidental Pest											
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	14.31						0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15	2.36
Contour Flood Irr.	acre	2.25	21.73	14.02	5.47			0.69	44.16	47.10	91.26
TOTALS		374.74	29.00	24.01	16.22	0.00	10.69	454.66	79.78	534.44	

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.E Estimated monthly income and expense flows per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	516.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	13.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	20.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	50.48	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.86	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.37	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.05	0.00	0.00	0.83	0.00	0.83	3.58	2.59	1.55	1.55	0.16	3.08
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	1.36	0.00	0.00	0.56	0.00	0.56	1.60	7.81	7.10	7.10	0.19	2.72
REPAIR & MAINTENANCE	1.45	0.00	0.00	0.44	0.00	0.44	2.60	8.38	2.98	2.98	0.09	4.65
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.81	0.00	1.13	3.31	0.48	0.61	0.60	0.24	0.10
TOTAL DIRECT EXPENSES	75.36	0.00	0.00	23.59	0.00	41.83	142.91	25.99	39.19	50.09	30.84	24.86
NET INCOME	-75.36	0.00	0.00	-23.59	0.00	-41.83	-142.91	-25.99	-39.19	-50.09	-30.84	491.36
NET INCOME TO DATE	-75.36	-75.36	-75.36	-98.95	-98.95	-140.78	-283.69	-309.68	-348.87	-398.96	-429.80	61.56

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre\* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-253 -333	-240 -320	-228 -307	-215 -294	-202 -282	-189 -269	-176 -256	-163 -243	-150 -230	-137 -217	-124 -204
60	31.80	bu	-216 -296	-201 -280	-185 -265	-170 -249	-154 -234	-139 -218	-123 -203	-108 -187	-92 -172	-77 -157	-61 -141
70	37.10	bu	-179 -259	-161 -241	-143 -222	-125 -204	-107 -186	-88 -168	-70 -150	-52 -132	-34 -114	-16 -96	1 -78
80	42.40	bu	-142 -221	-121 -201	-100 -180	-80 -159	-59 -139	-38 -118	-18 -97	2 -77	23 -56	43 -35	64 -15
90	47.70	bu	-104 -184	-81 -161	-58 -138	-35 -114	-11 -91	11 -68	34 -45	57 -21	81 1	104 24	127 47
100	53.00	bu	-67 -147	-41 -121	-15 -95	9 -69	35 -44	61 -18	87 7	113 33	138 59	164 85	190 110
110	58.30	bu	-30 -109	-1 -81	26 -53	54 -24	83 3	111 31	140 60	168 88	196 117	225 145	253 173
120	63.60	bu	7 -72	38 -41	69 -10	99 20	130 51	161 82	192 113	223 144	254 175	285 206	316 237
130	68.90	bu	44 -35	77 -1	111 31	145 65	178 98	212 132	245 165	279 199	312 232	346 266	379 300
140	74.20	bu	81 1	117 37	153 74	190 110	226 146	262 182	298 218	334 254	370 290	406 327	442 363
150	79.50	bu	118 39	157 77	196 116	235 155	273 193	312 232	351 271	389 310	428 348	467 387	506 426

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

Table 12.A Estimated costs per acre  
Soybeans, May-planted, RR, 12R 30"  
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	96.0000	13.44	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Prefix	pt	6.34	2.0000	12.68	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.5000	5.54	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3621	4.76	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR					
	hour	13.10	0.3472	4.55	_____
DIESEL FUEL					
Tractors	gal	1.70	3.6017	6.14	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Roll-Out Pipe Irr.	gal	1.70	9.7755	16.60	_____
REPAIR & MAINTENANCE					
Implements	acre	5.06	1.0000	5.06	_____
Tractors	acre	2.13	1.0000	2.13	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Roll-Out Pipe Irr.	acre	6.36	1.0000	6.36	_____
INTEREST ON OP. CAP.	acre	10.64	1.0000	10.64	_____
TOTAL DIRECT EXPENSES				448.79	_____
FIXED EXPENSES					
Implements	acre	9.40	1.0000	9.40	_____
Tractors	acre	13.49	1.0000	13.49	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				87.98	_____
TOTAL SPECIFIED EXPENSES				536.77	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.



Table 12.B Summary of estimated costs and returns per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	53.0000	516.22	_____
				-----	
TOTAL INCOME				516.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	111.82	1.0000	111.82	_____
INSECTICIDES	acre	32.86	1.0000	32.86	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	5.55	1.0000	5.55	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	14.31	1.0000	14.31	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	13.14	0.4643	6.10	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL	gal	1.70	14.7708	25.11	_____
REPAIR & MAINTENANCE	acre	16.99	1.0000	16.99	_____
INTEREST ON OP. CAP.	acre	10.64	1.0000	10.64	_____
				-----	
TOTAL DIRECT EXPENSES				448.79	_____
RETURNS ABOVE DIRECT EXPENSES				67.43	_____
TOTAL FIXED EXPENSES				87.98	_____
				-----	
TOTAL SPECIFIED EXPENSES				536.77	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-20.55	_____

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.C Estimated resource use for field operations, per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Nov	0.3300				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Prefix	pt					2.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
<b>TOTALS</b>							<b>0.46</b>	<b>0.46</b>	<b>0.97</b>	<b>0.34</b>

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.D Estimated costs for field operations, per acre  
Soybeans, May-planted, RR, 12R 30"  
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	5.04
Lime (Spread)	ton	15.18						0.72	15.90	
Custom Apply Fert	acre	7.00						0.33	7.33	
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94	
Potash (60% K2O)	cwt	22.57						1.07	23.64	
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64	
Select Max	pt	14.99						0.53	15.52	
Surfactant	pt	1.48						0.05	1.53	
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51
Fierce	oz	24.43						0.68	25.11	
Gramoxone SL 2.0	oz	12.96						0.36	13.32	
Surfactant	pt	1.48						0.04	1.52	
Soybeans Consultant	acre	6.50						0.15	6.65	
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93
Soybean Seed RR2	lb	63.00						1.50	64.50	
CruiserMaxx	oz	7.36						0.17	7.53	
Optimize	oz	3.00						0.07	3.07	
Boundary	pt	20.36						0.48	20.84	
Gramoxone SL 2.0	oz	12.96						0.31	13.27	
Surfactant	pt	1.48						0.04	1.52	
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	
Prefix	pt	12.68						0.30	12.98	
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	
App by Air ( 5 gal)	appl	6.50						0.10	6.60	
Quadris Top	oz	20.08						0.32	20.40	
Surfactant	pt	0.37						0.01	0.38	
App by Air ( 5 gal)	appl	6.50						0.08	6.58	
Acephate 90SP	lb	6.52						0.08	6.60	
App by Air ( 5 gal)	appl	6.50						0.08	6.58	
Prevathon	oz	18.34						0.22	18.56	
Incidental Pest										
App by Air ( 5 gal)	appl	6.50						0.05	6.55	
Incidental Pest Trt	acre	8.00						0.06	8.06	
App by Air ( 5 gal)	appl	6.50						0.05	6.55	
Paraquat	oz	5.12						0.04	5.16	
Sodium Chlorate 5L	gal	3.30						0.03	3.33	
Surfactant	pt	0.74						0.01	0.75	
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88
Haul Soybeans	bu	14.31						0.06	14.37	
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15
Roll-Out Pipe Irr.	acre	8.25	17.84	7.00	4.56			0.64	38.29	55.30
TOTALS		380.74	25.11	16.99	15.31	0.00	10.64	448.79	87.98	536.77

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.E Estimated monthly income and expense flows per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	516.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	13.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	20.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	50.48	4.48	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.86	8.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.37	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.55	0.00	0.00	0.83	0.00	0.83	3.36	3.15	0.46	0.46	0.59	3.08
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	1.99	0.00	0.00	0.56	0.00	0.56	1.60	0.80	8.30	8.30	0.28	2.72
REPAIR & MAINTENANCE	1.78	0.00	0.00	0.44	0.00	0.44	2.60	3.02	1.96	1.96	0.14	4.65
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.81	0.00	1.13	3.31	0.39	0.59	0.58	0.25	0.10
TOTAL DIRECT EXPENSES	76.89	0.00	0.00	23.59	0.00	41.83	142.69	20.09	38.26	49.16	31.42	24.86
NET INCOME	-76.89	0.00	0.00	-23.59	0.00	-41.83	-142.69	-20.09	-38.26	-49.16	-31.42	491.36
NET INCOME TO DATE	-76.89	-76.89	-76.89	-100.48	-100.48	-142.31	-285.00	-305.09	-343.35	-392.51	-423.93	67.43

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

\* Lease costs are based on hourly usage costs.

Table 12.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, May-planted, RR, 12R 30"  
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-248 -336	-235 -323	-222 -310	-209 -297	-196 -284	-183 -271	-170 -258	-157 -245	-144 -232	-131 -219	-118 -206
60	31.80	bu	-210 -298	-195 -283	-179 -267	-164 -252	-148 -236	-133 -221	-117 -205	-102 -190	-86 -174	-71 -159	-55 -143
70	37.10	bu	-173 -261	-155 -243	-137 -225	-119 -207	-101 -189	-83 -171	-65 -153	-46 -134	-28 -116	-10 -98	7 -80
80	42.40	bu	-136 -224	-115 -203	-94 -182	-74 -162	-53 -141	-32 -120	-12 -100	8 -79	29 -58	49 -38	70 -17
90	47.70	bu	-98 -186	-75 -163	-52 -140	-29 -117	-5 -93	17 -70	40 -47	63 -24	86 -1	110 22	133 45
100	53.00	bu	-61 -149	-35 -123	-10 -97	15 -72	41 -46	67 -20	93 5	119 31	144 56	170 82	196 108
110	58.30	bu	-24 -112	4 -83	32 -55	60 -27	89 1	117 29	146 58	174 86	202 114	231 143	259 171
120	63.60	bu	12 -75	43 -44	74 -13	105 17	136 48	167 79	198 110	229 141	260 172	291 203	322 234
130	68.90	bu	50 -37	83 -4	117 29	150 62	184 96	217 130	251 163	285 197	318 230	352 264	385 297
140	74.20	bu	87 -0	123 35	159 71	195 107	232 144	268 180	304 216	340 252	376 288	412 324	448 360
150	79.50	bu	124 36	163 75	202 114	240 152	279 191	318 230	357 269	395 307	434 346	473 385	511 423

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

Table 13.A Estimated costs per acre  
 Soybeans, June-planted, after wheat, RR, 12R 30"  
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Baythroid XL	oz	2.48	2.1300	5.28	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2	lb	1.26	50.0000	63.00	_____
ADJUVANTS					
Surfactant	pt	3.69	0.6000	2.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.1453	1.91	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	13.10	0.2128	2.79	_____
DIESEL FUEL					
Tractors	gal	1.70	1.6834	2.87	_____
Harvesters	gal	1.70	1.3935	2.37	_____
1/2-mi Pivot Irr.	gal	1.70	16.4057	27.90	_____
REPAIR & MAINTENANCE					
Implements	acre	3.39	1.0000	3.39	_____
Tractors	acre	0.98	1.0000	0.98	_____
Harvesters	acre	3.44	1.0000	3.44	_____
1/2-mi Pivot Irr.	acre	9.62	1.0000	9.62	_____
INTEREST ON OP. CAP.	acre	8.07	1.0000	8.07	_____
TOTAL DIRECT EXPENSES				385.13	_____
FIXED EXPENSES					
Implements	acre	5.74	1.0000	5.74	_____
Tractors	acre	6.23	1.0000	6.23	_____
Harvesters	acre	13.56	1.0000	13.56	_____
1/2-mi Pivot Irr.	acre	34.22	1.0000	34.22	_____
TOTAL FIXED EXPENSES				59.75	_____
TOTAL SPECIFIED EXPENSES				444.88	_____

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.B Summary of estimated costs and returns per acre  
 Soybeans, June-planted, after wheat, RR, 12R 30"  
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	50.0000	487.00	_____
				-----	
TOTAL INCOME				487.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	72.22	1.0000	72.22	_____
INSECTICIDES	acre	38.14	1.0000	38.14	_____
SEED/PLANTS	acre	63.00	1.0000	63.00	_____
ADJUVANTS	acre	2.22	1.0000	2.22	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	13.14	0.2475	3.25	_____
UNALLOCATED LABOR	hour	13.10	0.2128	2.79	_____
DIESEL FUEL	gal	1.70	19.4827	33.14	_____
REPAIR & MAINTENANCE	acre	17.43	1.0000	17.43	_____
INTEREST ON OP. CAP.	acre	8.07	1.0000	8.07	_____
				-----	
TOTAL DIRECT EXPENSES				385.13	_____
RETURNS ABOVE DIRECT EXPENSES				101.87	_____
TOTAL FIXED EXPENSES				59.75	_____
				-----	
TOTAL SPECIFIED EXPENSES				444.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				42.12	_____

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.C Estimated resource use for field operations, per acre  
 Soybeans, June-planted, after wheat, RR, 12R 30"  
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed RR2	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Baythroid XL	oz					2.1300				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.24	0.24	0.39	0.21

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.



Table 13.D Estimated costs for field operations, per acre  
Soybeans, June-planted, after wheat, RR, 12R 30"  
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	15.18						0.72	15.90	15.90
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Phosphorus(46% P2O5)	cwt	19.04						0.90	19.94	19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64	23.64
Soybeans Consultant	acre	6.50						0.15	6.65	6.65
Plant & Pre-Folding	12R-30		1.33	2.26	2.26			0.12	5.97	6.35
Soybean Seed RR2	lb	63.00						1.25	64.25	64.25
CruiserMaxx	oz	7.36						0.15	7.51	7.51
Optimize	oz	3.00						0.06	3.06	3.06
Boundary	pt	20.36						0.40	20.76	20.76
Gramoxone SL 2.0	oz	12.96						0.26	13.22	13.22
Surfactant	pt	1.48						0.03	1.51	1.51
Spray (Broadcast)	60'		0.56	0.44	0.82			0.04	1.86	1.51
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Dual Magnum	pt	14.97						0.30	15.27	15.27
Spray (Broadcast)	60'		0.56	0.44	0.82			0.03	1.85	1.51
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55	4.55
Dual Magnum	pt	14.97						0.24	15.21	15.21
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Quadris Top	oz	20.08						0.24	20.32	20.32
Surfactant	pt	0.37							0.37	0.37
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Acephate 90SP	lb	6.52						0.08	6.60	6.60
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Prevathon	oz	18.34						0.22	18.56	18.56
Surfactant	pt	0.37							0.37	0.37
Baythroid XL	oz	5.28						0.06	5.34	5.34
Incidental Pest										
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Incidental Pest Trt	acre	8.00						0.06	8.06	8.06
Header -Soybean	25' Flex		2.37	4.32	2.49			0.04	9.22	14.88
Haul Soybeans	bu	13.50						0.05	13.55	13.55
Grain Cart Soybean	700 bu		0.42	0.35	0.52			0.01	1.30	1.28
1/2-mi Pivot Irr.	acre		27.90	9.62	0.47			0.65	38.64	34.22
TOTALS		319.11	33.14	17.43	7.38	0.00	8.07	385.13	59.75	444.88

Note: Cost of production estimates are based on 2016 input prices.  
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.E Estimated monthly income and expense flows per acre  
Soybeans, June-planted, after wheat, RR, 12R 30"  
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	487.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	20.08	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.77	19.45	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.14	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.74	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	3.12	0.87	0.04	0.00	3.01
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.26	11.72	8.37	0.00	2.79
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.06	1.16	0.54	0.00	4.67
INTEREST ON OP. CAP.	3.18	0.00	0.00	0.00	0.00	0.00	0.16	3.04	0.53	0.95	0.11	0.10
TOTAL DIRECT EXPENSES	70.27	0.00	0.00	0.00	0.00	0.00	7.00	155.09	33.73	80.36	14.61	24.07
NET INCOME	-70.27	0.00	0.00	0.00	0.00	0.00	-7.00	-155.09	-33.73	-80.36	-14.61	462.93
NET INCOME TO DATE	-70.27	-70.27	-70.27	-70.27	-70.27	-70.27	-77.27	-232.36	-266.09	-346.45	-361.06	101.87

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

\* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, June-planted, after wheat, RR, 12R 30"  
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-195 -255	-183 -243	-171 -231	-159 -218	-147 -206	-134 -194	-122 -182	-110 -170	-98 -158	-86 -145	-73 -133
60	30.00	bu	-160 -220	-145 -205	-131 -191	-116 -176	-102 -161	-87 -147	-72 -132	-58 -118	-43 -103	-29 -88	-14 -74
70	35.00	bu	-125 -185	-108 -168	-91 -151	-74 -134	-57 -116	-40 -99	-23 -82	-6 -65	10 -48	28 -31	45 -14
80	40.00	bu	-90 -149	-70 -130	-51 -111	-31 -91	-12 -72	7 -52	26 -33	46 -13	65 5	85 25	104 44
90	45.00	bu	-55 -114	-33 -92	-11 -70	10 -49	32 -27	54 -5	76 16	98 38	120 60	142 82	164 104
100	50.00	bu	-19 -79	4 -55	28 -30	53 -6	77 17	101 42	126 66	150 90	174 115	199 139	223 163
110	55.00	bu	15 -44	42 -17	68 9	95 35	122 62	149 89	176 116	202 143	229 169	256 196	283 223
120	60.00	bu	50 -9	79 19	108 49	138 78	167 107	196 136	225 166	255 195	284 224	313 253	342 282
130	65.00	bu	85 25	117 57	148 89	180 120	212 152	243 184	275 215	307 247	338 279	370 310	402 342
140	70.00	bu	120 61	154 95	188 129	223 163	257 197	291 231	325 265	359 299	393 333	427 367	461 401
150	75.00	bu	155 96	192 132	229 169	265 205	302 242	338 278	375 315	411 351	448 388	484 424	521 461

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

Table 14.A Estimated costs per acre  
Soybeans, early-planted, LL, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.0000	19.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Valor SX	oz	6.60	2.0000	13.20	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.0000	3.69	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3302	4.35	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	13.12	0.3892	5.11	_____
DIESEL FUEL					
Tractors	gal	1.70	3.8252	6.51	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.80	1.0000	4.80	_____
Tractors	acre	2.24	1.0000	2.24	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	9.25	1.0000	9.25	_____
TOTAL DIRECT EXPENSES				351.31	_____
FIXED EXPENSES					
Implements	acre	9.56	1.0000	9.56	_____
Tractors	acre	14.16	1.0000	14.16	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				37.28	_____
TOTAL SPECIFIED EXPENSES				388.59	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.B Summary of estimated costs and returns per acre  
Soybeans, early-planted, LL, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	42.0000	409.08	_____
				-----	
TOTAL INCOME				409.08	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.50	1.0000	19.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	119.60	1.0000	119.60	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	3.70	1.0000	3.70	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
OPERATOR LABOR	hour	13.14	0.4324	5.69	_____
UNALLOCATED LABOR	hour	13.12	0.3892	5.11	_____
DIESEL FUEL	gal	1.70	5.2188	8.88	_____
REPAIR & MAINTENANCE	acre	10.48	1.0000	10.48	_____
INTEREST ON OP. CAP.	acre	9.25	1.0000	9.25	_____
				-----	
TOTAL DIRECT EXPENSES				351.31	_____
RETURNS ABOVE DIRECT EXPENSES				57.77	_____
TOTAL FIXED EXPENSES				37.28	_____
				-----	
TOTAL SPECIFIED EXPENSES				388.59	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				20.49	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.C Estimated resource use for field operations, per acre  
Soybeans, early-planted, LL, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus(46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
<b>TOTALS</b>							<b>0.43</b>	<b>0.43</b>	<b>0.52</b>	<b>0.38</b>

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.D Estimated costs for field operations, per acre  
Soybeans, early-planted, LL, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87
Lime (Spread)	ton	15.18						0.72	15.90	
Custom Apply Fert	acre	7.00						0.33	7.33	
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94	
Potash (60% K2O)	cwt	22.57						1.07	23.64	
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55
Field Cultivate Fld	24'		1.23	0.81	1.56			0.17	3.77	4.33
App by Air ( 5 gal)	appl	6.50						0.21	6.71	
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62	
2,4-D Amine 4	pt	5.58						0.18	5.76	
Select Max	pt	14.99						0.47	15.46	
Valor SX	oz	13.20						0.42	13.62	
Surfactant	pt	1.48						0.05	1.53	
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35
Soybean Seed LL	lb	58.00						1.38	59.38	
CruiserMaxx	oz	7.36						0.17	7.53	
Optimize	oz	3.00						0.07	3.07	
Boundary	pt	20.36						0.48	20.84	
Gramoxone SL 2.0	oz	12.96						0.31	13.27	
Surfactant	pt	1.48						0.04	1.52	
Soybeans Consultant	acre	6.50						0.13	6.63	
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51
Liberty 280	oz	16.53						0.33	16.86	
Dual Magnum	pt	14.97						0.30	15.27	
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51
Liberty 280	oz	16.53						0.33	16.86	
App by Air ( 5 gal)	appl	6.50						0.05	6.55	
Acephate 90SP	lb	6.52						0.05	6.57	
App by Air ( 5 gal)	appl	6.50						0.05	6.55	
Paraquat	oz	5.12						0.04	5.16	
Sodium Chlorate 5L	gal	3.30						0.03	3.33	
Surfactant	pt	0.74						0.01	0.75	
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88
Haul Soybeans	bu	11.34						0.04	11.38	
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28
<b>TOTALS</b>		<b>311.03</b>	<b>8.88</b>	<b>10.48</b>	<b>11.67</b>	<b>0.00</b>	<b>9.25</b>	<b>351.31</b>	<b>37.28</b>	<b>388.59</b>

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.E Estimated monthly income and expense flows per acre  
Soybeans, early-planted, LL, stale seedbed, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	409.08
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	38.25	0.00	33.32	48.03	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.48	0.00	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.63	0.00	0.00	0.00	0.00	0.00	2.30	1.66	0.00	0.00	0.00	3.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.64	0.00	0.00	0.00	0.00	0.00	1.33	1.12	0.00	0.00	0.00	2.79
REPAIR & MAINTENANCE	2.67	0.00	0.00	0.00	0.00	0.00	2.26	0.88	0.00	0.00	0.00	4.67
INTEREST ON OP. CAP.	3.70	0.00	0.00	0.00	1.47	0.00	2.59	1.17	0.00	0.00	0.23	0.09
TOTAL DIRECT EXPENSES	81.73	0.00	0.00	0.00	47.70	0.00	111.64	59.36	0.00	0.00	28.91	21.97
NET INCOME	-81.73	0.00	0.00	0.00	-47.70	0.00	-111.64	-59.36	0.00	0.00	-28.91	387.11
NET INCOME TO DATE	-81.73	-81.73	-81.73	-81.73	-129.43	-129.43	-241.07	-300.43	-300.43	-300.43	-329.34	57.77

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

\* Lease costs are based on hourly usage costs.



Table 14.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, early-planted, LL, stale seedbed, 12R 30"  
 Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-192	-181	-171	-161	-151	-141	-130	-120	-110	-100	-89
			-229	-219	-209	-198	-188	-178	-168	-157	-147	-137	-127
60	25.20	bu	-162	-150	-138	-125	-113	-101	-89	-76	-64	-52	-39
			-199	-187	-175	-163	-150	-138	-126	-114	-101	-89	-77
70	29.40	bu	-133	-118	-104	-90	-75	-61	-47	-32	-18	-4	10
			-170	-156	-141	-127	-113	-98	-84	-70	-55	-41	-27
80	33.60	bu	-103	-87	-70	-54	-38	-21	-5	10	27	43	60
			-140	-124	-108	-91	-75	-59	-42	-26	-9	6	22
90	37.80	bu	-74	-55	-37	-18	-0	18	36	54	73	91	110
			-111	-92	-74	-56	-37	-19	-0	17	35	54	72
100	42.00	bu	-44	-24	-3	16	37	57	78	98	119	139	160
			-81	-61	-40	-20	0	20	40	61	81	102	122
110	46.20	bu	-14	7	30	52	75	97	120	142	165	187	210
			-52	-29	-7	15	37	60	82	105	127	150	172
120	50.40	bu	14	39	63	88	112	137	161	186	210	235	260
			-22	1	26	50	75	100	124	149	173	198	222
130	54.60	bu	44	70	97	123	150	177	203	230	256	283	310
			6	33	60	86	113	139	166	192	219	246	272
140	58.80	bu	73	102	130	159	188	216	245	274	302	331	360
			36	65	93	122	150	179	208	236	265	294	322
150	63.00	bu	103	133	164	195	225	256	287	317	348	379	410
			65	96	127	157	188	219	250	280	311	342	372

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

Table 15.A Estimated costs per acre  
Soybeans, early-planted, LL, stale seedbed, 12R 30"  
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.0000	26.00	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Valor SX	oz	6.60	2.0000	13.20	_____
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.1000	4.06	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4713	6.20	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR					
	hour	13.13	0.4454	5.85	_____
DIESEL FUEL					
Tractors	gal	1.70	5.2753	8.98	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Roll-Out Pipe Irr.	gal	1.70	7.3316	12.45	_____
REPAIR & MAINTENANCE					
Implements	acre	5.46	1.0000	5.46	_____
Tractors	acre	3.11	1.0000	3.11	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Roll-Out Pipe Irr.	acre	6.34	1.0000	6.34	_____
INTEREST ON OP. CAP.	acre	10.29	1.0000	10.29	_____
TOTAL DIRECT EXPENSES				421.09	_____
FIXED EXPENSES					
Implements	acre	11.79	1.0000	11.79	_____
Tractors	acre	19.59	1.0000	19.59	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				96.47	_____
TOTAL SPECIFIED EXPENSES				517.56	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.B Summary of estimated costs and returns per acre  
 Soybeans, early-planted, LL, stale seedbed, 12R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	60.0000	584.40	_____
				-----	
TOTAL INCOME				584.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	119.60	1.0000	119.60	_____
INSECTICIDES	acre	6.52	1.0000	6.52	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	4.07	1.0000	4.07	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	13.14	0.5735	7.54	_____
UNALLOCATED LABOR	hour	13.13	0.4454	5.85	_____
DIESEL FUEL	gal	1.70	14.0006	23.80	_____
REPAIR & MAINTENANCE	acre	18.35	1.0000	18.35	_____
INTEREST ON OP. CAP.	acre	10.29	1.0000	10.29	_____
				-----	
TOTAL DIRECT EXPENSES				421.09	_____
RETURNS ABOVE DIRECT EXPENSES				163.31	_____
TOTAL FIXED EXPENSES				96.47	_____
				-----	
TOTAL SPECIFIED EXPENSES				517.56	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				66.84	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.C Estimated resource use for field operations, per acre  
 Soybeans, early-planted, LL, stale seedbed, 12R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3300				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Field Cultivate Fld	24'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
Bed/Lister-Roll-Fold	12R-30	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Apr		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Soybeans	bu					60.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Sep		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.57	0.57	1.03	0.44

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.D Estimated costs for field operations, per acre  
Soybeans, early-planted, LL, stale seedbed, 12R 30"  
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Field Cultivate Fld	24'		1.23	0.81	1.56			0.17	3.77	4.33	8.10
Bed/Lister-Roll-Fold	12R-30		1.23	0.89	1.56			0.17	3.85	3.89	7.74
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Select Max	pt	14.99						0.47	15.46		15.46
Valor SX	oz	13.20						0.42	13.62		13.62
Surfactant	pt	1.48						0.05	1.53		1.53
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.13	6.63		6.63
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.33	16.86		16.86
Dual Magnum	pt	14.97						0.30	15.27		15.27
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Quadris Top	oz	20.08						0.24	20.32		20.32
Surfactant	pt	0.37							0.37		0.37
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Acephate 90SP	lb	6.52						0.05	6.57		6.57
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	16.20						0.06	16.26		16.26
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
Roll-Out Pipe Irr.	acre	8.25	13.69	6.98	4.33			0.53	33.78	55.30	89.08
TOTALS		351.09	23.80	18.35	17.56	0.00	10.29	421.09	96.47	517.56	

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.E Estimated monthly income and expense flows per acre  
Soybeans, early-planted, LL, stale seedbed, 12R 30"  
Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	584.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	6.50	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	0.00	20.08	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	38.25	0.00	33.32	48.03	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.48	0.00	1.48	0.00	0.00	0.37	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.69	0.00	0.00	0.00	0.00	0.00	2.30	1.89	2.78	0.23	0.00	3.67
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	5.50	0.00	0.00	0.00	0.00	0.00	1.33	1.12	8.63	4.15	0.00	3.07
REPAIR & MAINTENANCE	3.89	0.00	0.00	0.00	0.00	0.00	2.26	0.88	5.21	1.30	0.00	4.81
INTEREST ON OP. CAP.	3.94	0.00	0.00	0.00	1.47	0.00	2.59	1.17	0.40	0.38	0.23	0.11
TOTAL DIRECT EXPENSES	87.11	0.00	0.00	0.00	47.70	0.00	111.64	59.59	25.27	33.01	28.91	27.86
NET INCOME	-87.11	0.00	0.00	0.00	-47.70	0.00	-111.64	-59.59	-25.27	-33.01	-28.91	556.54
NET INCOME TO DATE	-87.11	-87.11	-87.11	-87.11	-134.81	-134.81	-246.45	-306.04	-331.31	-364.32	-393.23	163.31

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

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, early-planted, LL, stale seedbed, 12R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-193	-179	-164	-149	-135	-120	-106	-91	-76	-62	-47
			-290	-275	-261	-246	-231	-217	-202	-188	-173	-158	-144
60	36.00	bu	-151	-134	-116	-99	-81	-63	-46	-28	-11	6	23
			-248	-230	-213	-195	-177	-160	-142	-125	-107	-90	-72
70	42.00	bu	-109	-88	-68	-48	-27	-7	13	33	54	74	95
			-205	-185	-164	-144	-124	-103	-83	-62	-42	-21	-1
80	48.00	bu	-67	-43	-20	2	26	49	73	96	119	143	166
			-163	-140	-116	-93	-70	-46	-23	-0	23	46	70
90	54.00	bu	-24	1	27	53	80	106	132	159	185	211	237
			-121	-95	-68	-42	-16	10	36	62	88	115	141
100	60.00	bu	17	46	75	104	134	163	192	221	250	280	309
			-79	-50	-20	8	37	66	96	125	154	183	212
110	66.00	bu	59	91	123	155	187	220	252	284	316	348	380
			-37	-4	27	59	91	123	155	187	220	252	284
120	72.00	bu	101	136	171	206	241	276	312	347	382	417	452
			5	40	75	110	145	180	215	250	285	320	355
130	78.00	bu	143	181	219	257	295	333	371	409	447	485	523
			47	85	123	161	199	237	275	313	351	389	427
140	84.00	bu	186	226	267	308	349	390	431	472	513	554	595
			89	130	171	212	253	294	335	375	416	457	498
150	90.00	bu	228	272	315	359	403	447	491	535	578	622	666
			131	175	219	263	307	350	394	438	482	526	570

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

Table 16.A Estimated costs per acre  
Soybeans, May-planted, LL, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.7500	24.38	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	10.5000	13.76	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.4000	5.17	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	40.0000	10.80	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2631	3.46	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR	hour	13.07	0.3287	4.30	_____
DIESEL FUEL					
Tractors	gal	1.70	3.0471	5.19	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	4.18	1.0000	4.18	_____
Tractors	acre	1.78	1.0000	1.78	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	9.89	1.0000	9.89	_____
TOTAL DIRECT EXPENSES				394.30	_____
FIXED EXPENSES					
Implements	acre	6.97	1.0000	6.97	_____
Tractors	acre	11.28	1.0000	11.28	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				31.81	_____
TOTAL SPECIFIED EXPENSES				426.11	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.



Table 16.B Summary of estimated costs and returns per acre  
Soybeans, May-planted, LL, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	40.0000	389.60	_____
				-----	
TOTAL INCOME				389.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.38	1.0000	24.38	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	7.36	1.0000	7.36	_____
HERBICIDES	acre	138.21	1.0000	138.21	_____
INSECTICIDES	acre	28.28	1.0000	28.28	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	5.18	1.0000	5.18	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	10.80	1.0000	10.80	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
OPERATOR LABOR	hour	13.14	0.3652	4.80	_____
UNALLOCATED LABOR	hour	13.07	0.3287	4.30	_____
DIESEL FUEL	gal	1.70	4.4407	7.56	_____
REPAIR & MAINTENANCE	acre	9.40	1.0000	9.40	_____
INTEREST ON OP. CAP.	acre	9.89	1.0000	9.89	_____
				-----	
TOTAL DIRECT EXPENSES				394.30	_____
RETURNS ABOVE DIRECT EXPENSES				-4.70	_____
TOTAL FIXED EXPENSES				31.81	_____
				-----	
TOTAL SPECIFIED EXPENSES				426.11	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-36.51	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.C Estimated resource use for field operations, per acre  
Soybeans, May-planted, LL, 12R 30"  
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Subsoiler	3 shank	MFWD 225	0.204	0.20	Nov		0.04	0.04	0.04	0.03
Disk Harrow	24'	MFWD 225	0.081	0.25	Nov		0.02	0.02	0.02	0.01
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			0.75	Aug	0.7500				
Prevathon	oz					10.5000				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					40.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
<b>TOTALS</b>							<b>0.36</b>	<b>0.36</b>	<b>0.48</b>	<b>0.32</b>

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

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.D Estimated costs for field operations, per acre  
Soybeans, May-planted, LL, 12R 30"  
Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Subsoiler	3 shank		0.80	0.33	1.02			0.10	2.25	1.87	4.12
Disk Harrow	24'		0.40	0.38	0.51			0.06	1.35	1.39	2.74
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus(46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.33	2.26	2.30			0.14	6.03	6.35	12.38
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.39	16.92		16.92
Dual Magnum	pt	14.97						0.36	15.33		15.33
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air ( 5 gal)	appl	4.88						0.06	4.94		4.94
Prevathon	oz	13.76						0.16	13.92		13.92
Incidental Pest											
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	10.80						0.04	10.84		10.84
Grain Cart Soybean	700 bu		0.42	0.35	0.53			0.01	1.31	1.28	2.59
TOTALS		357.22	7.56	9.40	10.23	0.00	9.89	394.30	31.81	426.11	

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.E Estimated monthly income and expense flows per acre  
Soybeans, May-planted, LL, 12R 30"  
Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	389.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.38	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	64.82	16.53	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.00	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.53	0.00	0.00	0.83	0.00	0.83	3.13	0.83	0.00	0.00	0.00	3.08
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	1.20	0.00	0.00	0.56	0.00	0.56	1.89	0.56	0.00	0.00	0.00	2.79
REPAIR & MAINTENANCE	0.71	0.00	0.00	0.44	0.00	0.44	2.70	0.44	0.00	0.00	0.00	4.67
INTEREST ON OP. CAP.	3.34	0.00	0.00	0.81	0.00	1.13	3.53	0.37	0.00	0.38	0.24	0.09
TOTAL DIRECT EXPENSES	73.87	0.00	0.00	23.59	0.00	41.83	152.41	18.73	0.00	32.04	30.40	21.43
NET INCOME	-73.87	0.00	0.00	-23.59	0.00	-41.83	-152.41	-18.73	0.00	-32.04	-30.40	368.17
NET INCOME TO DATE	-73.87	-73.87	-73.87	-97.46	-97.46	-139.29	-291.70	-310.43	-310.43	-342.47	-372.87	-4.70

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

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Soybeans	7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17		
PERCENT	YIELD	UNIT	dollars										
50	20.00	bu	-242 -274	-233 -264	-223 -255	-213 -245	-203 -235	-194 -225	-184 -216	-174 -206	-164 -196	-155 -186	-145 -177
60	24.00	bu	-214 -246	-202 -234	-191 -223	-179 -211	-167 -199	-156 -188	-144 -176	-132 -164	-121 -152	-109 -141	-97 -129
70	28.00	bu	-186 -218	-172 -204	-159 -191	-145 -177	-131 -163	-118 -150	-104 -136	-91 -122	-77 -109	-63 -95	-50 -81
80	32.00	bu	-158 -190	-142 -174	-127 -159	-111 -143	-96 -127	-80 -112	-64 -96	-49 -81	-33 -65	-18 -49	-2 -34
90	36.00	bu	-130 -162	-112 -144	-95 -126	-77 -109	-60 -91	-42 -74	-25 -56	-7 -39	10 -21	27 -4	45 13
100	40.00	bu	-102 -133	-82 -114	-63 -94	-43 -75	-24 -55	-4 -36	14 -17	34 2	53 21	73 41	92 60
110	44.00	bu	-73 -105	-52 -84	-31 -62	-9 -41	11 -20	33 1	54 22	76 44	97 65	118 87	140 108
120	48.00	bu	-45 -77	-22 -54	0 -30	24 -7	47 15	71 39	94 62	117 85	141 109	164 132	187 156
130	52.00	bu	-17 -49	7 -24	32 1	58 26	83 51	108 77	134 102	159 127	184 153	210 178	235 203
140	56.00	bu	10 -21	37 5	64 33	92 60	119 87	146 114	174 142	201 169	228 196	255 224	283 251
150	60.00	bu	38 6	67 35	97 65	126 94	155 123	184 152	213 182	243 211	272 240	301 269	330 298

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

Table 17.A Estimated costs per acre  
Soybeans, May-planted, LL, 12R 30"  
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.5000	5.54	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4864	6.38	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR					
	hour	13.10	0.3472	4.55	_____
DIESEL FUEL					
Tractors	gal	1.70	4.6503	7.94	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Contour Flood Irr.	gal	1.70	10.9974	18.69	_____
REPAIR & MAINTENANCE					
Implements	acre	5.08	1.0000	5.08	_____
Tractors	acre	2.78	1.0000	2.78	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Contour Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	11.15	1.0000	11.15	_____
TOTAL DIRECT EXPENSES				476.51	_____
FIXED EXPENSES					
Implements	acre	9.49	1.0000	9.49	_____
Tractors	acre	17.55	1.0000	17.55	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Contour Flood Irr.	acre	39.18	1.0000	39.18	_____
TOTAL FIXED EXPENSES				79.78	_____
TOTAL SPECIFIED EXPENSES				556.29	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.B Summary of estimated costs and returns per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	53.0000	516.22	_____
				-----	
TOTAL INCOME				516.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	138.21	1.0000	138.21	_____
INSECTICIDES	acre	32.86	1.0000	32.86	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	5.55	1.0000	5.55	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	13.14	0.5886	7.72	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL	gal	1.70	17.0414	29.00	_____
REPAIR & MAINTENANCE	acre	24.01	1.0000	24.01	_____
INTEREST ON OP. CAP.	acre	11.15	1.0000	11.15	_____
				-----	
TOTAL DIRECT EXPENSES				476.51	_____
RETURNS ABOVE DIRECT EXPENSES				39.71	_____
TOTAL FIXED EXPENSES				79.78	_____
				-----	
TOTAL SPECIFIED EXPENSES				556.29	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-40.07	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre..

Table 17.C Estimated resource use for field operations, per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Nov	0.3300				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
<b>TOTALS</b>							<b>0.58</b>	<b>0.58</b>	<b>1.02</b>	<b>0.34</b>

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

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.



Table 17.D Estimated costs for field operations, per acre  
Soybeans, May-planted, LL, 12R 30"  
Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	5.04	10.13
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93	11.68
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33	3.08
Liberty 280	oz	16.53						0.39	16.92		16.92
Dual Magnum	pt	14.97						0.36	15.33		15.33
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33	3.07
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air ( 5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top	oz	20.08						0.32	20.40		20.40
Surfactant	pt	0.37						0.01	0.38		0.38
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Prevathon	oz	18.34						0.22	18.56		18.56
Incidental Pest											
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	14.31						0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15	2.36
Contour Flood Irr.	acre	2.25	21.73	14.02	5.47			0.69	44.16	47.10	91.26
TOTALS		396.13	29.00	24.01	16.22	0.00	11.15	476.51	79.78	556.29	

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

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second Fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.E Estimated monthly income and expense flows per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	516.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	13.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	20.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	64.82	16.53	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.86	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.37	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.05	0.00	0.00	0.83	0.00	0.83	3.58	2.59	1.55	1.55	0.16	3.08
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	1.36	0.00	0.00	0.56	0.00	0.56	1.60	7.81	7.10	7.10	0.19	2.72
REPAIR & MAINTENANCE	1.45	0.00	0.00	0.44	0.00	0.44	2.60	8.38	2.98	2.98	0.09	4.65
INTEREST ON OP. CAP.	3.41	0.00	0.00	0.81	0.00	1.13	3.53	0.72	0.61	0.60	0.24	0.10
TOTAL DIRECT EXPENSES	75.36	0.00	0.00	23.59	0.00	41.83	152.47	38.28	39.19	50.09	30.84	24.86
NET INCOME	-75.36	0.00	0.00	-23.59	0.00	-41.83	-152.47	-38.28	-39.19	-50.09	-30.84	491.36
NET INCOME TO DATE	-75.36	-75.36	-75.36	-98.95	-98.95	-140.78	-293.25	-331.53	-370.72	-420.81	-451.65	39.71

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

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
			dollars										
PERCENT	YIELD	UNIT											
50	26.50	bu	-275 -355	-262 -342	-249 -329	-237 -316	-224 -303	-211 -290	-198 -278	-185 -265	-172 -252	-159 -239	-146 -226
60	31.80	bu	-238 -318	-222 -302	-207 -287	-192 -271	-176 -256	-161 -240	-145 -225	-130 -209	-114 -194	-99 -178	-83 -163
70	37.10	bu	-201 -280	-183 -262	-165 -244	-146 -226	-128 -208	-110 -190	-92 -172	-74 -154	-56 -136	-38 -118	-20 -100
80	42.40	bu	-163 -243	-143 -223	-122 -202	-101 -181	-81 -161	-60 -140	-40 -119	-19 -99	1 -78	21 -57	42 -37
90	47.70	bu	-126 -206	-103 -183	-80 -159	-56 -136	-33 -113	-10 -90	12 -67	35 -43	59 -20	82 2	105 25
100	53.00	bu	-89 -169	-63 -143	-37 -117	-11 -91	13 -65	39 -40	65 -14	91 11	117 37	142 63	168 88
110	58.30	bu	-52 -131	-23 -103	4 -75	33 -46	61 -18	89 10	118 38	146 66	175 95	203 123	231 152
120	63.60	bu	-14 -94	16 -63	47 -32	78 -1	109 29	140 60	171 91	202 122	233 153	263 184	294 215
130	68.90	bu	22 -57	56 -23	89 9	123 43	156 76	190 110	223 144	257 177	290 211	324 244	358 278
140	74.20	bu	59 -20	95 16	132 52	168 88	204 124	240 160	276 196	312 232	348 269	384 305	421 341
150	79.50	bu	97 17	135 55	174 94	213 133	251 172	290 210	329 249	368 288	406 327	445 365	484 404

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

Table 18.A Estimated costs per acre  
Soybeans, LL, 12R 30"  
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 201

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.0000	32.50	_____
HARVEST AIDS					
Paraquat	oz	0.32	16.0000	5.12	_____
Sodium Chlorate 5L	gal	5.50	0.6000	3.30	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Select Max	pt	14.99	1.0000	14.99	_____
Fierce	oz	6.98	3.5000	24.43	_____
Gramoxone SL 2.0	oz	0.27	96.0000	25.92	_____
Boundary	pt	10.18	2.0000	20.36	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	1.0000	14.97	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	1.5000	5.54	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3621	4.76	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1241	1.13	_____
UNALLOCATED LABOR					
	hour	13.10	0.3472	4.55	_____
DIESEL FUEL					
Tractors	gal	1.70	3.6017	6.14	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Roll-Out Pipe Irr.	gal	1.70	9.7755	16.60	_____
REPAIR & MAINTENANCE					
Implements	acre	5.06	1.0000	5.06	_____
Tractors	acre	2.13	1.0000	2.13	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Roll-Out Pipe Irr.	acre	6.36	1.0000	6.36	_____
INTEREST ON OP. CAP.	acre	11.10	1.0000	11.10	_____
TOTAL DIRECT EXPENSES				470.64	_____
FIXED EXPENSES					
Implements	acre	9.40	1.0000	9.40	_____
Tractors	acre	13.49	1.0000	13.49	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				87.98	_____
TOTAL SPECIFIED EXPENSES				558.62	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.B Summary of estimated costs and returns per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 201

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	53.0000	516.22	_____
				-----	
TOTAL INCOME				516.22	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	32.50	1.0000	32.50	_____
HARVEST AIDS	acre	8.42	1.0000	8.42	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	138.21	1.0000	138.21	_____
INSECTICIDES	acre	32.86	1.0000	32.86	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	5.55	1.0000	5.55	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	14.31	1.0000	14.31	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1241	1.13	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	13.14	0.4643	6.10	_____
UNALLOCATED LABOR	hour	13.10	0.3472	4.55	_____
DIESEL FUEL	gal	1.70	14.7708	25.11	_____
REPAIR & MAINTENANCE	acre	16.99	1.0000	16.99	_____
INTEREST ON OP. CAP.	acre	11.10	1.0000	11.10	_____
				-----	
TOTAL DIRECT EXPENSES				470.64	_____
RETURNS ABOVE DIRECT EXPENSES				45.58	_____
TOTAL FIXED EXPENSES				87.98	_____
				-----	
TOTAL SPECIFIED EXPENSES				558.62	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-42.40	_____

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.C Estimated resource use for field operations, per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3300				
Disk Harrow	24'	MFWD 190	0.081	1.00	Nov		0.08	0.08	0.08	0.07
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Feb		0.02	0.02	0.04	0.02
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Fierce	oz					3.5000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 190	0.067	1.00	May		0.06	0.06	0.13	0.06
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	May		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 190	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Paraquat	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.09
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 190	0.021	1.00	Oct		0.02	0.02	0.02	0.01
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.46	0.46	0.97	0.34

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.D Estimated costs for field operations, per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Disk Harrow	24'		1.36	1.45	2.05			0.23	5.09	5.04	10.13
Lime (Spread)	ton	15.18						0.72	15.90		15.90
Custom Apply Fert	acre	7.00						0.33	7.33		7.33
Phosphorus (46% P2O5)	cwt	19.04						0.90	19.94		19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64		23.64
Spray (Broadcast)	60'		0.56	0.44	0.83			0.07	1.90	1.51	3.41
Glyphosate 3lbs a.e	oz	4.48						0.16	4.64		4.64
Select Max	pt	14.99						0.53	15.52		15.52
Surfactant	pt	1.48						0.05	1.53		1.53
Spray (Broadcast)	60'		0.56	0.44	0.83			0.05	1.88	1.51	3.39
Fierce	oz	24.43						0.68	25.11		25.11
Gramoxone SL 2.0	oz	12.96						0.36	13.32		13.32
Surfactant	pt	1.48						0.04	1.52		1.52
Soybeans Consultant	acre	6.50						0.15	6.65		6.65
Plant & Pre-Folding	12R-30		1.13	2.19	2.30			0.13	5.75	5.93	11.68
Soybean Seed LL	lb	58.00						1.38	59.38		59.38
CruiserMaxx	oz	7.36						0.17	7.53		7.53
Optimize	oz	3.00						0.07	3.07		3.07
Boundary	pt	20.36						0.48	20.84		20.84
Gramoxone SL 2.0	oz	12.96						0.31	13.27		13.27
Surfactant	pt	1.48						0.04	1.52		1.52
Spray (Broadcast)	60'		0.47	0.41	0.83			0.04	1.75	1.33	3.08
Liberty 280	oz	16.53						0.39	16.92		16.92
Dual Magnum	pt	14.97						0.36	15.33		15.33
Spray (Broadcast)	60'		0.47	0.41	0.83			0.03	1.74	1.33	3.07
Liberty 280	oz	16.53						0.33	16.86		16.86
App by Air ( 5 gal)	appl	6.50						0.10	6.60		6.60
Quadris Top	oz	20.08						0.32	20.40		20.40
Surfactant	pt	0.37						0.01	0.38		0.38
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Acephate 90SP	lb	6.52						0.08	6.60		6.60
App by Air ( 5 gal)	appl	6.50						0.08	6.58		6.58
Prevathon	oz	18.34						0.22	18.56		18.56
Incidental Pest											
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Incidental Pest Trt	acre	8.00						0.06	8.06		8.06
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Paraquat	oz	5.12						0.04	5.16		5.16
Sodium Chlorate 5L	gal	3.30						0.03	3.33		3.33
Surfactant	pt	0.74						0.01	0.75		0.75
Header -Soybean	25' Flex		2.37	4.32	2.55			0.04	9.28	14.88	24.16
Haul Soybeans	bu	14.31						0.06	14.37		14.37
Grain Cart Soybean	700 bu		0.35	0.33	0.53				1.21	1.15	2.36
Roll-Out Pipe Irr.	acre	8.25	17.84	7.00	4.56			0.64	38.29	55.30	93.59
TOTALS		402.13	25.11	16.99	15.31	0.00	11.10	470.64	87.98	558.62	

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.E Estimated monthly income and expense flows per acre  
Soybeans, May-planted, LL, 12R 30"  
Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	516.22
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50	13.00	13.00	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.42	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	20.08	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	19.47	0.00	37.39	64.82	16.53	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.86	8.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.48	0.00	1.48	1.48	0.00	0.37	0.00	0.74	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.55	0.00	0.00	0.83	0.00	0.83	3.36	3.15	0.46	0.46	0.59	3.08
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	1.99	0.00	0.00	0.56	0.00	0.56	1.60	0.80	8.30	8.30	0.28	2.72
REPAIR & MAINTENANCE	1.78	0.00	0.00	0.44	0.00	0.44	2.60	3.02	1.96	1.96	0.14	4.65
INTEREST ON OP. CAP.	3.48	0.00	0.00	0.81	0.00	1.13	3.53	0.63	0.59	0.58	0.25	0.10
TOTAL DIRECT EXPENSES	76.89	0.00	0.00	23.59	0.00	41.83	152.25	32.38	38.26	49.16	31.42	24.86
NET INCOME	-76.89	0.00	0.00	-23.59	0.00	-41.83	-152.25	-32.38	-38.26	-49.16	-31.42	491.36
NET INCOME TO DATE	-76.89	-76.89	-76.89	-100.48	-100.48	-142.31	-294.56	-326.94	-365.20	-414.36	-445.78	45.58

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.



Table 18.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, May-planted, LL, 12R 30"  
 Furrow Irrigated, 12.0 ac-in., Delta Area, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-269 -357	-256 -344	-244 -332	-231 -319	-218 -306	-205 -293	-192 -280	-179 -267	-166 -254	-153 -241	-140 -228
60	31.80	bu	-232 -320	-217 -305	-201 -289	-186 -274	-170 -258	-155 -243	-139 -227	-124 -212	-108 -196	-93 -181	-77 -165
70	37.10	bu	-195 -283	-177 -265	-159 -247	-141 -229	-123 -211	-104 -192	-86 -174	-68 -156	-50 -138	-32 -120	-14 -102
80	42.40	bu	-158 -246	-137 -225	-116 -204	-96 -184	-75 -163	-54 -142	-34 -122	-13 -101	7 -80	27 -60	48 -39
90	47.70	bu	-120 -208	-97 -185	-74 -162	-51 -139	-27 -115	-4 -92	18 -69	41 -46	65 -22	88 0	111 23
100	53.00	bu	-83 -171	-57 -145	-31 -119	-6 -94	19 -68	45 -42	71 -16	97 9	123 35	148 60	174 86
110	58.30	bu	-46 -134	-17 -105	10 -77	38 -48	67 -20	95 7	124 36	152 64	180 92	209 121	237 149
120	63.60	bu	-8 -96	22 -65	53 -34	84 -3	114 26	145 57	176 88	207 119	238 150	269 181	300 212
130	68.90	bu	28 -59	61 -26	95 7	129 41	162 74	196 108	229 141	263 175	296 208	330 242	363 275
140	74.20	bu	65 -22	101 13	137 49	174 86	210 122	246 158	282 194	318 230	354 266	390 302	426 339
150	79.50	bu	102 14	141 53	180 92	219 131	257 169	296 208	335 247	373 285	412 324	451 363	490 402

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

Table 19.A Estimated costs per acre  
Soybeans, June-planted, after wheat, LL, 12R 30"  
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.0000	26.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	0.8700	19.04	_____
Potash (60% K2O)	cwt	16.97	1.3300	22.57	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	1.6000	7.36	_____
Quadris Top	oz	2.51	8.0000	20.08	_____
HERBICIDES					
Boundary	pt	10.18	2.0000	20.36	_____
Gramoxone SL 2.0	oz	0.27	48.0000	12.96	_____
Liberty 280	oz	0.57	58.0000	33.06	_____
Dual Magnum	pt	14.97	2.0000	29.94	_____
INSECTICIDES					
Acephate 90SP	lb	8.69	0.7500	6.52	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Baythroid XL	oz	2.48	2.1300	5.28	_____
Incidental Pest Trt	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed LL	lb	1.16	50.0000	58.00	_____
ADJUVANTS					
Surfactant	pt	3.69	0.6000	2.21	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Optimize	oz	2.14	1.4000	3.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.1453	1.91	_____
Harvesters	hour	13.14	0.1021	1.34	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0959	0.87	_____
UNALLOCATED LABOR	hour	13.10	0.2128	2.79	_____
DIESEL FUEL					
Tractors	gal	1.70	1.6834	2.87	_____
Harvesters	gal	1.70	1.3935	2.37	_____
1/2-mi Pivot Irr.	gal	1.70	16.4057	27.90	_____
REPAIR & MAINTENANCE					
Implements	acre	3.39	1.0000	3.39	_____
Tractors	acre	0.98	1.0000	0.98	_____
Harvesters	acre	3.44	1.0000	3.44	_____
1/2-mi Pivot Irr.	acre	9.62	1.0000	9.62	_____
INTEREST ON OP. CAP.	acre	8.40	1.0000	8.40	_____
TOTAL DIRECT EXPENSES				404.56	_____
FIXED EXPENSES					
Implements	acre	5.74	1.0000	5.74	_____
Tractors	acre	6.23	1.0000	6.23	_____
Harvesters	acre	13.56	1.0000	13.56	_____
1/2-mi Pivot Irr.	acre	34.22	1.0000	34.22	_____
TOTAL FIXED EXPENSES				59.75	_____
TOTAL SPECIFIED EXPENSES				464.31	_____

Note: Cost of production estimates are based on 2016 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.B Summary of estimated costs and returns per acre  
 Soybeans, June-planted, after wheat, LL, 12R 30"  
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	9.74	50.0000	487.00	_____
				-----	
TOTAL INCOME				487.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	26.00	1.0000	26.00	_____
FERTILIZERS	acre	41.61	1.0000	41.61	_____
FUNGICIDES	acre	27.44	1.0000	27.44	_____
HERBICIDES	acre	96.32	1.0000	96.32	_____
INSECTICIDES	acre	38.14	1.0000	38.14	_____
SEED/PLANTS	acre	58.00	1.0000	58.00	_____
ADJUVANTS	acre	2.22	1.0000	2.22	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	3.00	1.0000	3.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.0959	0.87	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	13.14	0.2475	3.25	_____
UNALLOCATED LABOR	hour	13.10	0.2128	2.79	_____
DIESEL FUEL	gal	1.70	19.4827	33.14	_____
REPAIR & MAINTENANCE	acre	17.43	1.0000	17.43	_____
INTEREST ON OP. CAP.	acre	8.40	1.0000	8.40	_____
				-----	
TOTAL DIRECT EXPENSES				404.56	_____
RETURNS ABOVE DIRECT EXPENSES				82.44	_____
TOTAL FIXED EXPENSES				59.75	_____
				-----	
TOTAL SPECIFIED EXPENSES				464.31	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				22.69	_____

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.C Estimated resource use for field operations, per acre  
 Soybeans, June-planted, after wheat, LL, 12R 30"  
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Nov	0.3300				
Lime (Spread)	ton			0.33	Nov	0.3300				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	12R-30	MFWD 225	0.067	1.00	Jun		0.06	0.06	0.13	0.05
Soybean Seed LL	lb					50.0000				
CruiserMaxx	oz					1.6000				
Optimize	oz					1.4000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jun		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Jul		0.02	0.02	0.04	0.02
Liberty 280	oz					29.0000				
Dual Magnum	pt					1.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Quadris Top	oz					8.0000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Baythroid XL	oz					2.1300				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
Incidental Pest Trt	acre					1.0000				
Header -Soybean	25' Flex	265 hp	0.102	1.00	Oct		0.10	0.10	0.10	0.08
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 225	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre				Jul	1.0000			0.05	
TOTALS							0.24	0.24	0.39	0.21

Note: Cost of production estimates are based on 2016 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.D Estimated costs for field operations, per acre  
Soybeans, June-planted, after wheat, LL, 12R 30"  
Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Lime (Spread)	ton	15.18						0.72	15.90	15.90
Custom Apply Fert	acre	7.00						0.33	7.33	7.33
Phosphorus(46% P2O5)	cwt	19.04						0.90	19.94	19.94
Potash (60% K2O)	cwt	22.57						1.07	23.64	23.64
Soybeans Consultant	acre	6.50						0.15	6.65	6.65
Plant & Pre-Folding	12R-30		1.33	2.26	2.26			0.12	5.97	6.35
Soybean Seed LL	lb	58.00						1.15	59.15	59.15
CruiserMaxx	oz	7.36						0.15	7.51	7.51
Optimize	oz	3.00						0.06	3.06	3.06
Boundary	pt	20.36						0.40	20.76	20.76
Gramoxone SL 2.0	oz	12.96						0.26	13.22	13.22
Surfactant	pt	1.48						0.03	1.51	1.51
Spray (Broadcast)	60'		0.56	0.44	0.82			0.04	1.86	1.51
Liberty 280	oz	16.53						0.33	16.86	16.86
Dual Magnum	pt	14.97						0.30	15.27	15.27
Spray (Broadcast)	60'		0.56	0.44	0.82			0.03	1.85	1.51
Liberty 280	oz	16.53						0.26	16.79	16.79
Dual Magnum	pt	14.97						0.24	15.21	15.21
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Quadris Top	oz	20.08						0.24	20.32	20.32
Surfactant	pt	0.37							0.37	0.37
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Acephate 90SP	lb	6.52						0.08	6.60	6.60
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Prevathon	oz	18.34						0.22	18.56	18.56
Surfactant	pt	0.37							0.37	0.37
Baythroid XL	oz	5.28						0.06	5.34	5.34
Incidental Pest										
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Incidental Pest Trt	acre	8.00						0.06	8.06	8.06
Header -Soybean	25' Flex		2.37	4.32	2.49			0.04	9.22	14.88
Haul Soybeans	bu	13.50						0.05	13.55	13.55
Grain Cart Soybean	700 bu		0.42	0.35	0.52			0.01	1.30	1.28
1/2-mi Pivot Irr.	acre		27.90	9.62	0.47			0.65	38.64	34.22
TOTALS		338.21	33.14	17.43	7.38	0.00	8.40	404.56	59.75	464.31

Note: Cost of production estimates are based on 2016 input prices.  
These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.E Estimated monthly income and expense flows per acre  
 Soybeans, June-planted, after wheat, LL, 12R 30"  
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	487.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.50	6.50	0.00
FERTILIZERS	41.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36	0.00	20.08	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.82	31.50	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.14	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.00	0.74	0.00	0.00
CUSTOM FERTILIZE	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	15.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	3.12	0.87	0.04	0.00	3.01
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.26	11.72	8.37	0.00	2.79
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.06	1.16	0.54	0.00	4.67
INTEREST ON OP. CAP.	3.18	0.00	0.00	0.00	0.00	0.00	0.16	3.18	0.72	0.95	0.11	0.10
TOTAL DIRECT EXPENSES	70.27	0.00	0.00	0.00	0.00	0.00	7.00	162.28	45.97	80.36	14.61	24.07
NET INCOME	-70.27	0.00	0.00	0.00	0.00	0.00	-7.00	-162.28	-45.97	-80.36	-14.61	462.93
NET INCOME TO DATE	-70.27	-70.27	-70.27	-70.27	-70.27	-70.27	-77.27	-239.55	-285.52	-365.88	-380.49	82.44

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre\* Lease costs are based on hourly usage costs.

Table 19.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, June-planted, after wheat, LL, 12R 30"  
 Pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Soybeans			7.30	7.79	8.27	8.76	9.25	9.74	10.22	10.71	11.20	11.68	12.17
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-215 -274	-202 -262	-190 -250	-178 -238	-166 -226	-154 -214	-142 -201	-129 -189	-117 -177	-105 -165	-93 -153
60	30.00	bu	-179 -239	-165 -225	-150 -210	-136 -195	-121 -181	-106 -166	-92 -152	-77 -137	-63 -122	-48 -108	-33 -93
70	35.00	bu	-144 -204	-127 -187	-110 -170	-93 -153	-76 -136	-59 -119	-42 -102	-25 -85	-8 -68	8 -51	25 -34
80	40.00	bu	-109 -169	-90 -149	-70 -130	-51 -110	-31 -91	-12 -72	7 -52	26 -33	46 -13	65 5	85 25
90	45.00	bu	-74 -134	-52 -112	-30 -90	-8 -68	13 -46	35 -24	57 -2	78 19	100 41	122 63	144 84
100	50.00	bu	-39 -99	-14 -74	9 -50	33 -26	58 -1	82 22	106 47	131 71	155 95	179 120	204 144
110	55.00	bu	-4 -63	22 -37	49 -10	76 16	103 43	129 70	156 96	183 123	210 150	236 177	263 203
120	60.00	bu	31 -28	60 0	89 29	118 58	147 88	177 117	206 146	235 175	264 205	294 234	323 263
130	65.00	bu	66 6	97 38	129 69	161 101	192 133	224 164	256 196	287 228	319 259	351 291	382 323
140	70.00	bu	101 41	135 75	169 109	203 143	237 177	271 212	305 246	340 280	374 314	408 348	442 382
150	75.00	bu	136 76	173 113	209 149	246 186	282 222	319 259	355 295	392 332	428 368	465 405	501 442

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

Table 20.A Estimated costs per acre  
 Corn, stale seedbed, BtRR, 12-row 38", 210 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	1.0000	6.50	_____
App by Air ( 3 gal)	appl	5.00	0.2000	1.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	1.8000	39.38	_____
Potash (60% K2O)	cwt	16.97	1.5000	25.46	_____
Fert 10-34-0	gal	3.33	4.2919	14.29	_____
Zinc Plus	pt	2.99	2.0000	5.98	_____
UAN + Sulfur (28%)	gal	1.61	32.1712	51.80	_____
UAN (32%)	gal	1.58	39.5570	62.50	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.18	0.5000	5.59	_____
Select Max	pt	14.99	1.0000	14.99	_____
Atrazine 4L	pt	1.95	4.0000	7.80	_____
Halex GT	pt	7.60	3.6000	27.36	_____
INSECTICIDES					
Bifenthrin	oz	1.03	1.2800	1.32	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.89	34.0000	132.26	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Corn	bu	0.23	210.0000	48.30	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4242	5.56	_____
Harvesters	hour	13.14	0.1009	1.33	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR					
	hour	13.13	0.4020	5.28	_____
DIESEL FUEL					
Tractors	gal	1.70	4.7302	8.05	_____
Harvesters	gal	1.70	1.6890	2.87	_____
Roll-Out Pipe Irr.	gal	1.70	10.5901	18.00	_____
REPAIR & MAINTENANCE					
Implements	acre	7.53	1.0000	7.53	_____
Tractors	acre	2.79	1.0000	2.79	_____
Harvesters	acre	3.53	1.0000	3.53	_____
Roll-Out Pipe Irr.	acre	6.36	1.0000	6.36	_____
INTEREST ON OP. CAP.	acre	15.03	1.0000	15.03	_____
TOTAL DIRECT EXPENSES				585.00	_____
FIXED EXPENSES					
Implements	acre	11.46	1.0000	11.46	_____
Tractors	acre	17.59	1.0000	17.59	_____
Harvesters	acre	13.94	1.0000	13.94	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
TOTAL FIXED EXPENSES				94.52	_____
TOTAL SPECIFIED EXPENSES				679.52	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 20.B Summary of estimated costs and returns per acre  
 Corn, stale seedbed, BtRR, 12-row 38", 210 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.62	210.0000	760.20	_____
				-----	
TOTAL INCOME				760.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.50	1.0000	7.50	_____
FERTILIZERS	acre	199.41	1.0000	199.41	_____
HERBICIDES	acre	60.22	1.0000	60.22	_____
INSECTICIDES	acre	1.32	1.0000	1.32	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	132.26	1.0000	132.26	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	48.30	1.0000	48.30	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	13.14	0.5252	6.89	_____
UNALLOCATED LABOR	hour	13.13	0.4020	5.28	_____
DIESEL FUEL	gal	1.70	17.0094	28.92	_____
REPAIR & MAINTENANCE	acre	20.21	1.0000	20.21	_____
INTEREST ON OP. CAP.	acre	15.03	1.0000	15.03	_____
				-----	
TOTAL DIRECT EXPENSES				585.00	_____
RETURNS ABOVE DIRECT EXPENSES				175.20	_____
TOTAL FIXED EXPENSES				94.52	_____
				-----	
TOTAL SPECIFIED EXPENSES				679.52	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				80.68	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 20.C Estimated resource use for field operations, per acre  
 Corn, stale seedbed, BtRR, 12-row 38", 210 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Lime (Spread)	ton			0.33	Oct	0.6600				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.8000				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant & Pre-Folding	12R-38	MFWD 225	0.053	1.00	Mar		0.05	0.05	0.10	0.04
Corn Seed BtRR	thous					34.0000				
Fert 10-34-0	gal					4.2919				
Zinc Plus	pt					2.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					39.5570				
App by Air ( 3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Header - Corn	8R-38	325 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					210.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.52	0.52	1.04	0.40

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 20.D Estimated costs for field operations, per acre  
 Corn, stale seedbed, BtRR, 12-row 38", 210 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Lime (Spread)	ton	30.36						1.44	31.80		31.80
Spin Spreader	5 ton		0.83	0.57	1.43			0.13	2.96	2.37	5.33
Phosphorus (46% P2O5)	cwt	39.38						1.87	41.25		41.25
Potash (60% K2O)	cwt	25.46						1.21	26.67		26.67
Bed/Disk w/roller	12R-30/40		1.23	1.12	1.56			0.19	4.10	4.51	8.61
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
Clarity	pt	5.59						0.18	5.77		5.77
Select Max	pt	14.99						0.47	15.46		15.46
Plant & Pre-Folding	12R-38		1.05	1.96	1.81			0.13	4.95	5.35	10.30
Corn Seed BtRR	thous	132.26						3.66	135.92		135.92
Fert 10-34-0	gal	14.29						0.40	14.69		14.69
Zinc Plus	pt	5.98						0.17	6.15		6.15
Custom Apply Fert	acre	7.00						0.17	7.17		7.17
UAN + Sulfur (28%)	gal	51.80						1.23	53.03		53.03
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Atrazine 4L	pt	7.80						0.19	7.99		7.99
Halex GT	pt	27.36						0.65	28.01		28.01
Corn Consultant	acre	6.00						0.12	6.12		6.12
Fert Appl (Liquid)	12R-38		1.02	0.96	1.52			0.07	3.57	2.91	6.48
UAN (32%)	gal	62.50						1.24	63.74		63.74
App by Air ( 3 gal)	appl	1.00						0.02	1.02		1.02
Bifenthrin	oz	1.32						0.03	1.35		1.35
Header - Corn	8R-38		2.87	5.03	2.52			0.04	10.46	16.20	26.66
Grain Cart Corn	700 bu		0.50	0.42	0.63			0.01	1.56	1.53	3.09
Haul Corn	bu	48.30						0.19	48.49		48.49
Stalk Shredder Flex	20'		1.62	2.71	2.06			0.03	6.42	4.84	11.26
Roll-Out Pipe Irr.	acre	8.25	19.24	7.00	4.56			0.64	39.69	55.30	94.99
TOTALS		503.92	28.92	20.21	16.92	0.00	15.03	585.00	94.52	679.52	

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 20.E Estimated monthly income and expense flows per acre  
 Corn, stale seedbed, BtRR, 12-row 38", 210 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1.00	0.00	0.00	0.00	0.00
FERTILIZERS	64.84	0.00	0.00	0.00	0.00	20.27	51.80	62.50	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	35.16	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	132.26	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.30
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.49	0.00	0.00	0.00	0.00	1.81	0.83	1.75	3.01	0.23	0.59	5.21
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.69	0.00	0.00	0.00	0.00	1.05	0.56	1.02	13.83	4.50	0.28	4.99
REPAIR & MAINTENANCE	2.02	0.00	0.00	0.00	0.00	1.96	0.44	0.96	5.55	0.98	0.14	8.16
INTEREST ON OP. CAP.	5.07	0.00	0.00	0.00	1.00	4.36	2.28	1.48	0.49	0.07	0.01	0.27
TOTAL DIRECT EXPENSES	111.77	0.00	0.00	0.00	32.56	161.71	98.07	76.03	31.13	5.78	1.02	66.93
NET INCOME	-111.77	0.00	0.00	0.00	-32.56	-161.71	-98.07	-76.03	-31.13	-5.78	-1.02	693.27
NET INCOME TO DATE	-111.77	-111.77	-111.77	-111.77	-144.33	-306.04	-404.11	-480.14	-511.27	-517.05	-518.07	175.20

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 20.F Estimated returns for various price/yield combinations, per acre  
 Corn, stale seedbed, BtRR, 12-row 38", 210 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Corn	2.71	2.89	3.07	3.25	3.43	3.62	3.80	3.98	4.16	4.34	4.52		
PERCENT	YIELD	UNIT	dollars										
50	105.00	bu	-275 -370	-256 -351	-237 -332	-218 -313	-199 -294	-180 -275	-161 -256	-142 -237	-123 -218	-104 -199	-85 -180
60	126.00	bu	-223 -318	-200 -295	-177 -272	-155 -249	-132 -226	-109 -204	-86 -181	-63 -158	-41 -135	-18 -112	4 -89
70	147.00	bu	-171 -265	-144 -239	-118 -212	-91 -186	-64 -159	-38 -132	-11 -106	14 -79	41 -53	68 -26	94 0
80	168.00	bu	-119 -213	-88 -183	-58 -152	-27 -122	2 -92	32 -61	63 -31	93 -0	124 29	154 59	184 90
90	189.00	bu	-67 -161	-32 -127	1 -93	35 -58	69 -24	104 9	138 43	172 77	206 112	240 146	275 180
100	210.00	bu	-14 -109	23 -71	61 -33	99 4	137 42	175 80	213 118	251 156	289 194	327 232	365 270
110	231.00	bu	37 -57	79 -15	120 26	162 68	204 110	246 151	288 193	329 235	371 277	413 319	455 360
120	252.00	bu	89 -5	135 40	180 86	226 131	271 177	317 223	363 268	408 314	454 359	499 405	545 451
130	273.00	bu	141 47	191 96	240 145	289 195	339 244	388 294	438 343	487 393	536 442	586 491	635 541
140	294.00	bu	193 99	247 152	300 205	353 258	406 312	459 365	513 418	566 471	619 525	672 578	725 631
150	315.00	bu	245 151	302 208	360 265	417 322	474 379	531 436	588 493	645 550	702 607	759 664	816 721

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

Table 21.A Estimated costs per acre  
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"  
 150 bu yield goal, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	1.0000	6.50	_____
App by Air ( 3 gal)	appl	5.00	0.2000	1.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	1.0870	23.78	_____
Potash (60% K2O)	cwt	16.97	0.8300	14.09	_____
Fert 10-34-0	gal	3.33	4.2919	14.29	_____
Zinc Plus	pt	2.99	2.0000	5.98	_____
UAN + Sulfur (28%)	gal	1.61	19.3063	31.08	_____
UAN (32%)	gal	1.58	29.6700	46.88	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.18	0.5000	5.59	_____
Select Max	pt	14.99	1.0000	14.99	_____
Atrazine 4L	pt	1.95	4.0000	7.80	_____
Halex GT	pt	7.60	3.6000	27.36	_____
INSECTICIDES					
Bifenthrin	oz	1.03	1.2800	1.32	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.89	28.0000	108.92	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Corn	bu	0.23	150.0000	34.50	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3457	4.53	_____
Harvesters	hour	13.14	0.1009	1.33	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR	hour	13.13	0.4020	5.28	_____
DIESEL FUEL					
Tractors	gal	1.70	4.0040	6.81	_____
Harvesters	gal	1.70	1.3770	2.34	_____
REPAIR & MAINTENANCE					
Implements	acre	7.33	1.0000	7.33	_____
Tractors	acre	2.35	1.0000	2.35	_____
Harvesters	acre	3.40	1.0000	3.40	_____
INTEREST ON OP. CAP.	acre	11.62	1.0000	11.62	_____
TOTAL DIRECT EXPENSES				441.43	_____
FIXED EXPENSES					
Implements	acre	10.44	1.0000	10.44	_____
Tractors	acre	14.84	1.0000	14.84	_____
Harvesters	acre	13.40	1.0000	13.40	_____
TOTAL FIXED EXPENSES				38.68	_____
TOTAL SPECIFIED EXPENSES				480.11	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 21.B Summary of estimated costs and returns per acre  
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"  
 150 bu yield goal, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.62	150.0000	543.00	_____
				-----	
TOTAL INCOME				543.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.50	1.0000	7.50	_____
FERTILIZERS	acre	136.10	1.0000	136.10	_____
HERBICIDES	acre	60.22	1.0000	60.22	_____
INSECTICIDES	acre	1.32	1.0000	1.32	_____
SEED/PLANTS	acre	108.92	1.0000	108.92	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	34.50	1.0000	34.50	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
OPERATOR LABOR	hour	13.14	0.4466	5.86	_____
UNALLOCATED LABOR	hour	13.13	0.4020	5.28	_____
DIESEL FUEL	gal	1.70	5.3810	9.15	_____
REPAIR & MAINTENANCE	acre	13.08	1.0000	13.08	_____
INTEREST ON OP. CAP.	acre	11.62	1.0000	11.62	_____
				-----	
TOTAL DIRECT EXPENSES				441.43	_____
RETURNS ABOVE DIRECT EXPENSES				101.57	_____
TOTAL FIXED EXPENSES				38.68	_____
				-----	
TOTAL SPECIFIED EXPENSES				480.11	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				62.89	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 21.C Estimated resource use for field operations, per acre  
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"  
 150 bu yield goal, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Lime (Spread)	ton			0.33	Oct	0.6600				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.0870				
Potash (60% K2O)	cwt					0.8300				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant & Pre-Folding	12R-38	MFWD 225	0.053	1.00	Mar		0.05	0.05	0.10	0.04
Corn Seed BtRR	thous					28.0000				
Fert 10-34-0	gal					4.2919				
Zinc Plus	pt					2.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					29.6700				
App by Air ( 3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					150.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
<b>TOTALS</b>							<b>0.44</b>	<b>0.44</b>	<b>0.58</b>	<b>0.40</b>

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

- Fertilization decisions should be based on soil tests.**
- Soil test cost is prorated for a test every 3<sup>rd</sup> year.**
- Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 21.D Estimated costs for field operations, per acre  
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"  
 150 bu yield goal, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Lime (Spread)	ton	30.36						1.44	31.80		31.80
Spin Spreader	5 ton		0.83	0.57	1.43			0.13	2.96	2.37	5.33
Phosphorus (46% P2O5)	cwt	23.78						1.13	24.91		24.91
Potash (60% K2O)	cwt	14.09						0.67	14.76		14.76
Bed/Disk w/roller	12R-30/40		1.23	1.12	1.56			0.19	4.10	4.51	8.61
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
Clarity	pt	5.59						0.18	5.77		5.77
Select Max	pt	14.99						0.47	15.46		15.46
Plant & Pre-Folding	12R-38		1.05	1.96	1.81			0.13	4.95	5.35	10.30
Corn Seed BtRR	thous	108.92						3.02	111.94		111.94
Fert 10-34-0	gal	14.29						0.40	14.69		14.69
Zinc Plus	pt	5.98						0.17	6.15		6.15
Custom Apply Fert	acre	7.00						0.17	7.17		7.17
UAN + Sulfur (28%)	gal	31.08						0.74	31.82		31.82
Spray (Broadcast)	60'		0.56	0.44	0.83			0.04	1.87	1.51	3.38
Atrazine 4L	pt	7.80						0.19	7.99		7.99
Halex GT	pt	27.36						0.65	28.01		28.01
Corn Consultant	acre	6.00						0.12	6.12		6.12
Fert Appl (Liquid)	12R-38		1.02	0.96	1.52			0.07	3.57	2.91	6.48
UAN (32%)	gal	46.88						0.93	47.81		47.81
App by Air ( 3 gal)	appl	1.00						0.02	1.02		1.02
Bifenthrin	oz	1.32						0.03	1.35		1.35
Header - Corn	8R-38		2.34	4.90	2.52			0.04	9.80	15.66	25.46
Grain Cart Corn	700 bu		0.50	0.42	0.63			0.01	1.56	1.53	3.09
Haul Corn	bu	34.50						0.14	34.64		34.64
Stalk Shredder Flex	20'		1.62	2.71	2.06			0.03	6.42	4.84	11.26
TOTALS		395.22	9.15	13.08	12.36	0.00	11.62	441.43	38.68	480.11	

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 21.E Estimated monthly income and expense flows per acre  
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"  
 150 bu yield goal, Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	543.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	1.00	0.00	0.00	0.00	0.00
FERTILIZERS	37.87	0.00	0.00	0.00	0.00	20.27	31.08	46.88	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	35.16	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	108.92	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.50
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.99	0.00	0.00	0.00	0.00	1.81	0.83	1.52	0.00	0.00	0.00	5.21
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.06	0.00	0.00	0.00	0.00	1.05	0.56	1.02	0.00	0.00	0.00	4.46
REPAIR & MAINTENANCE	1.69	0.00	0.00	0.00	0.00	1.96	0.44	0.96	0.00	0.00	0.00	8.03
INTEREST ON OP. CAP.	3.72	0.00	0.00	0.00	1.00	3.72	1.79	1.17	0.00	0.00	0.00	0.22
TOTAL DIRECT EXPENSES	81.99	0.00	0.00	0.00	32.56	137.73	76.86	59.87	0.00	0.00	0.00	52.42
NET INCOME	-81.99	0.00	0.00	0.00	-32.56	-137.73	-76.86	-59.87	0.00	0.00	0.00	490.58
NET INCOME TO DATE	-81.99	-81.99	-81.99	-81.99	-114.55	-252.28	-329.14	-389.01	-389.01	-389.01	-389.01	101.57

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 21.F Estimated returns for various price/yield combinations, per acre  
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"  
 150 bu yield goal, Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Corn	2.71	2.89	3.07	3.25	3.43	3.62	3.80	3.98	4.16	4.34	4.52		
PERCENT	YIELD	UNIT	dollars										
50	75.00	bu	-220 -259	-206 -245	-193 -232	-179 -218	-166 -204	-152 -191	-139 -177	-125 -164	-111 -150	-98 -136	-84 -123
60	90.00	bu	-183 -221	-166 -205	-150 -189	-134 -173	-118 -156	-101 -140	-85 -124	-69 -107	-52 -91	-36 -75	-20 -59
70	105.00	bu	-145 -184	-126 -165	-107 -146	-88 -127	-69 -108	-50 -89	-31 -70	-12 -51	6 -32	25 -13	44 5
80	120.00	bu	-108 -147	-86 -125	-65 -103	-43 -82	-21 -60	-0 -38	21 -17	43 4	65 26	86 48	108 69
90	135.00	bu	-71 -110	-47 -85	-22 -61	1 -36	26 -12	50 12	75 36	99 60	124 85	148 109	172 134
100	150.00	bu	-34 -72	-7 -45	20 -18	47 8	74 35	101 62	128 90	155 117	183 144	210 171	237 198
110	165.00	bu	3 -35	32 -5	62 24	92 53	122 83	152 113	182 143	212 173	242 203	271 233	301 263
120	180.00	bu	40 1	72 34	105 66	138 99	170 131	203 164	235 197	268 229	300 262	333 294	366 327
130	195.00	bu	77 38	112 74	148 109	183 144	218 180	254 215	289 250	324 285	359 321	395 356	430 391
140	210.00	bu	114 76	152 114	190 152	228 190	266 228	304 266	342 304	380 342	418 380	456 418	494 456
150	225.00	bu	152 113	192 154	233 194	274 235	315 276	355 317	396 357	437 398	477 439	518 479	559 520

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

Table 22.A Estimated costs per acre  
 Corn, conventional tillage, RR seed, 12-row 38",  
 210 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	6.50	1.0000	6.50	_____
App by Air ( 3 gal)	appl	5.00	1.0000	5.00	_____
<b>FERTILIZERS</b>					
Phosphorus (46% P2O5)	cwt	21.88	1.8000	39.38	_____
Potash (60% K2O)	cwt	16.97	1.5000	25.46	_____
UAN + Sulfur (28%)	gal	1.61	32.1712	51.80	_____
UAN (32%)	gal	1.58	39.5570	62.50	_____
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.18	0.5000	5.59	_____
Select Max	pt	14.99	1.0000	14.99	_____
Atrazine 4L	pt	1.95	4.0000	7.80	_____
Halex GT	pt	7.60	3.6000	27.36	_____
<b>INSECTICIDES</b>					
Intrepid 2F	oz	2.05	4.0000	8.20	_____
<b>IRRIGATION SUPPLIES</b>					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
<b>SEED/PLANTS</b>					
Corn Seed RR2	thous	3.17	34.0000	107.78	_____
<b>CUSTOM FERTILIZE</b>					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
<b>HAULING</b>					
Haul Corn	bu	0.23	210.0000	48.30	_____
<b>CUSTOM LIME</b>					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
<b>CROP CONSULTANT</b>					
Corn Consultant	acre	6.00	1.0000	6.00	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3300	3.30	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	13.14	0.6930	9.09	_____
Harvesters	hour	13.14	0.1009	1.33	_____
Self-Propelled	hour	13.14	0.0176	0.23	_____
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
<b>HAND LABOR</b>					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
<b>UNALLOCATED LABOR</b>					
	hour	13.15	0.6597	8.68	_____
<b>DIESEL FUEL</b>					
Tractors	gal	1.70	7.8429	13.34	_____
Harvesters	gal	1.70	1.3770	2.34	_____
Self-Propelled	gal	1.70	0.1586	0.27	_____
Roll-Out Pipe Irr.	gal	1.70	10.5901	18.00	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.21	1.0000	9.21	_____
Tractors	acre	4.64	1.0000	4.64	_____
Harvesters	acre	3.40	1.0000	3.40	_____
Self-Propelled	acre	0.18	1.0000	0.18	_____
Roll-Out Pipe Irr.	acre	6.36	1.0000	6.36	_____
INTEREST ON OP. CAP.	acre	14.60	1.0000	14.60	_____
<b>TOTAL DIRECT EXPENSES</b>				566.39	_____
<b>FIXED EXPENSES</b>					
Implements	acre	15.88	1.0000	15.88	_____
Tractors	acre	29.12	1.0000	29.12	_____
Harvesters	acre	13.40	1.0000	13.40	_____
Self-Propelled	acre	1.20	1.0000	1.20	_____
Roll-Out Pipe Irr.	acre	51.53	1.0000	51.53	_____
<b>TOTAL FIXED EXPENSES</b>				111.13	_____
<b>TOTAL SPECIFIED EXPENSES</b>				677.52	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 22.B Summary of estimated costs and returns per acre  
 Corn, conventional tillage, RR seed, 12-row 38",  
 210 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.62	210.0000	760.20	_____
				-----	
TOTAL INCOME				760.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.50	1.0000	11.50	_____
FERTILIZERS	acre	179.14	1.0000	179.14	_____
HERBICIDES	acre	60.22	1.0000	60.22	_____
INSECTICIDES	acre	8.20	1.0000	8.20	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	107.78	1.0000	107.78	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	48.30	1.0000	48.30	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	13.14	0.8116	10.65	_____
UNALLOCATED LABOR	hour	13.15	0.6597	8.68	_____
DIESEL FUEL	gal	1.70	19.9688	33.95	_____
REPAIR & MAINTENANCE	acre	23.79	1.0000	23.79	_____
INTEREST ON OP. CAP.	acre	14.60	1.0000	14.60	_____
				-----	
TOTAL DIRECT EXPENSES				566.39	_____
RETURNS ABOVE DIRECT EXPENSES				193.81	_____
TOTAL FIXED EXPENSES				111.13	_____
				-----	
TOTAL SPECIFIED EXPENSES				677.52	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				82.68	_____

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

**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 22.C Estimated resource use for field operations, per acre  
 Corn, conventional tillage, RR seed, 12-row 38",  
 210 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
							-----hours-----				
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09	
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07	
Soil Test	acre			0.33	Oct	0.3300					
Lime (Spread)	ton			0.33	Oct	0.6600					
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03	
Phosphorus(46% P2O5)	cwt					1.8000					
Potash (60% K2O)	cwt					1.5000					
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05	
App by Air ( 5 gal)	appl			1.00	Feb	1.0000					
Glyphosate 3lbs a.e	oz					32.0000					
Clarity	pt					0.5000					
Select Max	pt					1.0000					
Row Cond./Roll-Fold.	30'	MFWD 225	0.062	1.00	Mar		0.06	0.06	0.06	0.05	
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04	
Corn Seed RR2	thous					34.0000					
Custom Apply Fert	acre			1.00	Apr	1.0000					
UAN + Sulfur (28%)	gal					32.1712					
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01	
Atrazine 4L	pt					4.0000					
Halex GT	pt					3.6000					
Corn Consultant	acre			1.00	May	1.0000					
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04	
UAN (32%)	gal					39.5570					
Cultivate	12R-38	MFWD 225	0.054	1.00	May		0.05	0.05	0.05	0.04	
App by Air ( 3 gal)	appl			1.00	Jun	1.0000					
Intrepid 2F	oz					4.0000					
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09	
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02	
Haul Corn	bu					210.0000					
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07	
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46		
TOTALS							0.81	0.79	1.32	0.65	

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 22.D Estimated costs for field operations, per acre  
 Corn, conventional tillage, RR seed, 12-row 38",  
 210 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		2.01	0.82	2.55			0.26	5.64	4.68	10.32
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Soil Test	acre	3.30						0.16	3.46		3.46
Lime (Spread)	ton	30.36						1.44	31.80		31.80
Spin Spreader	5 ton		0.83	0.57	1.43			0.13	2.96	2.37	5.33
Phosphorus(46% P2O5)	cwt	39.38						1.87	41.25		41.25
Potash (60% K2O)	cwt	25.46						1.21	26.67		26.67
Bed/Disk w/roller	12R-30/40		1.23	1.12	1.56			0.19	4.10	4.51	8.61
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
Clarity	pt	5.59						0.18	5.77		5.77
Select Max	pt	14.99						0.47	15.46		15.46
Row Cond./Roll-Fold.	30'		1.23	0.99	1.56			0.10	3.88	4.15	8.03
Plant - Folding	12R-38		0.98	1.68	1.69			0.12	4.47	4.69	9.16
Corn Seed RR2	thous	107.78						2.99	110.77		110.77
Custom Apply Fert	acre	7.00						0.17	7.17		7.17
UAN + Sulfur (28%)	gal	51.80						1.23	53.03		53.03
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.52			0.02	0.99	1.20	2.19
Atrazine 4L	pt	7.80						0.19	7.99		7.99
Halex GT	pt	27.36						0.65	28.01		28.01
Corn Consultant	acre	6.00						0.12	6.12		6.12
Fert Appl (Liquid)	12R-38		1.02	0.96	1.52			0.07	3.57	2.91	6.48
UAN (32%)	gal	62.50						1.24	63.74		63.74
Cultivate	12R-38		1.07	0.91	1.35			0.07	3.40	3.74	7.14
App by Air ( 3 gal)	appl	5.00						0.08	5.08		5.08
Intrepid 2F	oz	8.20						0.13	8.33		8.33
Header - Corn	8R-38		2.34	4.90	2.52			0.04	9.80	15.66	25.46
Grain Cart Corn	700 bu		0.50	0.42	0.63			0.01	1.56	1.53	3.09
Haul Corn	bu	48.30						0.19	48.49		48.49
Stalk Shredder Flex	20'		1.62	2.71	2.06			0.03	6.42	4.84	11.26
Roll-Out Pipe Irr.	acre	8.25	19.24	7.00	4.56			0.64	39.69	55.30	94.99
TOTALS		470.05	33.95	23.79	24.00	0.00	14.60	566.39	111.13	677.52	

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 22.E Estimated monthly income and expense flows per acre  
 Corn, conventional tillage, RR seed, 12-row 38",  
 210 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	64.84	0.00	0.00	0.00	0.00	0.00	51.80	62.50	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	35.16	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.20	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	107.78	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.30
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	8.09	0.00	0.00	0.00	0.00	3.25	0.52	3.10	3.01	0.23	0.59	5.21
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	6.31	0.00	0.00	0.00	0.00	2.21	0.27	2.09	13.83	4.50	0.28	4.46
REPAIR & MAINTENANCE	4.37	0.00	0.00	0.00	0.00	2.67	0.18	1.87	5.55	0.98	0.14	8.03
INTEREST ON OP. CAP.	5.58	0.00	0.00	0.00	1.00	3.21	2.26	1.50	0.70	0.07	0.01	0.27
TOTAL DIRECT EXPENSES	122.85	0.00	0.00	0.00	32.56	119.12	97.19	77.06	44.54	5.78	1.02	66.27
NET INCOME	-122.85	0.00	0.00	0.00	-32.56	-119.12	-97.19	-77.06	-44.54	-5.78	-1.02	693.93
NET INCOME TO DATE	-122.85	-122.85	-122.85	-122.85	-155.41	-274.53	-371.72	-448.78	-493.32	-499.10	-500.12	193.81

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.



Table 22.F Estimated returns for various price/yield combinations, per acre  
 Corn, conventional tillage, RR seed, 12-row 38",  
 210 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Corn	2.71	2.89	3.07	3.25	3.43	3.62	3.80	3.98	4.16	4.34	4.52		
PERCENT	YIELD	UNIT	dollars										
50	105.00	bu	-257 -368	-238 -349	-219 -330	-200 -311	-181 -292	-162 -273	-143 -254	-124 -235	-105 -216	-86 -197	-67 -178
60	126.00	bu	-204 -316	-182 -293	-159 -270	-136 -247	-113 -224	-90 -202	-68 -179	-45 -156	-22 -133	0 -110	23 -87
70	147.00	bu	-152 -263	-126 -237	-99 -210	-72 -184	-46 -157	-19 -130	6 -104	33 -77	60 -51	86 -24	113 2
80	168.00	bu	-100 -211	-70 -181	-39 -150	-9 -120	21 -90	51 -59	81 -29	112 1	142 31	173 61	203 92
90	189.00	bu	-48 -159	-14 -125	20 -91	54 -56	88 -22	122 11	156 45	191 79	225 114	259 148	293 182
100	210.00	bu	3 -107	41 -69	79 -31	117 6	155 44	193 82	231 120	269 158	307 196	345 234	383 272
110	231.00	bu	55 -55	97 -13	139 28	181 70	223 112	264 153	306 195	348 237	390 279	432 321	474 362
120	252.00	bu	108 -3	153 42	199 88	244 133	290 179	336 225	381 270	427 316	472 361	518 407	564 453
130	273.00	bu	160 49	209 98	259 147	308 197	357 246	407 296	456 345	506 395	555 444	604 493	654 543
140	294.00	bu	212 101	265 154	318 207	372 260	425 314	478 367	531 420	584 473	638 527	691 580	744 633
150	315.00	bu	264 153	321 210	378 267	435 324	492 381	549 438	606 495	663 552	720 609	777 666	834 723

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

Table 23.A Estimated costs per acre  
 Corn, conventional tillage, RR seed, 12-row 38"  
 150 bu yield goal, non-irrigated, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	1.0000	6.50	_____
App by Air ( 3 gal)	appl	5.00	1.0000	5.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	1.0870	23.78	_____
Potash (60% K2O)	cwt	16.97	0.8300	14.09	_____
UAN + Sulfur (28%)	gal	1.61	19.3063	31.08	_____
UAN (32%)	gal	1.58	29.6700	46.88	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.18	0.5000	5.59	_____
Select Max	pt	14.99	1.0000	14.99	_____
Atrazine 4L	pt	1.95	4.0000	7.80	_____
Halex GT	pt	7.60	3.6000	27.36	_____
INSECTICIDES					
Intrepid 2F	oz	2.05	4.0000	8.20	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.17	28.0000	88.76	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Corn	bu	0.23	150.0000	34.50	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5690	7.46	_____
Harvesters	hour	13.14	0.1009	1.33	_____
Self-Propelled	hour	13.14	0.0176	0.23	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	13.16	0.6188	8.15	_____
DIESEL FUEL					
Tractors	gal	1.70	6.5903	11.21	_____
Harvesters	gal	1.70	1.3770	2.34	_____
Self-Propelled	gal	1.70	0.1586	0.27	_____
REPAIR & MAINTENANCE					
Implements	acre	7.70	1.0000	7.70	_____
Tractors	acre	3.88	1.0000	3.88	_____
Harvesters	acre	3.40	1.0000	3.40	_____
Self-Propelled	acre	0.18	1.0000	0.18	_____
INTEREST ON OP. CAP.	acre	11.22	1.0000	11.22	_____
TOTAL DIRECT EXPENSES				424.18	_____
FIXED EXPENSES					
Implements	acre	11.76	1.0000	11.76	_____
Tractors	acre	24.42	1.0000	24.42	_____
Harvesters	acre	13.40	1.0000	13.40	_____
Self-Propelled	acre	1.20	1.0000	1.20	_____
TOTAL FIXED EXPENSES				50.78	_____
TOTAL SPECIFIED EXPENSES				474.96	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 23.B Summary of estimated costs and returns per acre  
 Corn, conventional tillage, RR seed, 12-row 38"  
 150 bu yield goal, non-irrigated, Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.62	150.0000	543.00	_____
				-----	
TOTAL INCOME				543.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.50	1.0000	11.50	_____
FERTILIZERS	acre	115.83	1.0000	115.83	_____
HERBICIDES	acre	60.22	1.0000	60.22	_____
INSECTICIDES	acre	8.20	1.0000	8.20	_____
SEED/PLANTS	acre	88.76	1.0000	88.76	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	34.50	1.0000	34.50	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
OPERATOR LABOR	hour	13.14	0.6876	9.02	_____
UNALLOCATED LABOR	hour	13.16	0.6188	8.15	_____
DIESEL FUEL	gal	1.70	8.1261	13.82	_____
REPAIR & MAINTENANCE	acre	15.16	1.0000	15.16	_____
INTEREST ON OP. CAP.	acre	11.22	1.0000	11.22	_____
				-----	
TOTAL DIRECT EXPENSES				424.18	_____
RETURNS ABOVE DIRECT EXPENSES				118.82	_____
TOTAL FIXED EXPENSES				50.78	_____
				-----	
TOTAL SPECIFIED EXPENSES				474.96	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				68.04	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 23.C Estimated resource use for field operations, per acre  
 Corn, conventional tillage, RR seed, 12-row 38"  
 150 bu yield goal, non-irrigated, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	24'	MFWD 225	0.081	1.00	Oct		0.08	0.08	0.08	0.07
Soil Test	acre			0.33	Oct	0.3300				
Lime (Spread)	ton			0.33	Oct	0.6600				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0870				
Potash (60% K2O)	cwt					0.8300				
Bed/Disk (Hipper)Rd	8R-38	MFWD 225	0.074	1.00	Oct		0.07	0.07	0.07	0.06
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	Mar		0.05	0.05	0.05	0.05
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					29.6700				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					150.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.68	0.67	0.81	0.61

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 23.D Estimated costs for field operations, per acre  
 Corn, conventional tillage, RR seed, 12-row 38"  
 150 bu yield goal, non-irrigated, Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		2.01	0.82	2.55			0.26	5.64	4.68	10.32
Disk Harrow	24'		1.61	1.53	2.05			0.25	5.44	5.55	10.99
Soil Test	acre	3.30						0.16	3.46		3.46
Lime (Spread)	ton	30.36						1.44	31.80		31.80
Spin Spreader	5 ton		0.83	0.57	1.43			0.13	2.96	2.37	5.33
Phosphorus(46% P2O5)	cwt	23.78						1.13	24.91		24.91
Potash (60% K2O)	cwt	14.09						0.67	14.76		14.76
Bed/Disk (Hipper)Rd	8R-38		1.46	0.77	1.85			0.19	4.27	3.89	8.16
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
Clarity	pt	5.59						0.18	5.77		5.77
Select Max	pt	14.99						0.47	15.46		15.46
Row Cond Rigid	26'		1.18	0.62	1.49			0.09	3.38	3.46	6.84
Plant - Folding	12R-38		0.98	1.68	1.69			0.12	4.47	4.69	9.16
Corn Seed RR2	thous	88.76						2.46	91.22		91.22
Custom Apply Fert	acre	7.00						0.17	7.17		7.17
UAN + Sulfur (28%)	gal	31.08						0.74	31.82		31.82
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.52			0.02	0.99	1.20	2.19
Atrazine 4L	pt	7.80						0.19	7.99		7.99
Halex GT	pt	27.36						0.65	28.01		28.01
Corn Consultant	acre	6.00						0.12	6.12		6.12
Fert Appl (Liquid)	12R-38		1.02	0.96	1.52			0.07	3.57	2.91	6.48
UAN (32%)	gal	46.88						0.93	47.81		47.81
App by Air ( 3 gal)	appl	5.00						0.08	5.08		5.08
Intrepid 2F	oz	8.20						0.13	8.33		8.33
Header - Corn	8R-38		2.34	4.90	2.52			0.04	9.80	15.66	25.46
Grain Cart Corn	700 bu		0.50	0.42	0.63			0.01	1.56	1.53	3.09
Haul Corn	bu	34.50						0.14	34.64		34.64
Stalk Shredder Flex	20'		1.62	2.71	2.06			0.03	6.42	4.84	11.26
TOTALS		365.67	13.82	15.16	18.31	0.00	11.22	424.18	50.78	474.96	

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 23.E Estimated monthly income and expense flows per acre  
 Corn, conventional tillage, RR seed, 12-row 38"  
 150 bu yield goal, non-irrigated, Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	543.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	37.87	0.00	0.00	0.00	0.00	0.00	31.08	46.88	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	35.16	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.20	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	88.76	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.50
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.88	0.00	0.00	0.00	0.00	3.18	0.52	1.52	0.00	0.00	0.00	5.21
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	5.91	0.00	0.00	0.00	0.00	2.16	0.27	1.02	0.00	0.00	0.00	4.46
REPAIR & MAINTENANCE	3.69	0.00	0.00	0.00	0.00	2.30	0.18	0.96	0.00	0.00	0.00	8.03
INTEREST ON OP. CAP.	4.23	0.00	0.00	0.00	1.00	2.67	1.77	1.12	0.21	0.00	0.00	0.22
TOTAL DIRECT EXPENSES	93.24	0.00	0.00	0.00	32.56	99.07	75.98	57.50	13.41	0.00	0.00	52.42
NET INCOME	-93.24	0.00	0.00	0.00	-32.56	-99.07	-75.98	-57.50	-13.41	0.00	0.00	490.58
NET INCOME TO DATE	-93.24	-93.24	-93.24	-93.24	-125.80	-224.87	-300.85	-358.35	-371.76	-371.76	-371.76	118.82

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 23.F Estimated returns for various price/yield combinations, per acre  
 Corn, conventional tillage, RR seed, 12-row 38"  
 150 bu yield goal, non-irrigated, Delta Area, Mississippi, 2017

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			2.71	2.89	3.07	3.25	3.43	3.62	3.80	3.98	4.16	4.34	4.52
			-----dollars-----										
PERCENT	YIELD	UNIT											
50	75.00	bu	-203	-189	-176	-162	-148	-135	-121	-108	-94	-81	-67
			-254	-240	-226	-213	-199	-186	-172	-158	-145	-131	-118
60	90.00	bu	-165	-149	-133	-117	-100	-84	-68	-51	-35	-19	-3
			-216	-200	-184	-167	-151	-135	-119	-102	-86	-70	-53
70	105.00	bu	-128	-109	-90	-71	-52	-33	-14	4	23	42	61
			-179	-160	-141	-122	-103	-84	-65	-46	-27	-8	10
80	120.00	bu	-91	-69	-48	-26	-4	17	38	60	82	104	125
			-142	-120	-98	-77	-55	-33	-11	9	31	53	74
90	135.00	bu	-54	-29	-5	19	43	67	92	116	141	165	190
			-104	-80	-56	-31	-7	17	41	66	90	114	139
100	150.00	bu	-16	10	37	64	91	118	145	173	200	227	254
			-67	-40	-13	13	40	68	95	122	149	176	203
110	165.00	bu	20	50	80	109	139	169	199	229	259	289	318
			-30	-0	29	59	89	118	148	178	208	238	268
120	180.00	bu	57	90	122	155	187	220	253	285	318	350	383
			6	39	71	104	137	169	202	234	267	300	332
130	195.00	bu	94	130	165	200	236	271	306	341	377	412	447
			44	79	114	149	185	220	255	291	326	361	397
140	210.00	bu	132	170	208	246	284	322	360	398	436	474	512
			81	119	157	195	233	271	309	347	385	423	461
150	225.00	bu	169	210	250	291	332	373	413	454	495	535	576
			118	159	200	240	281	322	362	403	444	485	525

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

Table 24.A Estimated costs per acre  
 Corn, stale seedbed, RR seed, 12-row 30",  
 135 bu yield goal, All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	1.0000	6.50	_____
App by Air ( 3 gal)	appl	5.00	1.0000	5.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	1.0870	23.78	_____
Potash (60% K2O)	cwt	16.97	0.8300	14.09	_____
UAN + Sulfur (28%)	gal	1.61	48.5856	78.22	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
Clarity	pt	11.18	0.5000	5.59	_____
Select Max	pt	14.99	1.0000	14.99	_____
Atrazine 4L	pt	1.95	4.0000	7.80	_____
Halex GT	pt	7.60	3.6000	27.36	_____
INSECTICIDES					
Intrepid 2F	oz	2.05	4.0000	8.20	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.17	28.0000	88.76	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
HAULING					
Haul Corn	bu	0.23	135.0000	31.05	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4823	6.33	_____
Harvesters	hour	13.14	0.1277	1.68	_____
Self-Propelled	hour	13.14	0.0176	0.23	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	13.15	0.5649	7.43	_____
DIESEL FUEL					
Tractors	gal	1.70	4.2208	7.19	_____
Harvesters	gal	1.70	1.7419	2.96	_____
Self-Propelled	gal	1.70	0.1586	0.27	_____
REPAIR & MAINTENANCE					
Implements	acre	8.56	1.0000	8.56	_____
Tractors	acre	2.56	1.0000	2.56	_____
Harvesters	acre	4.30	1.0000	4.30	_____
Self-Propelled	acre	0.18	1.0000	0.18	_____
INTEREST ON OP. CAP.	acre	10.91	1.0000	10.91	_____
TOTAL DIRECT EXPENSES				416.47	_____
FIXED EXPENSES					
Implements	acre	12.69	1.0000	12.69	_____
Tractors	acre	16.14	1.0000	16.14	_____
Harvesters	acre	16.95	1.0000	16.95	_____
Self-Propelled	acre	1.20	1.0000	1.20	_____
TOTAL FIXED EXPENSES				46.98	_____
TOTAL SPECIFIED EXPENSES				463.45	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 24.B Summary of estimated costs and returns per acre  
 Corn, stale seedbed, RR seed, 12-row 30",  
 135 bu yield goal, All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	3.62	135.0000	488.70	_____
				-----	
TOTAL INCOME				488.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	11.50	1.0000	11.50	_____
FERTILIZERS	acre	116.09	1.0000	116.09	_____
HERBICIDES	acre	60.22	1.0000	60.22	_____
INSECTICIDES	acre	8.20	1.0000	8.20	_____
SEED/PLANTS	acre	88.76	1.0000	88.76	_____
CUSTOM FERTILIZE	acre	7.00	1.0000	7.00	_____
HAULING	acre	31.05	1.0000	31.05	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1530	1.39	_____
OPERATOR LABOR	hour	13.14	0.6277	8.24	_____
UNALLOCATED LABOR	hour	13.15	0.5649	7.43	_____
DIESEL FUEL	gal	1.70	6.1215	10.42	_____
REPAIR & MAINTENANCE	acre	15.60	1.0000	15.60	_____
INTEREST ON OP. CAP.	acre	10.91	1.0000	10.91	_____
				-----	
TOTAL DIRECT EXPENSES				416.47	_____
RETURNS ABOVE DIRECT EXPENSES				72.23	_____
TOTAL FIXED EXPENSES				46.98	_____
				-----	
TOTAL SPECIFIED EXPENSES				463.45	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				25.25	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 24.C Estimated resource use for field operations, per acre  
 Corn, stale seedbed, RR seed, 12-row 30",  
 135 bu yield goal, All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Lime (Spread)	ton			0.33	Oct	0.6600				
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.0870				
Potash (60% K2O)	cwt					0.8300				
Disk Heavy	20'	MFWD 170	0.097	1.00	Oct		0.09	0.09	0.09	0.08
Bed/Disk w/roller	8R-30/40	MFWD 170	0.093	1.00	Oct		0.09	0.09	0.09	0.08
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant - Rigid	12R-30	MFWD 170	0.062	1.00	Mar		0.06	0.06	0.12	0.05
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					14.8018				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	12R-30	MFWD 170	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					33.7838				
Corn Consultant	acre			1.00	May	1.0000				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 170	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					135.0000				
Stalk Shredder Flex	20'	MFWD 170	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.62	0.61	0.78	0.56

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 24.D Estimated costs for field operations, per acre  
 Corn, stale seedbed, RR seed, 12-row 30",  
 135 bu yield goal, All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Lime (Spread)	ton	30.36						1.44	31.80		31.80
Spin Spreader	5 ton		0.63	0.50	1.43			0.12	2.68	1.97	4.65
Phosphorus(46% P2O5)	cwt	23.78						1.13	24.91		24.91
Potash (60% K2O)	cwt	14.09						0.67	14.76		14.76
Disk Heavy	20'		1.45	1.62	2.43			0.26	5.76	5.57	11.33
Bed/Disk w/roller	8R-30/40		1.39	1.15	2.34			0.23	5.11	4.86	9.97
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
Clarity	pt	5.59						0.18	5.77		5.77
Select Max	pt	14.99						0.47	15.46		15.46
Plant - Rigid	12R-30		0.94	1.68	2.14			0.13	4.89	4.68	9.57
Corn Seed RR2	thous	88.76						2.46	91.22		91.22
Custom Apply Fert	acre	7.00						0.17	7.17		7.17
UAN + Sulfur (28%)	gal	23.83						0.57	24.40		24.40
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.52			0.02	0.99	1.20	2.19
Atrazine 4L	pt	7.80						0.19	7.99		7.99
Halex GT	pt	27.36						0.65	28.01		28.01
Fert Appl (Liquid)	12R-30		1.17	1.42	2.32			0.10	5.01	3.75	8.76
UAN + Sulfur (28%)	gal	54.39						1.08	55.47		55.47
Corn Consultant	acre	6.00						0.12	6.12		6.12
App by Air ( 3 gal)	appl	5.00						0.08	5.08		5.08
Intrepid 2F	oz	8.20						0.13	8.33		8.33
Header - Corn	8R-30		2.96	6.17	3.19			0.05	12.37	19.76	32.13
Grain Cart Corn	500 bu		0.38	0.29	0.63			0.01	1.31	1.13	2.44
Haul Corn	bu	31.05						0.12	31.17		31.17
Stalk Shredder Flex	20'		1.23	2.59	2.06			0.02	5.90	4.06	9.96
TOTALS		362.48	10.42	15.60	17.06	0.00	10.91	416.47	46.98	463.45	

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 24.E Estimated monthly income and expense flows per acre  
 Corn, stale seedbed, RR seed, 12-row 30",  
 135 bu yield goal, All Areas, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	488.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	5.00	0.00	0.00	0.00
FERTILIZERS	37.87	0.00	0.00	0.00	0.00	0.00	23.83	54.39	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.06	0.00	35.16	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.20	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	88.76	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.05
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	6.20	0.00	0.00	0.00	0.00	2.14	0.52	2.32	0.00	0.00	0.00	5.88
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.47	0.00	0.00	0.00	0.00	0.94	0.27	1.17	0.00	0.00	0.00	4.57
REPAIR & MAINTENANCE	3.27	0.00	0.00	0.00	0.00	1.68	0.18	1.42	0.00	0.00	0.00	9.05
INTEREST ON OP. CAP.	4.01	0.00	0.00	0.00	1.00	2.59	1.60	1.30	0.21	0.00	0.00	0.20
TOTAL DIRECT EXPENSES	88.48	0.00	0.00	0.00	32.56	96.11	68.56	66.60	13.41	0.00	0.00	50.75
NET INCOME	-88.48	0.00	0.00	0.00	-32.56	-96.11	-68.56	-66.60	-13.41	0.00	0.00	437.95
NET INCOME TO DATE	-88.48	-88.48	-88.48	-88.48	-121.04	-217.15	-285.71	-352.31	-365.72	-365.72	-365.72	72.23

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 24.F Estimated returns for various price/yield combinations, per acre  
 Corn, stale seedbed, RR seed, 12-row 30",  
 135 bu yield goal, All Areas, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Corn	2.71	2.89	3.07	3.25	3.43	3.62	3.80	3.98	4.16	4.34	4.52		
PERCENT	YIELD	UNIT	dollars										
50	67.50	bu	-217 -264	-205 -252	-193 -240	-180 -227	-168 -215	-156 -203	-144 -191	-132 -179	-119 -166	-107 -154	-95 -142
60	81.00	bu	-184 -231	-169 -216	-154 -201	-140 -187	-125 -172	-110 -157	-96 -143	-81 -128	-66 -113	-52 -99	-37 -84
70	94.50	bu	-150 -197	-133 -180	-116 -163	-99 -146	-82 -129	-65 -112	-47 -94	-30 -77	-13 -60	3 -43	20 -26
80	108.00	bu	-117 -163	-97 -144	-77 -124	-58 -105	-38 -85	-19 -66	0 -46	19 -27	39 -7	58 11	78 31
90	121.50	bu	-83 -130	-61 -108	-39 -86	-17 -64	4 -42	26 -20	48 1	70 23	92 45	114 67	136 89
100	135.00	bu	-49 -96	-25 -72	-1 -48	23 -23	47 0	72 25	96 49	121 74	145 98	169 122	194 147
110	148.50	bu	-16 -63	10 -36	37 -9	64 17	91 44	117 71	144 97	171 124	198 151	225 178	252 205
120	162.00	bu	17 -29	46 -0	75 28	105 58	134 87	163 116	193 146	222 175	251 204	281 234	310 263
130	175.50	bu	50 3	82 35	114 67	145 98	177 130	209 162	241 194	273 226	304 257	336 289	368 321
140	189.00	bu	84 37	118 71	152 105	186 139	221 174	255 208	289 242	323 276	357 310	392 345	426 379
150	202.50	bu	117 70	154 107	191 144	227 180	264 217	300 254	337 290	374 327	410 363	447 400	484 437

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

Table 25.A Estimated costs per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	1.0000	6.50	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	1.3000	28.44	_____
Potash (60% K2O)	cwt	16.97	1.0000	16.97	_____
UAN + Sulfur (28%)	gal	1.61	38.2883	61.64	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Select Max	pt	14.99	1.0000	14.99	_____
Lexar	pt	7.90	6.0000	47.40	_____
INSECTICIDES					
Sivanto	oz	2.53	4.0000	10.12	_____
Karate Z	oz	2.58	1.5000	3.87	_____
Prevathon	oz	1.31	14.0000	18.34	_____
Transform WG	oz	7.90	1.0000	7.90	_____
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.39	5.0000	16.95	_____
ADJUVANTS					
Surfactant	pt	3.69	0.3000	1.11	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Sorghum Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.3120	4.10	_____
Harvesters	hour	13.14	0.1021	1.34	_____
Self-Propelled	hour	13.14	0.0661	0.85	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0330	0.30	_____
UNALLOCATED LABOR					
	hour	13.18	0.4322	5.70	_____
DIESEL FUEL					
Tractors	gal	1.70	2.7303	4.65	_____
Harvesters	gal	1.70	1.3935	2.37	_____
Self-Propelled	gal	1.70	0.8505	1.45	_____
REPAIR & MAINTENANCE					
Implements	acre	4.82	1.0000	4.82	_____
Tractors	acre	1.65	1.0000	1.65	_____
Harvesters	acre	3.44	1.0000	3.44	_____
Self-Propelled	acre	0.90	1.0000	0.90	_____
INTEREST ON OP. CAP.	acre	7.85	1.0000	7.85	_____
TOTAL DIRECT EXPENSES				349.68	_____
FIXED EXPENSES					
Implements	acre	9.45	1.0000	9.45	_____
Tractors	acre	10.44	1.0000	10.44	_____
Harvesters	acre	13.56	1.0000	13.56	_____
Self-Propelled	acre	5.80	1.0000	5.80	_____
TOTAL FIXED EXPENSES				39.25	_____
TOTAL SPECIFIED EXPENSES				388.93	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 25.B Summary of estimated costs and returns per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	3.44	100.0000	344.00	_____
				-----	
TOTAL INCOME				344.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	6.50	1.0000	6.50	_____
FERTILIZERS	acre	107.05	1.0000	107.05	_____
HERBICIDES	acre	72.45	1.0000	72.45	_____
INSECTICIDES	acre	40.23	1.0000	40.23	_____
SEED/PLANTS	acre	16.95	1.0000	16.95	_____
ADJUVANTS	acre	1.11	1.0000	1.11	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1772	1.61	_____
OPERATOR LABOR	hour	13.14	0.4803	6.29	_____
UNALLOCATED LABOR	hour	13.18	0.4322	5.70	_____
DIESEL FUEL	gal	1.70	4.9745	8.47	_____
REPAIR & MAINTENANCE	acre	10.81	1.0000	10.81	_____
INTEREST ON OP. CAP.	acre	7.85	1.0000	7.85	_____
				-----	
TOTAL DIRECT EXPENSES				349.68	_____
RETURNS ABOVE DIRECT EXPENSES				-5.68	_____
TOTAL FIXED EXPENSES				39.25	_____
				-----	
TOTAL SPECIFIED EXPENSES				388.93	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-44.93	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 25.C Estimated resource use for field operations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Lime (Spread)	ton			0.33	Oct	0.6600				
Disk Harrow	24'	MFWD 170	0.081	1.00	Nov		0.08	0.08	0.08	0.07
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.3000				
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Apr		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.3000				
Potash (60% K2O)	cwt					1.0000				
Field Cultivate Fld	32'	MFWD 170	0.046	1.00	Apr		0.04	0.04	0.04	0.04
Plant - Folding	12R-30	MFWD 170	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Sorghum Concept+ Po	lb					5.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Apr			0.01	0.01	0.01
Lexar	pt					6.0000				
Sorghum Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-30	MFWD 170	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					38.2883				
Sprayer 800gal	80' 250hp		0.013	1.00	Jun			0.01	0.01	0.01
Sivanto	oz					4.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Karate Z	oz					1.5000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Prevathon	oz					14.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Transform WG	oz					1.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Sorghum	bu					100.0000				
TOTALS							0.48	0.41	0.65	0.43

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 25.D Estimated costs for field operations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Lime (Spread)	ton	30.36						1.44	31.80		31.80
Disk Harrow	24'		1.22	1.40	2.05			0.20	4.87	4.78	9.65
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	4.48						0.14	4.62		4.62
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Select Max	pt	14.99						0.47	15.46		15.46
Surfactant	pt	1.11						0.04	1.15		1.15
Spin Spreader	5 ton		0.63	0.50	1.43			0.06	2.62	1.97	4.59
Phosphorus(46% P2O5)	cwt	28.44						0.68	29.12		29.12
Potash (60% K2O)	cwt	16.97						0.40	17.37		17.37
Field Cultivate Fld	32'		0.69	0.71	1.16			0.06	2.62	3.51	6.13
Plant - Folding	12R-30		0.94	1.82	2.14			0.12	5.02	4.95	9.97
Sorghum Concept+ Po	lb	16.95						0.40	17.35		17.35
Sprayer 800gal	80' 250hp		0.29	0.18	0.39			0.02	0.88	1.16	2.04
Lexar	pt	47.40						1.13	48.53		48.53
Sorghum Consultant	acre	6.00						0.12	6.12		6.12
Fert Appl (Liquid)	12R-30		1.17	1.42	2.32			0.10	5.01	3.75	8.76
UAN + Sulfur (28%)	gal	61.64						1.22	62.86		62.86
Sprayer 800gal	80' 250hp		0.29	0.18	0.39			0.01	0.87	1.16	2.03
Sivanto	oz	10.12						0.16	10.28		10.28
Sprayer 800gal	80' 250hp		0.29	0.18	0.39			0.01	0.87	1.16	2.03
Karate Z	oz	3.87						0.05	3.92		3.92
Sprayer 800gal	80' 250hp		0.29	0.18	0.39			0.01	0.87	1.16	2.03
Prevathon	oz	18.34						0.22	18.56		18.56
Sprayer 800gal	80' 250hp		0.29	0.18	0.39			0.01	0.87	1.16	2.03
Transform WG	oz	7.90						0.09	7.99		7.99
Header Wheat/Sorghum	25' Rigid		2.37	4.06	2.55			0.04	9.02	14.49	23.51
Haul Sorghum	bu	25.00						0.10	25.10		25.10
TOTALS		308.95	8.47	10.81	13.60	0.00	7.85	349.68	39.25	388.93	

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 25.E Estimated monthly income and expense flows per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	344.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	45.41	61.64	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	25.05	0.00	47.40	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.12	30.11	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	16.95	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
CUSTOM LIME	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	2.05	0.00	0.00	0.00	0.00	5.12	2.32	0.39	1.17	0.00	2.55
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	0.00	1.22	0.00	0.00	0.00	0.00	2.55	1.17	0.29	0.87	0.00	2.37
REPAIR & MAINTENANCE	0.00	1.40	0.00	0.00	0.00	0.00	3.21	1.42	0.18	0.54	0.00	4.06
INTEREST ON OP. CAP.	1.60	0.20	0.00	0.00	1.04	0.00	2.87	1.44	0.17	0.39	0.00	0.14
TOTAL DIRECT EXPENSES	35.26	4.87	0.00	0.00	33.70	0.00	123.51	73.99	11.15	33.08	0.00	34.12
NET INCOME	-35.26	-4.87	0.00	0.00	-33.70	0.00	-123.51	-73.99	-11.15	-33.08	0.00	309.88
NET INCOME TO DATE	-35.26	-40.13	-40.13	-40.13	-73.83	-73.83	-197.34	-271.33	-282.48	-315.56	-315.56	-5.68

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 25.F Estimated returns for various price/yield combinations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2017

PRODUCT	PERCENT													
	75	80	85	90	95	100	105	110	115	120	125			
Grain Sorghum	PRODUCT PRICE													
	2.58	2.75	2.92	3.09	3.26	3.44	3.61	3.78	3.95	4.12	4.30			
PERCENT	YIELD	UNIT	dollars											
50	50.00	bu	-208 -247	-199 -238	-190 -230	-182 -221	-173 -212	-165 -204	-156 -195	-147 -187	-139 -178	-130 -169	-122 -161	
60	60.00	bu	-184 -224	-174 -213	-164 -203	-153 -193	-143 -182	-133 -172	-122 -162	-112 -151	-102 -141	-91 -131	-81 -120	
70	70.00	bu	-161 -200	-149 -188	-137 -176	-125 -164	-113 -152	-101 -140	-89 -128	-77 -116	-65 -104	-53 -92	-41 -80	
80	80.00	bu	-138 -177	-124 -163	-110 -149	-96 -136	-83 -122	-69 -108	-55 -94	-41 -81	-28 -67	-14 -53	-0 -39	
90	90.00	bu	-114 -154	-99 -138	-84 -123	-68 -107	-53 -92	-37 -76	-22 -61	-6 -45	8 -30	24 -14	39 0	
100	100.00	bu	-91 -130	-74 -113	-57 -96	-40 -79	-22 -62	-5 -44	11 -27	28 -10	45 6	63 23	80 41	
110	110.00	bu	-68 -107	-49 -88	-30 -69	-11 -50	7 -31	26 -13	45 5	64 24	82 43	101 62	120 81	
120	120.00	bu	-45 -84	-24 -63	-3 -43	16 -22	37 -1	58 18	78 39	99 60	120 80	140 101	161 122	
130	130.00	bu	-21 -61	0 -38	22 -16	45 6	67 28	89 50	112 73	134 95	157 117	179 140	201 162	
140	140.00	bu	1 -37	25 -13	49 10	73 34	97 58	121 82	145 106	170 130	194 154	218 178	242 203	
150	150.00	bu	24 -14	50 11	76 37	102 62	127 88	153 114	179 140	205 166	231 191	256 217	282 243	

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

Table 26.A Estimated costs per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.0000	19.50	_____
App by Air ( 3 gal)	appl	5.00	1.0000	5.00	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	21.88	1.0000	21.88	_____
Potash (60% K2O)	cwt	16.97	0.7500	12.73	_____
Fert 41-0-0-4	cwt	16.85	2.8000	47.18	_____
FUNGICIDES					
CruiserMaxx	oz	4.60	4.5000	20.70	_____
Prosaro	oz	2.70	8.0000	21.60	_____
HERBICIDES					
Axiom	oz	2.13	10.0000	21.30	_____
Harmony Extra SG	oz	14.02	0.7500	10.52	_____
Axial XL	oz	1.16	16.4000	19.02	_____
INSECTICIDES					
Karate Z	oz	2.58	1.5000	3.87	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.25	90.0000	22.50	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	2.8000	19.60	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.6600	30.36	_____
CROP CONSULTANT					
Wheat Consultant	acre	5.50	1.0000	5.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.2648	3.48	_____
Harvesters	hour	13.14	0.1021	1.34	_____
HAND LABOR					
Implements	hour	9.06	0.1363	1.23	_____
UNALLOCATED LABOR					
	hour	13.11	0.2936	3.85	_____
DIESEL FUEL					
Tractors	gal	1.70	2.3178	3.94	_____
Harvesters	gal	1.70	1.3935	2.37	_____
REPAIR & MAINTENANCE					
Implements	acre	3.70	1.0000	3.70	_____
Tractors	acre	1.40	1.0000	1.40	_____
Harvesters	acre	3.44	1.0000	3.44	_____
INTEREST ON OP. CAP.	acre	8.67	1.0000	8.67	_____
TOTAL DIRECT EXPENSES				336.18	_____
FIXED EXPENSES					
Implements	acre	8.10	1.0000	8.10	_____
Tractors	acre	8.86	1.0000	8.86	_____
Harvesters	acre	13.56	1.0000	13.56	_____
TOTAL FIXED EXPENSES				30.52	_____
TOTAL SPECIFIED EXPENSES				366.70	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 26.B Summary of estimated costs and returns per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	4.24	70.0000	296.80	_____
				-----	
TOTAL INCOME				296.80	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.50	1.0000	24.50	_____
FERTILIZERS	acre	81.79	1.0000	81.79	_____
FUNGICIDES	acre	42.30	1.0000	42.30	_____
HERBICIDES	acre	50.84	1.0000	50.84	_____
INSECTICIDES	acre	3.87	1.0000	3.87	_____
SEED/PLANTS	acre	22.50	1.0000	22.50	_____
CUSTOM FERTILIZE	acre	19.60	1.0000	19.60	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	30.36	1.0000	30.36	_____
CROP CONSULTANT	acre	5.50	1.0000	5.50	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1363	1.23	_____
OPERATOR LABOR	hour	13.14	0.3670	4.82	_____
UNALLOCATED LABOR	hour	13.11	0.2936	3.85	_____
DIESEL FUEL	gal	1.70	3.7114	6.31	_____
REPAIR & MAINTENANCE	acre	8.54	1.0000	8.54	_____
INTEREST ON OP. CAP.	acre	8.67	1.0000	8.67	_____
				-----	
TOTAL DIRECT EXPENSES				336.18	_____
RETURNS ABOVE DIRECT EXPENSES				-39.38	_____
TOTAL FIXED EXPENSES				30.52	_____
				-----	
TOTAL SPECIFIED EXPENSES				366.70	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-69.90	_____

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 26.C Estimated resource use for field operations, per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Sep	0.3300				
Lime (Spread)	ton			0.33	Sep	0.6600				
Disk Harrow	24'	MFWD 170	0.081	1.00	Sep		0.08	0.08	0.08	0.06
Spin Spreader	5 ton	MFWD 170	0.042	1.00	Sep		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.0000				
Potash (60% K2O)	cwt					0.7500				
Field Cultivate Fld	32'	MFWD 170	0.046	1.00	Sep		0.04	0.04	0.04	0.03
Grain Drill	20'	MFWD 170	0.094	1.00	Oct		0.09	0.09	0.18	0.07
Wheat Seed Private	lb					90.0000				
CruiserMaxx	oz					4.5000				
Wheat Consultant	acre			1.00	Oct	1.0000				
App by Air ( 5 gal)	appl			1.00	Nov	1.0000				
Axiom	oz					10.0000				
Harmony Extra SG	oz					0.7500				
App by Air ( 5 gal)	appl			1.00	Jan	1.0000				
Axial XL	oz					16.4000				
App by Air ( 3 gal)	appl			1.00	Feb	1.0000				
Karate Z	oz					1.5000				
App Fert by Air	cwt			1.00	Feb	1.4000				
Fert 41-0-0-4	cwt					1.4000				
App Fert by Air	cwt			1.00	Mar	1.4000				
Fert 41-0-0-4	cwt					1.4000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Prosaro	oz					8.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Jun		0.10	0.10	0.10	0.08
Haul Wheat	bu					70.0000				
TOTALS							0.36	0.36	0.50	0.29

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 26.D Estimated costs for field operations, per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.13	3.43	3.43
Lime (Spread)	ton	30.36						1.20	31.56	31.56
Disk Harrow	24'		1.22	1.40	1.94			0.18	4.74	4.78
Spin Spreader	5 ton		0.63	0.50	1.37			0.10	2.60	1.97
Phosphorus(46% P2O5)	cwt	21.88						0.87	22.75	22.75
Potash (60% K2O)	cwt	12.73						0.50	13.23	13.23
Field Cultivate Fld	32'		0.69	0.71	1.10			0.10	2.60	3.51
Grain Drill	20'		1.40	1.87	3.08			0.23	6.58	5.77
Wheat Seed Private	lb	22.50						0.80	23.30	23.30
CruiserMaxx	oz	20.70						0.74	21.44	21.44
Wheat Consultant	acre	5.50						0.20	5.70	5.70
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Axiom	oz	21.30						0.67	21.97	21.97
Harmony Extra SG	oz	10.52						0.33	10.85	10.85
App by Air ( 5 gal)	appl	6.50						0.15	6.65	6.65
Axial XL	oz	19.02						0.45	19.47	19.47
App by Air ( 3 gal)	appl	5.00						0.10	5.10	5.10
Karate Z	oz	3.87						0.08	3.95	3.95
App Fert by Air	cwt	9.80						0.19	9.99	9.99
Fert 41-0-0-4	cwt	23.59						0.47	24.06	24.06
App Fert by Air	cwt	9.80						0.16	9.96	9.96
Fert 41-0-0-4	cwt	23.59						0.37	23.96	23.96
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Prosaro	oz	21.60						0.26	21.86	21.86
Header Wheat/Sorghum	25' Rigid		2.37	4.06	2.41			0.03	8.87	14.49
Haul Wheat	bu	18.20						0.07	18.27	18.27
TOTALS		302.76	6.31	8.54	9.90	0.00		8.67	336.18	30.52

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 26.E Estimated monthly income and expense flows per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2017

ITEM	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	296.80
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	5.00	0.00	6.50	0.00	0.00
FERTILIZERS	0.00	0.00	34.61	0.00	0.00	0.00	0.00	23.59	23.59	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	20.70	0.00	0.00	0.00	0.00	0.00	21.60	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.82	0.00	19.02	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.87	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.80	9.80	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	0.00	18.20
CUSTOM LIME	0.00	0.00	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	4.41	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.41
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	0.00	0.00	2.54	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37
REPAIR & MAINTENANCE	0.00	0.00	2.61	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.06
INTEREST ON OP. CAP.	0.00	0.00	3.08	1.97	1.21	0.00	0.60	0.84	0.53	0.34	0.00	0.10
TOTAL DIRECT EXPENSES	0.00	0.00	80.91	57.02	39.53	0.00	26.12	43.10	33.92	28.44	0.00	27.14
NET INCOME	0.00	0.00	-80.91	-57.02	-39.53	0.00	-26.12	-43.10	-33.92	-28.44	0.00	269.66
NET INCOME TO DATE	0.00	0.00	-80.91	-137.93	-177.46	-177.46	-203.58	-246.68	-280.60	-309.04	-309.04	-39.38

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

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.



Table 26.F Estimated returns for various price/yield combinations, per acre  
Wheat followed by soybeans, 70 bu yield goal  
All Areas, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Wheat			3.18	3.39	3.60	3.81	4.02	4.24	4.45	4.66	4.87	5.08	5.30
PERCENT	YIELD	UNIT	dollars										
50	35.00	bu	-215 -246	-208 -238	-200 -231	-193 -224	-186 -216	-178 -209	-171 -201	-163 -194	-156 -186	-148 -179	-141 -172
60	42.00	bu	-195 -225	-186 -216	-177 -208	-168 -199	-159 -190	-150 -181	-141 -172	-132 -163	-124 -154	-115 -145	-106 -136
70	49.00	bu	-174 -205	-164 -195	-154 -184	-143 -174	-133 -163	-122 -153	-112 -143	-102 -132	-91 -122	-81 -111	-70 -101
80	56.00	bu	-154 -184	-142 -173	-130 -161	-118 -149	-106 -137	-95 -125	-83 -113	-71 -101	-59 -89	-47 -78	-35 -66
90	63.00	bu	-134 -164	-120 -151	-107 -137	-93 -124	-80 -111	-67 -97	-53 -84	-40 -71	-27 -57	-13 -44	-0 -30
100	70.00	bu	-113 -144	-98 -129	-83 -114	-69 -99	-54 -84	-39 -69	-24 -55	-9 -40	5 -25	19 -10	34 4
110	77.00	bu	-93 -123	-76 -107	-60 -91	-44 -74	-27 -58	-11 -42	4 -25	21 -9	37 6	53 23	70 39
120	84.00	bu	-72 -103	-54 -85	-37 -67	-19 -49	-1 -32	16 -14	34 3	51 21	69 39	87 57	105 74
130	91.00	bu	-52 -82	-32 -63	-13 -44	5 -24	24 -5	44 13	63 32	82 52	102 71	121 90	140 110
140	98.00	bu	-31 -62	-11 -41	9 -20	30 -0	51 20	72 41	92 62	113 83	134 103	155 124	175 145
150	105.00	bu	-11 -41	10 -19	33 2	55 24	77 47	99 69	122 91	144 113	166 136	188 158	211 180

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

Table 27.A Estimated costs per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.5000	35.75	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	75.0000	28.50	_____
Cruiser Maxx Rice	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv(Levees)	lb	0.38	13.6000	5.17	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.75	1.5000	5.63	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5475	7.18	_____
Harvesters	hour	13.14	0.2030	2.67	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	13.13	0.5633	7.40	_____
DIESEL FUEL					
Tractors	gal	1.70	5.9886	10.20	_____
Harvesters	gal	1.70	3.3975	5.78	_____
Flood Irr.	gal	1.70	26.8827	45.69	_____
REPAIR & MAINTENANCE					
Implements	acre	8.21	1.0000	8.21	_____
Tractors	acre	3.56	1.0000	3.56	_____
Harvesters	acre	7.11	1.0000	7.11	_____
Flood Irr.	acre	12.69	1.0000	12.69	_____
INTEREST ON OP. CAP.	acre	12.20	1.0000	12.20	_____
TOTAL DIRECT EXPENSES				724.00	_____
FIXED EXPENSES					
Implements	acre	17.57	1.0000	17.57	_____
Tractors	acre	22.31	1.0000	22.31	_____
Harvesters	acre	28.05	1.0000	28.05	_____
Flood Irr.	acre	39.95	1.0000	39.95	_____
TOTAL FIXED EXPENSES				107.88	_____
TOTAL SPECIFIED EXPENSES				831.88	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 27.B Summary of estimated costs and returns per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____
				-----	
TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	54.05	1.0000	54.05	_____
ADJUVANTS	acre	10.65	1.0000	10.65	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	13.14	0.7506	9.85	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	13.13	0.5633	7.40	_____
DIESEL FUEL	gal	1.70	36.2688	61.67	_____
REPAIR & MAINTENANCE	acre	31.57	1.0000	31.57	_____
INTEREST ON OP. CAP.	acre	12.20	1.0000	12.20	_____
				-----	
TOTAL DIRECT EXPENSES				724.00	_____
RETURNS ABOVE DIRECT EXPENSES				-42.28	_____
TOTAL FIXED EXPENSES				107.88	_____
				-----	
TOTAL SPECIFIED EXPENSES				831.88	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-150.16	_____

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

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

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

Table 27.C Estimated resource use for field operations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Sep	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Cruiser Maxx Rice	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.4000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.75	0.75	6.10	0.56

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 27.D Estimated costs for field operations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

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

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

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

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

Table 27.E Estimated monthly income and expense flows per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.05	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	15.59	9.52	11.33	11.33	10.93	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	12.02	12.46	12.46	12.46	6.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.77	7.01	2.13	2.13	10.32	3.15
INTEREST ON OP. CAP.	0.38	0.00	0.00	0.00	0.60	0.00	3.20	4.58	1.37	0.88	1.14	0.05
TOTAL DIRECT EXPENSES	8.34	0.00	0.00	0.00	19.40	0.00	138.37	235.02	87.81	75.72	146.08	13.26
NET INCOME	-8.34	0.00	0.00	0.00	-19.40	0.00	-138.37	-235.02	-87.81	-75.72	535.64	-13.26
NET INCOME TO DATE	-8.34	-8.34	-8.34	-8.34	-27.74	-27.74	-166.11	-401.13	-488.94	-564.66	-29.02	-42.28

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

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

\* Lease costs are based on hourly usage costs

Table 27.F Estimated returns for various price/yield combinations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

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

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

Table 28.A Estimated costs per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.5000	35.75	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	75.0000	28.50	_____
Cruiser Maxx Rice	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv (Levees)	lb	0.38	13.6000	5.17	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4999	6.56	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.5719	9.48	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	21.9949	37.38	_____
REPAIR & MAINTENANCE					
Implements	acre	7.79	1.0000	7.79	_____
Tractors	acre	3.29	1.0000	3.29	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	11.84	1.0000	11.84	_____
TOTAL DIRECT EXPENSES				690.98	_____
FIXED EXPENSES					
Implements	acre	16.64	1.0000	16.64	_____
Tractors	acre	20.73	1.0000	20.73	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.86	1.0000	63.86	_____
TOTAL FIXED EXPENSES				125.54	_____
TOTAL SPECIFIED EXPENSES				816.52	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 28.B Summary of estimated costs and returns per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____
				-----	
TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	54.05	1.0000	54.05	_____
ADJUVANTS	acre	10.65	1.0000	10.65	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.14	0.6759	8.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	30.5114	51.87	_____
REPAIR & MAINTENANCE	acre	29.95	1.0000	29.95	_____
INTEREST ON OP. CAP.	acre	11.84	1.0000	11.84	_____
				-----	
TOTAL DIRECT EXPENSES				690.98	_____
RETURNS ABOVE DIRECT EXPENSES				-9.26	_____
TOTAL FIXED EXPENSES				125.54	_____
				-----	
TOTAL SPECIFIED EXPENSES				816.52	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-134.80	_____

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

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

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

Table 28.C Estimated resource use for field operations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Cruiser Maxx Rice	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 28.D Estimated costs for field operations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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

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

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

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

Table 28.E Estimated monthly income and expense flows per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.05	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	11.61	5.44	6.34	6.34	9.98	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	11.62	9.69	9.69	9.69	5.60	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.91	6.91	2.03	2.03	8.86	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	3.05	4.45	1.25	0.79	1.12	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	131.73	227.94	79.83	67.77	142.56	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-131.73	-227.94	-79.83	-67.77	539.16	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-162.93	-390.87	-470.70	-538.47	0.69	-9.26

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

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

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

\* Lease costs are based on hourly usage costs

Table 28.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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

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

Table 29.A Estimated costs per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.5000	35.75	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	75.0000	28.50	_____
Cruiser Maxx Rice	lbseed	0.23	88.6000	20.38	_____
Rice Seed Cv(Levees)	lb	0.38	13.6000	5.17	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.75	1.5000	5.63	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc.(Pet.)	pt	2.47	0.5000	1.24	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.92	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8180	9.90	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	18.7364	31.85	_____
REPAIR & MAINTENANCE					
Implements	acre	7.85	1.0000	7.85	_____
Tractors	acre	3.44	1.0000	3.44	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	11.75	1.0000	11.75	_____
TOTAL DIRECT EXPENSES				683.53	_____
FIXED EXPENSES					
Implements	acre	17.09	1.0000	17.09	_____
Tractors	acre	21.67	1.0000	21.67	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.42	1.0000	63.42	_____
TOTAL FIXED EXPENSES				126.49	_____
TOTAL SPECIFIED EXPENSES				810.02	_____

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

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

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

Table 29.B Summary of estimated costs and returns per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____
				-----	
TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	54.05	1.0000	54.05	_____
ADJUVANTS	acre	10.90	1.0000	10.90	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.23	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	27.4990	46.76	_____
REPAIR & MAINTENANCE	acre	29.84	1.0000	29.84	_____
INTEREST ON OP. CAP.	acre	11.75	1.0000	11.75	_____
				-----	
TOTAL DIRECT EXPENSES				683.53	_____
RETURNS ABOVE DIRECT EXPENSES				-1.81	_____
TOTAL FIXED EXPENSES				126.49	_____
				-----	
TOTAL SPECIFIED EXPENSES				810.02	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-128.30	_____

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

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

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

Table 29.C Estimated resource use for field operations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Cruiser Maxx Rice	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Cruiser Maxx Rice	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.5000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 29.D Estimated costs for field operations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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

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

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

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

Table 29.E Estimated monthly income and expense flows per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.05	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.56	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	9.40	2.72	3.62	3.62	9.71	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	10.56	8.31	8.31	8.31	5.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.97	6.84	1.96	1.96	8.90	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	3.17	4.37	1.18	0.74	1.11	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	136.89	223.94	75.59	63.55	142.41	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-136.89	-223.94	-75.59	-63.55	539.31	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-168.09	-392.03	-467.62	-531.17	8.14	-1.81

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

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

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

\* Lease costs are based on hourly usage costs

Table 29.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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

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

Table 30.A Estimated costs per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	5.5000	35.75	
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	
DAP	cwt	24.82	0.5000	12.41	
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	
NBPT	pt	10.23	0.7500	7.67	
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	
2,4-D Amine 4	pt	2.79	2.0000	5.58	
Command 3ME	pt	19.34	1.0000	19.34	
Sharpen	oz	5.35	2.0000	10.70	
Regiment	oz	44.39	0.6000	26.63	
Facet L	pt	14.84	2.6900	39.92	
Permit	oz	20.59	0.7500	15.44	
Clincher SF	oz	2.38	7.5000	17.85	
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	
SEED/PLANTS					
Rice Seed Conv.	lb	0.38	75.0000	28.50	
Cruiser Maxx Rice	lbseed	0.23	75.0000	17.25	
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	
MSO	pt	3.75	1.5000	5.63	
Dyne-A-Pak	pt	4.63	0.5000	2.32	
Crop Oil Conc. (Pet.)	pt	2.47	0.5000	1.24	
Surfactant	pt	3.69	0.1000	0.37	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	
OPERATOR LABOR					
Tractors	hour	13.14	0.4228	5.55	
Harvesters	hour	13.14	0.1760	2.31	
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
	hour	13.13	0.5389	7.08	
DIESEL FUEL					
Tractors	gal	1.70	4.8970	8.33	
Harvesters	gal	1.70	2.9444	5.01	
Flood Irr.	gal	1.70	15.4779	26.30	
REPAIR & MAINTENANCE					
Implements	acre	7.69	1.0000	7.69	
Tractors	acre	2.88	1.0000	2.88	
Harvesters	acre	6.16	1.0000	6.16	
Flood Irr.	acre	10.39	1.0000	10.39	
INTEREST ON OP. CAP.					
	acre	11.08	1.0000	11.08	
TOTAL DIRECT EXPENSES				651.86	
FIXED EXPENSES					
Implements	acre	16.20	1.0000	16.20	
Tractors	acre	18.14	1.0000	18.14	
Harvesters	acre	24.31	1.0000	24.31	
Flood Irr.	acre	63.09	1.0000	63.09	
TOTAL FIXED EXPENSES				121.74	
TOTAL SPECIFIED EXPENSES				773.60	

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 30.B Summary of estimated costs and returns per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____
				-----	
TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.25	1.0000	43.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	45.75	1.0000	45.75	_____
ADJUVANTS	acre	10.90	1.0000	10.90	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.14	0.5988	7.86	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	23.3194	39.64	_____
REPAIR & MAINTENANCE	acre	27.12	1.0000	27.12	_____
INTEREST ON OP. CAP.	acre	11.08	1.0000	11.08	_____
				-----	
TOTAL DIRECT EXPENSES				651.86	_____
RETURNS ABOVE DIRECT EXPENSES				29.86	_____
TOTAL FIXED EXPENSES				121.74	_____
				-----	
TOTAL SPECIFIED EXPENSES				773.60	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-91.88	_____

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

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

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

Table 30.C Estimated resource use for field operations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Cruiser Maxx Rice	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.5000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000				1.05
TOTALS							0.59	0.59	2.67	0.53

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 30.D Estimated costs for field operations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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

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

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

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

Table 30.E Estimated monthly income and expense flows per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	45.75	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.56	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	6.63	3.18	4.08	4.08	8.74	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	8.07	6.92	6.92	6.92	5.23	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	3.99	6.33	1.45	1.45	8.69	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	2.57	4.34	1.16	0.73	1.10	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	111.25	222.47	74.13	62.10	140.76	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-111.25	-222.47	-74.13	-62.10	540.96	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-142.45	-364.92	-439.05	-501.15	39.81	29.86

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

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

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

\* Lease costs are based on hourly usage costs.



Table 30.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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

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

Table 31.A Estimated costs per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	65.0000	68.25	_____
Cruiser Maxx Rice	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
SuperMax AMS	pt	2.67	0.5000	1.34	_____
MSO	pt	3.75	1.5000	5.63	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5757	7.55	_____
Harvesters	hour	13.14	0.2030	2.67	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0926	0.84	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
	hour	13.13	0.5887	7.73	_____
DIESEL FUEL					
Tractors	gal	1.70	6.3153	10.76	_____
Harvesters	gal	1.70	3.3975	5.78	_____
Flood Irr.	gal	1.70	26.8827	45.69	_____
REPAIR & MAINTENANCE					
Implements	acre	8.46	1.0000	8.46	_____
Tractors	acre	3.75	1.0000	3.75	_____
Harvesters	acre	7.11	1.0000	7.11	_____
Flood Irr.	acre	12.69	1.0000	12.69	_____
INTEREST ON OP. CAP.	acre	13.35	1.0000	13.35	_____
TOTAL DIRECT EXPENSES				758.02	_____
FIXED EXPENSES					
Implements	acre	17.87	1.0000	17.87	_____
Tractors	acre	23.52	1.0000	23.52	_____
Harvesters	acre	28.05	1.0000	28.05	_____
Flood Irr.	acre	39.95	1.0000	39.95	_____
TOTAL FIXED EXPENSES				109.39	_____
TOTAL SPECIFIED EXPENSES				867.41	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 31.B Summary of estimated costs and returns per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____
				-----	
TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.25	1.0000	45.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	98.56	1.0000	98.56	_____
ADJUVANTS	acre	17.22	1.0000	17.22	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	13.14	0.7788	10.22	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	13.13	0.5887	7.73	_____
DIESEL FUEL	gal	1.70	36.5955	62.23	_____
REPAIR & MAINTENANCE	acre	32.01	1.0000	32.01	_____
INTEREST ON OP. CAP.	acre	13.35	1.0000	13.35	_____
				-----	
TOTAL DIRECT EXPENSES				758.02	_____
RETURNS ABOVE DIRECT EXPENSES				-76.30	_____
TOTAL FIXED EXPENSES				109.39	_____
				-----	
TOTAL SPECIFIED EXPENSES				867.41	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-185.69	_____

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

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

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

Table 31.C Estimated resource use for field operations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Cruiser Maxx Rice	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
App by Air ( 5 gal)	appl					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
SuperMax AMS	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF (Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	25' Rigid	325 hp	0.203	1.00	Aug		0.20	0.20	0.20	0.18
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
<b>TOTALS</b>							<b>0.77</b>	<b>0.77</b>	<b>6.14</b>	<b>0.58</b>

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 31.D Estimated costs for field operations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

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

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 31.E Estimated monthly income and expense flows per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	98.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	16.42	9.52	11.33	11.33	10.93	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	12.58	12.46	12.46	12.46	6.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	5.21	7.01	2.13	2.13	10.32	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.29	3.49	1.37	0.88	1.14	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	228.01	179.25	87.81	75.72	146.08	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-228.01	-179.25	-87.81	-75.72	535.64	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-259.21	-438.46	-526.27	-601.99	-66.35	-76.30

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

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

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

\* Lease costs are based on hourly usage costs

Table 31.F Estimated returns for various price/yield combinations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Delta Area, Mississippi, 2017

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

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

Table 32.A Estimated costs per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	65.0000	68.25	_____
Cruiser Maxx Rice	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.93	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0926	0.84	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.13	0.5643	7.41	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8986	10.04	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	21.9949	37.38	_____
REPAIR & MAINTENANCE					
Implements	acre	8.04	1.0000	8.04	_____
Tractors	acre	3.48	1.0000	3.48	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	12.84	1.0000	12.84	_____
TOTAL DIRECT EXPENSES				724.85	_____
FIXED EXPENSES					
Implements	acre	16.94	1.0000	16.94	_____
Tractors	acre	21.94	1.0000	21.94	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.86	1.0000	63.86	_____
TOTAL FIXED EXPENSES				127.05	_____
TOTAL SPECIFIED EXPENSES				851.90	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 32.B Summary of estimated costs and returns per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____
				-----	
TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.25	1.0000	45.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	98.56	1.0000	98.56	_____
ADJUVANTS	acre	17.22	1.0000	17.22	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3426	3.11	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.24	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5643	7.41	_____
DIESEL FUEL	gal	1.70	30.8381	52.43	_____
REPAIR & MAINTENANCE	acre	30.39	1.0000	30.39	_____
INTEREST ON OP. CAP.	acre	12.84	1.0000	12.84	_____
				-----	
TOTAL DIRECT EXPENSES				724.85	_____
RETURNS ABOVE DIRECT EXPENSES				-43.13	_____
TOTAL FIXED EXPENSES				127.05	_____
				-----	
TOTAL SPECIFIED EXPENSES				851.90	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-170.18	_____

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

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

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

Table 32.C Estimated resource use for field operations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Cruiser Maxx Rice	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
App by Air ( 5 gal)	appl					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF (Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.70	0.70	4.12	0.56

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

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

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

Table 32.D Estimated costs for field operations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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

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

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

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

Table 32.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	98.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	12.44	5.44	6.34	6.34	9.98	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	12.18	9.69	9.69	9.69	5.60	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	5.35	6.91	2.03	2.03	8.86	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.14	3.36	1.25	0.79	1.12	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	221.37	172.17	79.83	67.77	142.56	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-221.37	-172.17	-79.83	-67.77	539.16	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-252.57	-424.74	-504.57	-572.34	-33.18	-43.13

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

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

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

\* Lease costs are based on hourly usage costs.

Table 32.F Estimated returns for various price/yield combinations, per acre  
Clearfield straight levee rice  
Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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

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

Table 33.A Estimated costs per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	65.0000	68.25	_____
Cruiser Maxx Rice	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.92	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8180	9.90	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	18.7364	31.85	_____
REPAIR & MAINTENANCE					
Implements	acre	7.85	1.0000	7.85	_____
Tractors	acre	3.44	1.0000	3.44	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	12.71	1.0000	12.71	_____
TOTAL DIRECT EXPENSES				715.28	_____
FIXED EXPENSES					
Implements	acre	17.09	1.0000	17.09	_____
Tractors	acre	21.67	1.0000	21.67	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.42	1.0000	63.42	_____
TOTAL FIXED EXPENSES				126.49	_____
TOTAL SPECIFIED EXPENSES				841.77	_____

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

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

Table 33.B Summary of estimated costs and returns per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____
				-----	
TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.25	1.0000	45.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	98.56	1.0000	98.56	_____
ADJUVANTS	acre	17.22	1.0000	17.22	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.23	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	27.4990	46.76	_____
REPAIR & MAINTENANCE	acre	29.84	1.0000	29.84	_____
INTEREST ON OP. CAP.	acre	12.71	1.0000	12.71	_____
				-----	
TOTAL DIRECT EXPENSES				715.28	_____
RETURNS ABOVE DIRECT EXPENSES				-33.56	_____
TOTAL FIXED EXPENSES				126.49	_____
				-----	
TOTAL SPECIFIED EXPENSES				841.77	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-160.05	_____

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

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

Table 33.C Estimated resource use for field operations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Cruiser Maxx Rice	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

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

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

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



Table 33.D Estimated costs for field operations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.30						0.16	3.46	3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03
App by Air ( 5 gal)	appl	6.50						0.21	6.71	6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93	6.93
2,4-D Amine 4	pt	5.58						0.18	5.76	5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67
Rice Clearfield	lb	68.25						1.62	69.87	69.87
Cruiser Maxx Rice	lbseed	14.95						0.36	15.31	15.31
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44
App by Air ( 5 gal)	appl	6.50						0.15	6.65	6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59	4.59
Command 3ME	pt	19.34						0.46	19.80	19.80
Sharpen	oz	10.70						0.25	10.95	10.95
MSO	pt	1.88						0.04	1.92	1.92
SuperMax AMS	pt	1.34						0.03	1.37	1.37
Seed Levees										
Rice Seed CF (Levees)	lb	12.60						0.30	12.90	12.90
Cruiser Maxx Rice	lbseed	2.76						0.07	2.83	2.83
App by Air ( 5 gal)	appl	6.50						0.15	6.65	6.65
Clearpath	lb	29.77						0.71	30.48	30.48
Crop Oil Conc. (Pet.)	pt	4.94						0.12	5.06	5.06
App Fert by Air	cwt	7.00						0.14	7.14	7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79	8.79
DAP	cwt	12.41						0.25	12.66	12.66
Rice Consultant	acre	8.00						0.16	8.16	8.16
App Fert by Air	cwt	17.50						0.35	17.85	17.85
Urea, Solid (46% N)	cwt	41.95						0.83	42.78	42.78
NBPT	pt	7.67						0.15	7.82	7.82
App by Air (10 gal)	appl	8.50						0.17	8.67	8.67
Newpath	oz	21.78						0.43	22.21	22.21
Crop Oil Conc. (Pet.)	pt	4.94						0.10	5.04	5.04
Aim	oz	8.40						0.17	8.57	8.57
Rice Management										
RICE MGT. LABOR	hour				0.91			0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.25						0.05	3.30	3.30
Clincher SF	oz	17.85						0.28	18.13	18.13
MSO	pt	3.75						0.06	3.81	3.81
Rice Management										
RICE MGT. LABOR	hour				1.81			0.03	1.84	1.84
App Fert by Air	cwt	10.50						0.17	10.67	10.67
Urea, Solid (46% N)	cwt	25.17						0.40	25.57	25.57
Rice Management										
RICE MGT. LABOR	hour				1.81			0.02	1.83	1.83
App by Air ( 5 gal)	appl	6.50						0.08	6.58	6.58
Stratego	pt	26.81						0.32	27.13	27.13
Surfactant	pt	0.37							0.37	0.37
App by Air ( 3 gal)	appl	7.50						0.09	7.59	7.59
Karate Z	oz	7.74						0.09	7.83	7.83
Rice Management										
RICE MGT. LABOR	hour				1.81			0.01	1.82	1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66
Handling & Storage										
HAND LABOR	hour				2.27			0.02	2.29	2.29
Haul Rice	bu	54.60						0.43	55.03	55.03
Dry Rice	bu	62.40						0.49	62.89	62.89
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97
Flood Irr.	acre	10.50	33.42	13.11	11.89			1.31	70.23	67.84
TOTALS		589.82	46.76	29.84	36.15	0.00	12.71	715.28	126.49	841.77

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

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

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

Table 33.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	98.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	9.40	2.72	3.62	3.62	9.71	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	10.56	8.31	8.31	8.31	5.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.97	6.84	1.96	1.96	8.90	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.22	3.28	1.18	0.74	1.11	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	224.66	167.92	75.59	63.55	142.41	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-224.66	-167.92	-75.59	-63.55	539.31	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-255.86	-423.78	-499.37	-562.92	-23.61	-33.56

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

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

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

\* Lease costs are based on hourly usage costs.

Table 33.F Estimated returns for various price/yield combinations, per acre  
Clearfield straight levee multi inlet rice  
Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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

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

Table 34.A Estimated costs per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	4.0000	67.12	_____
NBPT	pt	10.23	0.7500	7.67	_____
FUNGICIDES					
Stratego	pt	22.58	1.1875	26.81	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clearfield	lb	1.05	65.0000	68.25	_____
Cruiser Maxx Rice	lbseed	0.23	77.0000	17.71	_____
Rice Seed CF (Levees)	lb	1.05	12.0000	12.60	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
Surfactant	pt	3.69	0.1000	0.37	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	5.0000	35.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4228	5.55	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	4.8970	8.33	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	15.4779	26.30	_____
REPAIR & MAINTENANCE					
Implements	acre	7.69	1.0000	7.69	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	12.23	1.0000	12.23	_____
TOTAL DIRECT EXPENSES				692.10	_____
FIXED EXPENSES					
Implements	acre	16.20	1.0000	16.20	_____
Tractors	acre	18.14	1.0000	18.14	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				121.74	_____
TOTAL SPECIFIED EXPENSES				813.84	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 34.B Summary of estimated costs and returns per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	156.0000	681.72	_____
				-----	
TOTAL INCOME				681.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.25	1.0000	45.25	_____
FERTILIZERS	acre	95.82	1.0000	95.82	_____
FUNGICIDES	acre	26.81	1.0000	26.81	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	98.56	1.0000	98.56	_____
ADJUVANTS	acre	17.22	1.0000	17.22	_____
CUSTOM FERTILIZE	acre	35.00	1.0000	35.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.14	0.5988	7.86	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	23.3194	39.64	_____
REPAIR & MAINTENANCE	acre	27.12	1.0000	27.12	_____
INTEREST ON OP. CAP.	acre	12.23	1.0000	12.23	_____
				-----	
TOTAL DIRECT EXPENSES				692.10	_____
RETURNS ABOVE DIRECT EXPENSES				-10.38	_____
TOTAL FIXED EXPENSES				121.74	_____
				-----	
TOTAL SPECIFIED EXPENSES				813.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-132.12	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 34.C Estimated resource use for field operations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clearfield	lb					65.0000				
Cruiser Maxx Rice	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF (Levees)	lb					12.0000				
Cruiser Maxx Rice	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Stratego	pt					1.1875				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
<b>TOTALS</b>							<b>0.59</b>	<b>0.59</b>	<b>2.67</b>	<b>0.53</b>

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 34.D Estimated costs for field operations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 34.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	681.72	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	14.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.65	25.17	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.81	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	98.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.37	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.50	10.50	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	6.63	3.18	4.08	4.08	8.74	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	8.07	6.92	6.92	6.92	5.23	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	3.99	6.33	1.45	1.45	8.69	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	4.81	3.25	1.16	0.73	1.10	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	207.51	166.45	74.13	62.10	140.76	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-207.51	-166.45	-74.13	-62.10	540.96	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-238.71	-405.16	-479.29	-541.39	-0.43	-10.38

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

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

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

\* Lease costs are based on hourly usage costs.



Table 34.F Estimated returns for various price/yield combinations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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

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

Table 35.A Estimated costs per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	5.30	23.0000	121.90	_____
Rice Seed CFH(Levee)	lb	1.77	4.2500	7.52	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc.(Pet.)	pt	2.47	4.0000	9.88	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4999	6.56	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.5719	9.48	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	21.9949	37.38	_____
REPAIR & MAINTENANCE					
Implements	acre	7.79	1.0000	7.79	_____
Tractors	acre	3.29	1.0000	3.29	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.71	1.0000	12.71	_____
INTEREST ON OP. CAP.	acre	13.14	1.0000	13.14	_____
TOTAL DIRECT EXPENSES				724.64	_____
FIXED EXPENSES					
Implements	acre	16.64	1.0000	16.64	_____
Tractors	acre	20.73	1.0000	20.73	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.86	1.0000	63.86	_____
TOTAL FIXED EXPENSES				125.54	_____
TOTAL SPECIFIED EXPENSES				850.18	_____

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

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

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

Table 35.B Summary of estimated costs and returns per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____
				-----	
TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	38.75	1.0000	38.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	130.40	1.0000	130.40	_____
ADJUVANTS	acre	16.85	1.0000	16.85	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.14	0.6759	8.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	30.5114	51.87	_____
REPAIR & MAINTENANCE	acre	29.95	1.0000	29.95	_____
INTEREST ON OP. CAP.	acre	13.14	1.0000	13.14	_____
				-----	
TOTAL DIRECT EXPENSES				724.64	_____
RETURNS ABOVE DIRECT EXPENSES				18.26	_____
TOTAL FIXED EXPENSES				125.54	_____
				-----	
TOTAL SPECIFIED EXPENSES				850.18	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-107.28	_____

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

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

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

Table 35.C Estimated resource use for field operations, per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clrflld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH (Levee)	lb					4.2500				
Cruiser Maxx Rice	lbseed					4.2500				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 35.D Estimated costs for field operations, per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 3.5.E Estimated monthly income and expense flows per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	130.40	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	11.61	5.44	6.34	6.34	9.98	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	11.62	9.69	9.69	9.69	5.60	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.91	6.91	2.03	2.03	8.86	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.85	3.45	1.06	0.39	1.21	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	252.09	176.81	67.75	33.69	153.15	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-252.09	-176.81	-67.75	-33.69	589.75	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-283.29	-460.10	-527.85	-561.54	28.21	18.26

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

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

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

\* Lease costs are based on hourly usage costs.

Table 35.F Estimated returns for various price/yield combinations, per acre  
 Clearfield hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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

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

Table 36.A Estimated costs per acre  
 Clearfield hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	5.30	23.0000	121.90	_____
Rice Seed CFH(Levee)	lb	1.77	4.2500	7.52	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc.(Pet.)	pt	2.47	4.0000	9.88	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.92	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8180	9.90	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	18.7364	31.85	_____
REPAIR & MAINTENANCE					
Implements	acre	7.85	1.0000	7.85	_____
Tractors	acre	3.44	1.0000	3.44	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____
TOTAL DIRECT EXPENSES				716.94	_____
FIXED EXPENSES					
Implements	acre	17.09	1.0000	17.09	_____
Tractors	acre	21.67	1.0000	21.67	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.42	1.0000	63.42	_____
TOTAL FIXED EXPENSES				126.49	_____
TOTAL SPECIFIED EXPENSES				843.43	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 36.B Summary of estimated costs and returns per acre  
 Clearfield hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____
				-----	
TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	38.75	1.0000	38.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	130.40	1.0000	130.40	_____
ADJUVANTS	acre	16.85	1.0000	16.85	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.23	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	27.4990	46.76	_____
REPAIR & MAINTENANCE	acre	29.84	1.0000	29.84	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____
				-----	
TOTAL DIRECT EXPENSES				716.94	_____
RETURNS ABOVE DIRECT EXPENSES				25.96	_____
TOTAL FIXED EXPENSES				126.49	_____
				-----	
TOTAL SPECIFIED EXPENSES				843.43	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-100.53	_____

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

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

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

Table 36.C Estimated resource use for field operations, per acre  
 Clearfield hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clrflld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH (Levee)	lb					4.2500				
Cruiser Maxx Rice	lbseed					4.2500				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000		0.10	0.10	1.26
TOTALS							0.70	0.70	2.89	0.53

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 36.D Estimated costs for field operations, per acre  
 Clearfield hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90	13.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03	4.37
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93		6.93
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67	13.31
Rice Clrfld Hyb Trt	lb	121.90						2.90	124.80		124.80
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44	5.29
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Command 3ME	pt	19.34						0.46	19.80		19.80
Sharpen	oz	10.70						0.25	10.95		10.95
MSO	pt	1.88						0.04	1.92		1.92
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CFH (Levee)	lb	7.52						0.18	7.70		7.70
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00		1.00
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Clearpath	lb	29.77						0.71	30.48		30.48
Crop Oil Conc. (Pet.)	pt	4.94						0.12	5.06		5.06
App Fert by Air	cwt	7.00						0.14	7.14		7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79		8.79
DAP	cwt	12.41						0.25	12.66		12.66
Rice Consultant	acre	8.00						0.16	8.16		8.16
App Fert by Air	cwt	18.69						0.37	19.06		19.06
Urea, Solid (46% N)	cwt	44.80						0.89	45.69		45.69
NBPT	pt	8.18						0.16	8.34		8.34
App by Air (10 gal)	appl	8.50						0.17	8.67		8.67
Newpath	oz	21.78						0.43	22.21		22.21
Crop Oil Conc. (Pet.)	pt	4.94						0.10	5.04		5.04
Aim	oz	8.40						0.17	8.57		8.57
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.85						0.28	18.13		18.13
MSO	pt	3.75						0.06	3.81		3.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	7.00						0.11	7.11		7.11
Urea, Solid (46% N)	cwt	16.78						0.27	17.05		17.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air ( 3 gal)	appl	7.50						0.09	7.59		7.59
Karate Z	oz	7.74						0.09	7.83		7.83
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98	46.03
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66	1.34
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	59.50						0.47	59.97		59.97
Dry Rice	bu	68.00						0.54	68.54		68.54
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97	20.92
Flood Irr.	acre	10.50	33.42	13.11	11.89			1.31	70.23	67.84	138.07
TOTALS		591.14	46.76	29.84	36.15	0.00	13.05	716.94	126.49	843.43	

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

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

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

Table 36.E Estimated monthly income and expense flows per acre  
 Clearfield hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	130.40	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	9.40	2.72	3.62	3.62	9.71	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	10.56	8.31	8.31	8.31	5.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.97	6.84	1.96	1.96	8.90	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.97	3.37	0.99	0.34	1.20	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	257.25	172.56	63.51	29.47	153.00	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-257.25	-172.56	-63.51	-29.47	589.90	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-288.45	-461.01	-524.52	-553.99	35.91	25.96

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

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

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

\* Lease costs are based on hourly usage costs

Table 10.F Estimated returns for various price/yield combinations, per acre  
 Clearfield hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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

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

Table 37.A Estimated costs per acre  
 Clearfield hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	3.5000	22.75	_____
App by Air (10 gal)	appl	8.50	1.0000	8.50	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Clearpath	lb	59.53	0.5000	29.77	_____
Newpath	oz	3.63	6.0000	21.78	_____
Aim	oz	5.60	1.5000	8.40	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Clrflld Hyb Trt	lb	5.30	23.0000	121.90	_____
Rice Seed CFH(Levee)	lb	1.77	4.2500	7.52	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Crop Oil Conc. (Pet.)	pt	2.47	4.0000	9.88	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4228	5.55	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	4.8970	8.33	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	15.4779	26.30	_____
REPAIR & MAINTENANCE					
Implements	acre	7.69	1.0000	7.69	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	12.57	1.0000	12.57	_____
TOTAL DIRECT EXPENSES				693.76	_____
FIXED EXPENSES					
Implements	acre	16.20	1.0000	16.20	_____
Tractors	acre	18.14	1.0000	18.14	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				121.74	_____
TOTAL SPECIFIED EXPENSES				815.50	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 37.B Summary of estimated costs and returns per acre  
 Clearfield hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____
				-----	
TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	38.75	1.0000	38.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	124.62	1.0000	124.62	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	130.40	1.0000	130.40	_____
ADJUVANTS	acre	16.85	1.0000	16.85	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.14	0.5988	7.86	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	23.3194	39.64	_____
REPAIR & MAINTENANCE	acre	27.12	1.0000	27.12	_____
INTEREST ON OP. CAP.	acre	12.57	1.0000	12.57	_____
				-----	
TOTAL DIRECT EXPENSES				693.76	_____
RETURNS ABOVE DIRECT EXPENSES				49.14	_____
TOTAL FIXED EXPENSES				121.74	_____
				-----	
TOTAL SPECIFIED EXPENSES				815.50	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-72.60	_____

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

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

Table 37.C Estimated resource use for field operations, per acre  
 Clearfield hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Clrflld Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CFH (Levee)	lb					4.2500				
Cruiser Maxx Rice	lbseed					4.2500				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	lb					0.5000				
Crop Oil Conc. (Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc. (Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

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

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

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



Table 37.D Estimated costs for field operations, per acre  
 Clearfield hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90	13.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03	4.37
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93		6.93
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67	13.31
Rice Clrfld Hyb Trt	lb	121.90						2.90	124.80		124.80
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44	5.29
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Command 3ME	pt	19.34						0.46	19.80		19.80
Sharpen	oz	10.70						0.25	10.95		10.95
MSO	pt	1.88						0.04	1.92		1.92
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CFH (Levee)	lb	7.52						0.18	7.70		7.70
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00		1.00
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Clearpath	lb	29.77						0.71	30.48		30.48
Crop Oil Conc. (Pet.)	pt	4.94						0.12	5.06		5.06
App Fert by Air	cwt	7.00						0.14	7.14		7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79		8.79
DAP	cwt	12.41						0.25	12.66		12.66
Rice Consultant	acre	8.00						0.16	8.16		8.16
App Fert by Air	cwt	18.69						0.37	19.06		19.06
Urea, Solid (46% N)	cwt	44.80						0.89	45.69		45.69
NBPT	pt	8.18						0.16	8.34		8.34
App by Air (10 gal)	appl	8.50						0.17	8.67		8.67
Newpath	oz	21.78						0.43	22.21		22.21
Crop Oil Conc. (Pet.)	pt	4.94						0.10	5.04		5.04
Aim	oz	8.40						0.17	8.57		8.57
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.85						0.28	18.13		18.13
MSO	pt	3.75						0.06	3.81		3.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	7.00						0.11	7.11		7.11
Urea, Solid (46% N)	cwt	16.78						0.27	17.05		17.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air ( 3 gal)	appl	7.50						0.09	7.59		7.59
Karate Z	oz	7.74						0.09	7.83		7.83
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98	46.03
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66	1.34
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	59.50						0.47	59.97		59.97
Dry Rice	bu	68.00						0.54	68.54		68.54
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97	20.92
Flood Irr.	acre		26.30	10.39	9.53			0.83	47.05	63.09	110.14
TOTALS		580.64	39.64	27.12	33.79	0.00	12.57	693.76	121.74	815.50	

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

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

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

Table 37.E Estimated monthly income and expense flows per acre  
 Clearfield hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	13.00	8.50	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	64.29	30.18	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	130.40	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.16	4.94	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	6.63	3.18	4.08	4.08	8.74	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	8.07	6.92	6.92	6.92	5.23	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	3.99	6.33	1.45	1.45	8.69	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.56	3.34	0.97	0.33	1.19	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	240.10	171.09	62.05	28.02	151.35	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-240.10	-171.09	-62.05	-28.02	591.55	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-271.30	-442.39	-504.44	-532.46	59.09	49.14

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

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

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

\* Lease costs are based on hourly usage costs.

Table 37.F Estimated returns for various price/yield combinations, per acre  
 Clearfield hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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

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

Table 38.A Estimated costs per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	
DAP	cwt	24.82	0.5000	12.41	
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	
NBPT	pt	10.23	0.8000	8.18	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	
2,4-D Amine 4	pt	2.79	2.0000	5.58	
Command 3ME	pt	19.34	1.0000	19.34	
Sharpen	oz	5.35	2.0000	10.70	
Regiment	oz	44.39	0.6000	26.63	
Facet L	pt	14.84	2.6900	39.92	
Permit	oz	20.59	0.7500	15.44	
Clincher SF	oz	2.38	7.5000	17.85	
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.57	23.0000	128.11	
Rice Seed CvH (Levee)	lb	1.65	4.2500	7.01	
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	
SuperMax AMS	pt	2.67	0.5000	1.34	
Dyne-A-Pak	pt	4.63	0.5000	2.32	
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	
OPERATOR LABOR					
Tractors	hour	13.14	0.4999	6.56	
Harvesters	hour	13.14	0.1760	2.31	
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
	hour	13.13	0.5389	7.08	
DIESEL FUEL					
Tractors	gal	1.70	5.5719	9.48	
Harvesters	gal	1.70	2.9444	5.01	
Flood Irr.	gal	1.70	21.9949	37.38	
REPAIR & MAINTENANCE					
Implements	acre	7.79	1.0000	7.79	
Tractors	acre	3.29	1.0000	3.29	
Harvesters	acre	6.16	1.0000	6.16	
Flood Irr.	acre	12.71	1.0000	12.71	
INTEREST ON OP. CAP.	acre	13.38	1.0000	13.38	
TOTAL DIRECT EXPENSES				744.05	
FIXED EXPENSES					
Implements	acre	16.64	1.0000	16.64	
Tractors	acre	20.73	1.0000	20.73	
Harvesters	acre	24.31	1.0000	24.31	
Flood Irr.	acre	63.86	1.0000	63.86	
TOTAL FIXED EXPENSES				125.54	
TOTAL SPECIFIED EXPENSES				869.59	

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

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

Table 38.B Summary of estimated costs and returns per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____
				-----	
TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	136.10	1.0000	136.10	_____
ADJUVANTS	acre	10.28	1.0000	10.28	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	13.14	0.6759	8.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	30.5114	51.87	_____
REPAIR & MAINTENANCE	acre	29.95	1.0000	29.95	_____
INTEREST ON OP. CAP.	acre	13.38	1.0000	13.38	_____
				-----	
TOTAL DIRECT EXPENSES				744.05	_____
RETURNS ABOVE DIRECT EXPENSES				-1.15	_____
TOTAL FIXED EXPENSES				125.54	_____
				-----	
TOTAL SPECIFIED EXPENSES				869.59	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-126.69	_____

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

Table 38.C Estimated resource use for field operations, per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH (Levee)	lb					4.2500				
Cruiser Maxx Rice	lbseed					4.2500				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.4000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.67	0.67	4.07	0.53

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 38.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90	13.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03	4.37
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93		6.93
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67	13.31
Rice Conv Hyb Trt	lb	128.11						3.04	131.15		131.15
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44	5.29
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Command 3ME	pt	19.34						0.46	19.80		19.80
Sharpen	oz	10.70						0.25	10.95		10.95
MSO	pt	1.88						0.04	1.92		1.92
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CvH (Levee)	lb	7.01						0.17	7.18		7.18
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00		1.00
App Fert by Air	cwt	7.00						0.14	7.14		7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79		8.79
DAP	cwt	12.41						0.25	12.66		12.66
Rice Consultant	acre	8.00						0.16	8.16		8.16
App by Air ( 5 gal)	appl	6.50						0.13	6.63		6.63
Regiment	oz	26.63						0.53	27.16		27.16
Dyne-A-Pak	pt	2.32						0.05	2.37		2.37
App Fert by Air	cwt	18.69						0.37	19.06		19.06
Urea, Solid (46% N)	cwt	44.80						0.89	45.69		45.69
NBPT	pt	8.18						0.16	8.34		8.34
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air ( 5 gal)	appl	6.50						0.13	6.63		6.63
Facet L	pt	39.92						0.79	40.71		40.71
Permit	oz	15.44						0.31	15.75		15.75
Crop Oil Conc. (Pet.)	pt	0.99						0.02	1.01		1.01
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.85						0.28	18.13		18.13
MSO	pt	3.75						0.06	3.81		3.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	7.00						0.11	7.11		7.11
Urea, Solid (46% N)	cwt	16.78						0.27	17.05		17.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air ( 3 gal)	appl	7.50						0.09	7.59		7.59
Karate Z	oz	7.74						0.09	7.83		7.83
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98	46.03
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66	1.34
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	59.50						0.47	59.97		59.97
Dry Rice	bu	68.00						0.54	68.54		68.54
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97	20.92
Flood Irr.	acre	2.25	38.53	13.22	22.53			1.40	77.93	66.89	144.82
TOTALS		602.06	51.87	29.95	46.79	0.00	13.38	744.05	125.54	869.59	

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

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

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

Table 38.E Estimated monthly income and expense flows per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	136.10	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	11.61	5.44	6.34	6.34	9.98	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	11.62	9.69	9.69	9.69	5.60	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.91	6.91	2.03	2.03	8.86	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.00	4.54	1.06	0.39	1.21	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	215.73	232.58	67.75	33.69	153.15	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-215.73	-232.58	-67.75	-33.69	589.75	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-246.93	-479.51	-547.26	-580.95	8.80	-1.15

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

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

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

\* Lease costs are based on hourly usage costs



Table 38.F Estimated returns for various price/yield combinations, per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Delta Area, Mississippi, 2017

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

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

Table 39.A Estimated costs per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.57	23.0000	128.11	_____
Rice Seed CvH(Levee)	lb	1.65	4.2500	7.01	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.5281	6.92	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	5.8180	9.90	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	18.7364	31.85	_____
REPAIR & MAINTENANCE					
Implements	acre	7.85	1.0000	7.85	_____
Tractors	acre	3.44	1.0000	3.44	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	12.39	1.0000	12.39	_____
INTEREST ON OP. CAP.	acre	13.29	1.0000	13.29	_____
TOTAL DIRECT EXPENSES				736.35	_____
FIXED EXPENSES					
Implements	acre	17.09	1.0000	17.09	_____
Tractors	acre	21.67	1.0000	21.67	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.42	1.0000	63.42	_____
TOTAL FIXED EXPENSES				126.49	_____
TOTAL SPECIFIED EXPENSES				862.84	_____

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

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

Table 39.B Summary of estimated costs and returns per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____
				-----	
TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	136.10	1.0000	136.10	_____
ADJUVANTS	acre	10.28	1.0000	10.28	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	13.14	0.7041	9.23	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	27.4990	46.76	_____
REPAIR & MAINTENANCE	acre	29.84	1.0000	29.84	_____
INTEREST ON OP. CAP.	acre	13.29	1.0000	13.29	_____
				-----	
TOTAL DIRECT EXPENSES				736.35	_____
RETURNS ABOVE DIRECT EXPENSES				6.55	_____
TOTAL FIXED EXPENSES				126.49	_____
				-----	
TOTAL SPECIFIED EXPENSES				862.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-119.94	_____

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

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

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

Table 39.C Estimated resource use for field operations, per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH(Levee)	lb					4.2500				
Cruiser Maxx Rice	lbseed					4.2500				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					0.4000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.70	0.70	2.89	0.53

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 39.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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

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

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

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

Table 39.E Estimated monthly income and expense flows per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	136.10	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	9.40	2.72	3.62	3.62	9.71	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	10.56	8.31	8.31	8.31	5.69	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	4.97	6.84	1.96	1.96	8.90	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	5.12	4.46	0.99	0.34	1.20	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	220.89	228.33	63.51	29.47	153.00	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-220.89	-228.33	-63.51	-29.47	589.90	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-252.09	-480.42	-543.93	-573.40	16.50	6.55

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

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

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

\* Lease costs are based on hourly usage costs.

Table 39.F Estimated returns for various price/yield combinations, per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Delta Area, Mississippi, 2017

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

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

Table 40.A Estimated costs per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	6.50	4.5000	29.25	_____
App by Air ( 3 gal)	appl	5.00	1.5000	7.50	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.23	0.5000	8.62	_____
DAP	cwt	24.82	0.5000	12.41	_____
Urea, Solid (46% N)	cwt	16.78	3.6700	61.58	_____
NBPT	pt	10.23	0.8000	8.18	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.14	80.0000	11.20	_____
2,4-D Amine 4	pt	2.79	2.0000	5.58	_____
Command 3ME	pt	19.34	1.0000	19.34	_____
Sharpen	oz	5.35	2.0000	10.70	_____
Regiment	oz	44.39	0.6000	26.63	_____
Facet L	pt	14.84	2.6900	39.92	_____
Permit	oz	20.59	0.7500	15.44	_____
Clincher SF	oz	2.38	7.5000	17.85	_____
INSECTICIDES					
Karate Z	oz	2.58	3.0000	7.74	_____
SEED/PLANTS					
Rice Conv Hyb Trt	lb	5.57	23.0000	128.11	_____
Rice Seed CvH (Levee)	lb	1.65	4.2500	7.01	_____
Cruiser Maxx Rice	lbseed	0.23	4.2500	0.98	_____
ADJUVANTS					
MSO	pt	3.75	1.5000	5.63	_____
SuperMax AMS	pt	2.67	0.5000	1.34	_____
Dyne-A-Pak	pt	4.63	0.5000	2.32	_____
Crop Oil Conc. (Pet.)	pt	2.47	0.4000	0.99	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	4.6700	32.69	_____
HAULING					
Haul Rice	bu	0.35	170.0000	59.50	_____
DRYING					
Dry Rice	bu	0.40	170.0000	68.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	0.4228	5.55	_____
Harvesters	hour	13.14	0.1760	2.31	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL					
Tractors	gal	1.70	4.8970	8.33	_____
Harvesters	gal	1.70	2.9444	5.01	_____
Flood Irr.	gal	1.70	15.4779	26.30	_____
REPAIR & MAINTENANCE					
Implements	acre	7.69	1.0000	7.69	_____
Tractors	acre	2.88	1.0000	2.88	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Flood Irr.	acre	10.39	1.0000	10.39	_____
INTEREST ON OP. CAP.	acre	12.81	1.0000	12.81	_____
TOTAL DIRECT EXPENSES				713.17	_____
FIXED EXPENSES					
Implements	acre	16.20	1.0000	16.20	_____
Tractors	acre	18.14	1.0000	18.14	_____
Harvesters	acre	24.31	1.0000	24.31	_____
Flood Irr.	acre	63.09	1.0000	63.09	_____
TOTAL FIXED EXPENSES				121.74	_____
TOTAL SPECIFIED EXPENSES				834.91	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**



Table 40.B Summary of estimated costs and returns per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	4.37	170.0000	742.90	_____
				-----	
TOTAL INCOME				742.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	36.75	1.0000	36.75	_____
FERTILIZERS	acre	90.79	1.0000	90.79	_____
HERBICIDES	acre	146.66	1.0000	146.66	_____
INSECTICIDES	acre	7.74	1.0000	7.74	_____
SEED/PLANTS	acre	136.10	1.0000	136.10	_____
ADJUVANTS	acre	10.28	1.0000	10.28	_____
CUSTOM FERTILIZE	acre	32.69	1.0000	32.69	_____
HAULING	acre	59.50	1.0000	59.50	_____
DRYING	acre	68.00	1.0000	68.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	13.14	0.5988	7.86	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	13.13	0.5389	7.08	_____
DIESEL FUEL	gal	1.70	23.3194	39.64	_____
REPAIR & MAINTENANCE	acre	27.12	1.0000	27.12	_____
INTEREST ON OP. CAP.	acre	12.81	1.0000	12.81	_____
				-----	
TOTAL DIRECT EXPENSES				713.17	_____
RETURNS ABOVE DIRECT EXPENSES				29.73	_____
TOTAL FIXED EXPENSES				121.74	_____
				-----	
TOTAL SPECIFIED EXPENSES				834.91	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-92.01	_____

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

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

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

Table 40.C Estimated resource use for field operations, per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Oct	0.3300				
Field Cultivate Fld	32'	MFWD 225	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 225	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb					23.0000				
Roller/Cultipacker	30'	MFWD 225	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.0000				
Sharpen	oz					2.0000				
MSO	pt					0.5000				
SuperMax AMS	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CvH (Levee)	lb					4.2500				
Cruiser Maxx Rice	lbseed					4.2500				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.6000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.6700				
Urea, Solid (46% N)	cwt					2.6700				
NBPT	pt					0.8000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.6900				
Permit	oz					0.7500				
Crop Oil Conc. (Pet.)	pt					0.4000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Karate Z	oz					3.0000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	25' Rigid	325 hp	0.176	1.00	Aug		0.17	0.17	0.17	0.15
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	170.0000				
Dry Rice	bu			1.00	Aug	170.0000				
Disk Heavy	28'	MFWD 225	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.59	0.59	2.67	0.53

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 40.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.16	3.46		3.46
Field Cultivate Fld	32'		1.84	1.56	2.33			0.27	6.00	7.90	13.90
Harrow - Folding	40'		0.76	0.50	0.97			0.11	2.34	2.03	4.37
App by Air ( 5 gal)	appl	6.50						0.21	6.71		6.71
Glyphosate 3lbs a.e	oz	6.72						0.21	6.93		6.93
2,4-D Amine 4	pt	5.58						0.18	5.76		5.76
Grain Drill	24'		1.55	2.27	2.67			0.15	6.64	6.67	13.31
Rice Conv Hyb Trt	lb	128.11						3.04	131.15		131.15
Roller/Cultipacker	30'		0.98	0.56	1.24			0.07	2.85	2.44	5.29
App by Air ( 5 gal)	appl	6.50						0.15	6.65		6.65
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Command 3ME	pt	19.34						0.46	19.80		19.80
Sharpen	oz	10.70						0.25	10.95		10.95
MSO	pt	1.88						0.04	1.92		1.92
SuperMax AMS	pt	1.34						0.03	1.37		1.37
Seed Levees											
Rice Seed CvH (Levee)	lb	7.01						0.17	7.18		7.18
Cruiser Maxx Rice	lbseed	0.98						0.02	1.00		1.00
App Fert by Air	cwt	7.00						0.14	7.14		7.14
Amm Sulfate (21% N)	cwt	8.62						0.17	8.79		8.79
DAP	cwt	12.41						0.25	12.66		12.66
Rice Consultant	acre	8.00						0.16	8.16		8.16
App by Air ( 5 gal)	appl	6.50						0.13	6.63		6.63
Regiment	oz	26.63						0.53	27.16		27.16
Dyne-A-Pak	pt	2.32						0.05	2.37		2.37
App Fert by Air	cwt	18.69						0.37	19.06		19.06
Urea, Solid (46% N)	cwt	44.80						0.89	45.69		45.69
NBPT	pt	8.18						0.16	8.34		8.34
Rice Management											
RICE MGT. LABOR	hour				0.91			0.02	0.93		0.93
App by Air ( 5 gal)	appl	6.50						0.13	6.63		6.63
Facet L	pt	39.92						0.79	40.71		40.71
Permit	oz	15.44						0.31	15.75		15.75
Crop Oil Conc. (Pet.)	pt	0.99						0.02	1.01		1.01
App by Air ( 5 gal)	appl	3.25						0.05	3.30		3.30
Clincher SF	oz	17.85						0.28	18.13		18.13
MSO	pt	3.75						0.06	3.81		3.81
Rice Management											
RICE MGT. LABOR	hour				1.81			0.03	1.84		1.84
App Fert by Air	cwt	7.00						0.11	7.11		7.11
Urea, Solid (46% N)	cwt	16.78						0.27	17.05		17.05
Rice Management											
RICE MGT. LABOR	hour				1.81			0.02	1.83		1.83
App by Air ( 3 gal)	appl	7.50						0.09	7.59		7.59
Karate Z	oz	7.74						0.09	7.83		7.83
Rice Management											
RICE MGT. LABOR	hour				1.81			0.01	1.82		1.82
Header - Draper (SL)	25' Rigid		5.01	8.51	4.39			0.14	18.05	27.98	46.03
Grain Cart Rice	700 bu		0.22	0.18	0.27			0.01	0.68	0.66	1.34
Handling & Storage											
HAND LABOR	hour				2.27			0.02	2.29		2.29
Haul Rice	bu	59.50						0.47	59.97		59.97
Dry Rice	bu	68.00						0.54	68.54		68.54
Disk Heavy	28'		2.98	3.15	3.78			0.04	9.95	10.97	20.92
Flood Irr.	acre		26.30	10.39	9.53			0.83	47.05	63.09	110.14
TOTALS		599.81	39.64	27.12	33.79	0.00	12.81	713.17	121.74	834.91	

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

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

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

Table 40.E Estimated monthly income and expense flows per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	742.90	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	6.50	13.00	3.25	7.50	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.01	16.78	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	12.30	0.00	34.52	81.99	17.85	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.74	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	136.10	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.31	3.75	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.69	7.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.50	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.30	0.00	0.00	0.00	0.00	0.00	6.63	3.18	4.08	4.08	8.74	3.78
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.60	0.00	0.00	0.00	0.00	0.00	8.07	6.92	6.92	6.92	5.23	2.98
REPAIR & MAINTENANCE	2.06	0.00	0.00	0.00	0.00	0.00	3.99	6.33	1.45	1.45	8.69	3.15
INTEREST ON OP. CAP.	0.54	0.00	0.00	0.00	0.60	0.00	4.71	4.43	0.97	0.33	1.19	0.04
TOTAL DIRECT EXPENSES	11.80	0.00	0.00	0.00	19.40	0.00	203.74	226.86	62.05	28.02	151.35	9.95
NET INCOME	-11.80	0.00	0.00	0.00	-19.40	0.00	-203.74	-226.86	-62.05	-28.02	591.55	-9.95
NET INCOME TO DATE	-11.80	-11.80	-11.80	-11.80	-31.20	-31.20	-234.94	-461.80	-523.85	-551.87	39.68	29.73

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

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

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

\* Lease costs are based on hourly usage costs.

Table 40.F Estimated returns for various price/yield combinations, per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Delta Area, Mississippi, 2017

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

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

Table 41.A Estimated costs per acre  
Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.62	5.5000	36.41	_____
Aframe	oz	1.13	2.2500	2.54	_____
Tebuconazole	oz	2.73	7.2000	19.66	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.29	4.0000	9.16	_____
Dual II Magnum	pt	15.51	1.0000	15.51	_____
Valor SX	oz	6.60	3.0000	19.80	_____
Storm	pt	12.75	1.5000	19.13	_____
Cadre	oz	4.21	4.0000	16.84	_____
Butyrac 200 (2,4-DB)	pt	4.77	2.0000	9.54	_____
Select Max	pt	14.99	1.0000	14.99	_____
INSECTICIDES					
Admire Pro	oz	1.72	9.0000	15.48	_____
Acephate 90%	lb	9.80	0.1375	1.35	_____
SEED/PLANTS					
Peanut Seed	lb	0.78	125.0000	97.50	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	3.75	6.0000	22.50	_____
HAULING					
Haul Peanuts	ton	14.50	1.8000	26.10	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____
DRYING					
Dry Peanuts	ton	24.00	1.0800	25.92	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
INOCULANT					
Optimize LIFT	oz	0.59	14.8000	8.73	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	1.6246	21.35	_____
Self-Propelled	hour	13.14	0.1983	2.59	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	13.17	1.4583	19.22	_____
DIESEL FUEL					
Tractors	gal	1.70	17.5722	29.87	_____
Self-Propelled	gal	1.70	1.7850	3.04	_____
REPAIR & MAINTENANCE					
Implements	acre	11.10	1.0000	11.10	_____
Tractors	acre	10.37	1.0000	10.37	_____
Self-Propelled	acre	2.03	1.0000	2.03	_____
INTEREST ON OP. CAP.	acre	6.61	1.0000	6.61	_____
TOTAL DIRECT EXPENSES				515.35	_____
FIXED EXPENSES					
Implements	acre	37.28	1.0000	37.28	_____
Tractors	acre	65.35	1.0000	65.35	_____
Self-Propelled	acre	13.50	1.0000	13.50	_____
TOTAL FIXED EXPENSES				116.13	_____
TOTAL SPECIFIED EXPENSES				631.48	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 41.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.8000	720.00	_____
				-----	
TOTAL INCOME				720.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	58.61	1.0000	58.61	_____
HERBICIDES	acre	104.97	1.0000	104.97	_____
INSECTICIDES	acre	16.83	1.0000	16.83	_____
SEED/PLANTS	acre	97.50	1.0000	97.50	_____
ADJUVANTS	acre	22.50	1.0000	22.50	_____
HAULING	acre	26.10	1.0000	26.10	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
INOCULANT	acre	8.73	1.0000	8.73	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	13.14	1.8229	23.94	_____
UNALLOCATED LABOR	hour	13.17	1.4583	19.22	_____
DIESEL FUEL	gal	1.70	19.3573	32.91	_____
REPAIR & MAINTENANCE	acre	23.50	1.0000	23.50	_____
INTEREST ON OP. CAP.	acre	6.61	1.0000	6.61	_____
				-----	
TOTAL DIRECT EXPENSES				515.35	_____
RETURNS ABOVE DIRECT EXPENSES				204.65	_____
TOTAL FIXED EXPENSES				116.13	_____
				-----	
TOTAL SPECIFIED EXPENSES				631.48	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				88.52	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 41.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Apr	0.3300				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3300				
Bed-Rip/Disk Fold.	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Plt&Pre Rigid	8R-38	MFWD 190	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual II Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Aframe	oz					1.1250				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Aframe	oz					1.1250				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	4R-38	MFWD 190	0.186	1.00	Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep		0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.0800				
Cleaning Peanuts	ton					1.5300				
Haul Peanuts	ton					1.8000				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.82	1.62	2.04	1.45

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.



Table 41.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.08	3.38		3.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Glyphosate 3lbs a.e	pt	9.16						0.22	9.38		9.38
Lime (Spread)	ton	15.18						0.36	15.54		15.54
Bed-Rip/Disk Fold.	8R-38		1.21	0.55	1.73			0.07	3.56	3.31	6.87
Peanut Plt&Pre Rigid	8R-38		2.01	2.43	3.95			0.17	8.56	7.73	16.29
Peanut Seed	lb	97.50						1.93	99.43		99.43
Optimize LIFT	oz	8.73						0.17	8.90		8.90
Admire Pro	oz	15.48						0.31	15.79		15.79
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Dual II Magnum	pt	15.51						0.31	15.82		15.82
Valor SX	oz	19.80						0.39	20.19		20.19
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13				0.25	0.30	0.55
Acephate 90%	lb	1.35						0.03	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Storm	pt	19.13						0.30	19.43		19.43
Cadre	oz	16.84						0.27	17.11		17.11
Butyrac 200 (2,4-DB)	pt	4.77						0.08	4.85		4.85
Crop Oil Conc.(Veg.)	pt	7.50						0.12	7.62		7.62
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Bravo Weather Stick	pt	9.93						0.16	10.09		10.09
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.02	1.29		1.29
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Butyrac 200 (2,4-DB)	pt	4.77						0.06	4.83		4.83
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Select Max	pt	14.99						0.18	15.17		15.17
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	6.62						0.08	6.70		6.70
Tebuconazole	oz	19.66						0.23	19.89		19.89
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.01	1.28		1.28
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	9.93						0.08	10.01		10.01
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50				0.95	1.20	2.15
Bravo Weather Stick	pt	9.93						0.04	9.97		9.97
Peanut Dig/Invertor	4R-38		3.10	2.42	4.41			0.04	9.97	8.43	18.40
Peanut Harvester	4R-38		18.40	13.41	22.10			0.21	54.12	68.32	122.44
Dry Peanuts	ton	25.92						0.10	26.02		26.02
Cleaning Peanuts	ton	27.54						0.11	27.65		27.65
Haul Peanuts	ton	26.10						0.10	26.20		26.20
Peanut Dump Cart	6-Row		5.15	2.66	7.33			0.06	15.20	14.84	30.04
TOTALS		407.18	32.91	23.50	45.15	0.00	6.61	515.35	116.13	631.48	

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 41.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	720.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	27.55	11.20	9.93
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	9.16	35.31	40.74	19.76	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.83	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.50	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	7.50	15.00	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	0.00	26.10
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.18	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.50	6.31	1.00	2.00	1.00	34.34
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	0.00	0.00	0.00	0.00	0.00	0.00	0.27	3.56	0.54	1.08	0.54	26.92
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	3.21	0.36	0.72	0.36	18.67
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.68	3.40	0.97	0.79	0.11	0.66
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.27	174.85	61.04	66.90	13.21	170.08
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-174.85	-61.04	-66.90	-13.21	549.92
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-204.12	-265.16	-332.06	-345.27	204.65

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 41.F estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.90	ton	-205 -321	-187 -303	-169 -285	-151 -267	-133 -249	-115 -231	-97 -213	-79 -195	-61 -177	-43 -159	-25 -141
60	1.08	ton	-159 -275	-137 -253	-116 -232	-94 -210	-73 -189	-51 -167	-29 -145	-8 -124	13 -102	34 -81	56 -59
70	1.26	ton	-113 -229	-88 -204	-62 -179	-37 -153	-12 -128	12 -103	37 -78	63 -53	88 -27	113 -2	138 22
80	1.44	ton	-67 -183	-38 -154	-9 -125	19 -97	47 -68	76 -39	105 -10	134 18	163 46	191 75	220 104
90	1.62	ton	-21 -137	11 -105	43 -72	75 -40	108 -7	140 24	173 56	205 89	237 121	270 154	302 186
100	1.80	ton	24 -91	60 -55	96 -19	132 16	168 52	204 88	240 124	276 160	312 196	348 232	384 268
110	1.98	ton	70 -45	110 -5	149 33	189 73	229 112	268 152	308 192	347 231	387 271	427 310	466 350
120	2.16	ton	116 0	159 43	203 86	246 130	289 173	332 216	375 259	419 302	462 346	505 389	548 432
130	2.34	ton	162 46	209 93	256 140	303 186	349 233	396 280	443 327	490 374	537 420	583 467	630 514
140	2.52	ton	208 92	259 142	309 193	359 243	410 294	460 344	511 394	561 445	611 495	662 546	712 596
150	2.70	ton	254 138	308 192	362 246	416 300	470 354	524 408	578 462	632 516	686 570	740 624	794 678

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

Table 42.A Estimated costs per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.62	5.5000	36.41	_____
Aframe	oz	1.13	2.2500	2.54	_____
Tebuconazole	oz	2.73	7.2000	19.66	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.29	4.0000	9.16	_____
Dual II Magnum	pt	15.51	1.0000	15.51	_____
Valor SX	oz	6.60	3.0000	19.80	_____
Storm	pt	12.75	1.5000	19.13	_____
Cadre	oz	4.21	4.0000	16.84	_____
Butyrac 200 (2,4-DB)	pt	4.77	2.0000	9.54	_____
Select Max	pt	14.99	1.0000	14.99	_____
INSECTICIDES					
Admire Pro	oz	1.72	9.0000	15.48	_____
Acephate 90%	lb	9.80	0.1375	1.35	_____
SEED/PLANTS					
Peanut Seed	lb	0.78	125.0000	97.50	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	3.75	6.0000	22.50	_____
HAULING					
Haul Peanuts	ton	14.50	1.8000	26.10	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____
DRYING					
Dry Peanuts	ton	24.00	1.0800	25.92	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
INOCULANT					
Optimize LIFT	oz	0.59	14.8000	8.73	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	1.6876	22.18	_____
Self-Propelled	hour	13.14	0.1983	2.59	_____
HAND LABOR					
Implements	hour	9.06	0.1527	1.38	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	13.18	1.5087	19.89	_____
DIESEL FUEL					
Tractors	gal	1.70	18.0359	30.65	_____
Self-Propelled	gal	1.70	1.7850	3.04	_____
REPAIR & MAINTENANCE					
Implements	acre	11.54	1.0000	11.54	_____
Tractors	acre	10.66	1.0000	10.66	_____
Self-Propelled	acre	2.03	1.0000	2.03	_____
INTEREST ON OP. CAP.	acre	6.70	1.0000	6.70	_____
TOTAL DIRECT EXPENSES				518.74	_____
FIXED EXPENSES					
Implements	acre	35.59	1.0000	35.59	_____
Tractors	acre	67.12	1.0000	67.12	_____
Self-Propelled	acre	13.50	1.0000	13.50	_____
TOTAL FIXED EXPENSES				116.21	_____
TOTAL SPECIFIED EXPENSES				634.95	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 42.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.8000	720.00	_____
				-----	
TOTAL INCOME				720.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	58.61	1.0000	58.61	_____
HERBICIDES	acre	104.97	1.0000	104.97	_____
INSECTICIDES	acre	16.83	1.0000	16.83	_____
SEED/PLANTS	acre	97.50	1.0000	97.50	_____
ADJUVANTS	acre	22.50	1.0000	22.50	_____
HAULING	acre	26.10	1.0000	26.10	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
INOCULANT	acre	8.73	1.0000	8.73	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.2519	2.28	_____
OPERATOR LABOR	hour	13.14	1.8859	24.77	_____
UNALLOCATED LABOR	hour	13.18	1.5087	19.89	_____
DIESEL FUEL	gal	1.70	19.8209	33.69	_____
REPAIR & MAINTENANCE	acre	24.23	1.0000	24.23	_____
INTEREST ON OP. CAP.	acre	6.70	1.0000	6.70	_____
				-----	
TOTAL DIRECT EXPENSES				518.74	_____
RETURNS ABOVE DIRECT EXPENSES				201.26	_____
				-----	
TOTAL FIXED EXPENSES				116.21	_____
				-----	
TOTAL SPECIFIED EXPENSES				634.95	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				85.05	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 42.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Apr	0.3300				
Sprayer 600-750gal Glyphosate 3lbs a.e	60' 175hp pt		0.017	1.00	Apr	4.0000		0.01	0.02	0.01
Lime (Spread)	ton			0.33	Apr	0.3300				
Bed-Rip/Disk Rigid	8R-30	MFWD 190	0.139	1.00	May		0.13	0.13	0.13	0.11
Peanut Plt&Pre Rigid	8R-30	MFWD 190	0.152	1.00	May		0.15	0.15	0.30	0.12
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal Dual II Magnum	60' 175hp pt		0.017	1.00	May	1.0000		0.01	0.02	0.01
Valor SX	oz					3.0000				
Sprayer 600-750gal Acephate 90%	60' 175hp lb		0.017	0.25	May	0.1375		0.00	0.00	0.00
Sprayer 600-750gal Storm	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Jul	1.1250		0.01	0.02	0.01
Sprayer 600-750gal Butyrac 200 (2,4-DB)	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Select Max	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Tebuconazole	oz					7.2000				
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Aug	1.1250		0.01	0.02	0.01
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Aug	1.5000		0.01	0.02	0.01
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Sep	1.5000		0.01	0.02	0.01
Peanut Dig/Invertor	4R-30	MFWD 190	0.235	1.00	Sep		0.23	0.23	0.23	0.18
Peanut Harvester	4R-30	MFWD 225	0.849	1.00	Sep		0.85	0.85	0.85	0.68
Dry Peanuts	ton					1.0800				
Cleaning Peanuts	ton					1.5300				
Haul Peanuts	ton					1.8000				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
<b>TOTALS</b>						-----hours-----				
						1.88	1.68	2.13	1.50	

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 42.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.08	3.38		3.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Glyphosate 3lbs a.e	pt	9.16						0.22	9.38		9.38
Lime (Spread)	ton	15.18						0.36	15.54		15.54
Bed-Rip/Disk Rigid	8R-30		2.31	1.03	3.29			0.13	6.76	6.12	12.88
Peanut Plt&Pre Rigid	8R-30		2.54	3.24	5.00			0.21	10.99	10.08	21.07
Peanut Seed	lb	97.50						1.93	99.43		99.43
Optimize LIFT	oz	8.73						0.17	8.90		8.90
Admire Pro	oz	15.48						0.31	15.79		15.79
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Dual II Magnum	pt	15.51						0.31	15.82		15.82
Valor SX	oz	19.80						0.39	20.19		20.19
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13				0.25	0.30	0.55
Acephate 90%	lb	1.35						0.03	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Storm	pt	19.13						0.30	19.43		19.43
Cadre	oz	16.84						0.27	17.11		17.11
Butyrac 200 (2,4-DB)	pt	4.77						0.08	4.85		4.85
Crop Oil Conc.(Veg.)	pt	7.50						0.12	7.62		7.62
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Bravo Weather Stick	pt	9.93						0.16	10.09		10.09
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.02	1.29		1.29
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Butyrac 200 (2,4-DB)	pt	4.77						0.06	4.83		4.83
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Select Max	pt	14.99						0.18	15.17		15.17
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	6.62						0.08	6.70		6.70
Tebuconazole	oz	19.66						0.23	19.89		19.89
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.01	1.28		1.28
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	9.93						0.08	10.01		10.01
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50				0.95	1.20	2.15
Bravo Weather Stick	pt	9.93						0.04	9.97		9.97
Peanut Dig/Invertor	4R-30		3.92	3.07	5.58			0.05	12.62	10.67	23.29
Peanut Harvester	4R-30		16.73	12.20	20.11			0.19	49.23	61.00	110.23
Dry Peanuts	ton	25.92						0.10	26.02		26.02
Cleaning Peanuts	ton	27.54						0.11	27.65		27.65
Haul Peanuts	ton	26.10						0.10	26.20		26.20
Peanut Dump Cart	6-Row		5.15	2.66	7.33			0.06	15.20	14.84	30.04
TOTALS		407.18	33.69	24.23	46.94	0.00	6.70	518.74	116.21	634.95	

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 42.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	720.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	27.55	11.20	9.93
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	9.16	35.31	40.74	19.76	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.83	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.50	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	7.50	15.00	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	0.00	26.10
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.18	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.50	8.92	1.00	2.00	1.00	33.52
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	0.00	0.00	0.00	0.00	0.00	0.00	0.27	5.19	0.54	1.08	0.54	26.07
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	4.50	0.36	0.72	0.36	18.11
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.68	3.50	0.97	0.79	0.11	0.65
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.27	180.48	61.04	66.90	13.21	167.84
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-180.48	-61.04	-66.90	-13.21	552.16
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-209.75	-270.79	-337.69	-350.90	201.26

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.



Table 42.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.90	ton	-208 -325	-190 -307	-172 -289	-154 -271	-136 -253	-118 -235	-100 -217	-82 -199	-64 -181	-46 -163	-28 -145
60	1.08	ton	-162 -279	-141 -257	-119 -235	-97 -214	-76 -192	-54 -171	-33 -149	-11 -127	10 -106	31 -84	53 -63
70	1.26	ton	-116 -232	-91 -207	-66 -182	-41 -157	-15 -132	9 -106	34 -81	59 -56	84 -31	110 -6	135 19
80	1.44	ton	-70 -186	-41 -158	-13 -129	15 -100	44 -71	73 -42	102 -14	130 14	159 43	188 72	217 101
90	1.62	ton	-24 -140	7 -108	40 -76	72 -43	104 -11	137 21	169 53	202 85	234 118	266 150	299 183
100	1.80	ton	21 -94	57 -58	93 -22	129 13	165 49	201 85	237 121	273 157	309 193	345 229	381 265
110	1.98	ton	67 -48	106 -9	146 30	186 69	225 109	265 149	304 188	344 228	384 267	423 307	463 347
120	2.16	ton	113 -2	156 40	199 83	242 126	286 169	329 213	372 256	415 299	458 342	502 385	545 429
130	2.34	ton	159 43	206 89	252 136	299 183	346 230	393 277	440 323	486 370	533 417	580 464	627 511
140	2.52	ton	205 89	255 139	306 189	356 240	406 290	457 341	507 391	558 441	608 492	658 542	709 593
150	2.70	ton	251 135	305 189	359 243	413 297	467 351	521 405	575 459	629 513	683 567	737 621	791 675

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

Table 43.A Estimated costs per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.62	5.5000	36.41	_____
Aframe	oz	1.13	2.2500	2.54	_____
Tebuconazole	oz	2.73	7.2000	19.66	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.29	4.0000	9.16	_____
Dual II Magnum	pt	15.51	1.0000	15.51	_____
Valor SX	oz	6.60	3.0000	19.80	_____
Storm	pt	12.75	1.5000	19.13	_____
Cadre	oz	4.21	4.0000	16.84	_____
Butyrac 200 (2,4-DB)	pt	4.77	2.0000	9.54	_____
Select Max	pt	14.99	1.0000	14.99	_____
INSECTICIDES					
Admire Pro	oz	1.72	9.0000	15.48	_____
Acephate 90%	lb	9.80	0.1375	1.35	_____
SEED/PLANTS					
Peanut Seed	lb	0.78	125.0000	97.50	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	3.75	6.0000	22.50	_____
HAULING					
Haul Peanuts	ton	14.50	1.8000	26.10	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____
DRYING					
Dry Peanuts	ton	24.00	1.0800	25.92	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
INOCULANT					
Optimize LIFT	oz	0.59	14.8000	8.73	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	1.1856	15.58	_____
Self-Propelled	hour	13.14	0.1983	2.59	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	13.19	1.1072	14.61	_____
DIESEL FUEL					
Tractors	gal	1.70	12.8051	21.77	_____
Self-Propelled	gal	1.70	1.7850	3.04	_____
REPAIR & MAINTENANCE					
Implements	acre	8.76	1.0000	8.76	_____
Tractors	acre	7.56	1.0000	7.56	_____
Self-Propelled	acre	2.03	1.0000	2.03	_____
INTEREST ON OP. CAP.	acre	6.48	1.0000	6.48	_____
TOTAL DIRECT EXPENSES				491.23	_____
FIXED EXPENSES					
Implements	acre	31.12	1.0000	31.12	_____
Tractors	acre	47.62	1.0000	47.62	_____
Self-Propelled	acre	13.50	1.0000	13.50	_____
TOTAL FIXED EXPENSES				92.24	_____
TOTAL SPECIFIED EXPENSES				583.47	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 43.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.8000	720.00	_____
				-----	
TOTAL INCOME				720.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	58.61	1.0000	58.61	_____
HERBICIDES	acre	104.97	1.0000	104.97	_____
INSECTICIDES	acre	16.83	1.0000	16.83	_____
SEED/PLANTS	acre	97.50	1.0000	97.50	_____
ADJUVANTS	acre	22.50	1.0000	22.50	_____
HAULING	acre	26.10	1.0000	26.10	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
INOCULANT	acre	8.73	1.0000	8.73	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	13.14	1.3840	18.17	_____
UNALLOCATED LABOR	hour	13.19	1.1072	14.61	_____
DIESEL FUEL	gal	1.70	14.5901	24.81	_____
REPAIR & MAINTENANCE	acre	18.35	1.0000	18.35	_____
INTEREST ON OP. CAP.	acre	6.48	1.0000	6.48	_____
				-----	
TOTAL DIRECT EXPENSES				491.23	_____
RETURNS ABOVE DIRECT EXPENSES				228.77	_____
				-----	
TOTAL FIXED EXPENSES				92.24	_____
				-----	
TOTAL SPECIFIED EXPENSES				583.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				136.53	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 43.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Apr	0.3300				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3300				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 190	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual II Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Aframe	oz					1.1250				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Aframe	oz					1.1250				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.0800				
Cleaning Peanuts	ton					1.5300				
Haul Peanuts	ton					1.8000				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.38	1.18	1.56	1.10

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 43.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.08	3.38		3.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Glyphosate 3lbs a.e	pt	9.16						0.22	9.38		9.38
Lime (Spread)	ton	15.18						0.36	15.54		15.54
Bed-Rip/Disk Fold.	12R-38		0.91	0.44	1.10			0.05	2.50	2.58	5.08
Peanut Plt&Pre Fold.	12R-38		1.34	2.88	2.64			0.14	7.00	7.54	14.54
Peanut Seed	lb	97.50						1.93	99.43		99.43
Optimize LIFT	oz	8.73						0.17	8.90		8.90
Admire Pro	oz	15.48						0.31	15.79		15.79
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Dual II Magnum	pt	15.51						0.31	15.82		15.82
Valor SX	oz	19.80						0.39	20.19		20.19
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13				0.25	0.30	0.55
Acephate 90%	lb	1.35						0.03	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Storm	pt	19.13						0.30	19.43		19.43
Cadre	oz	16.84						0.27	17.11		17.11
Butyrac 200 (2,4-DB)	pt	4.77						0.08	4.85		4.85
Crop Oil Conc.(Veg.)	pt	7.50						0.12	7.62		7.62
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Bravo Weather Stick	pt	9.93						0.16	10.09		10.09
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.02	1.29		1.29
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Butyrac 200 (2,4-DB)	pt	4.77						0.06	4.83		4.83
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Select Max	pt	14.99						0.18	15.17		15.17
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	6.62						0.08	6.70		6.70
Tebuconazole	oz	19.66						0.23	19.89		19.89
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.01	1.28		1.28
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	9.93						0.08	10.01		10.01
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50				0.95	1.20	2.15
Bravo Weather Stick	pt	9.93						0.04	9.97		9.97
Peanut Dig/Invertor	6R-38		2.06	1.64	2.93			0.03	6.66	6.10	12.76
Peanut Harvester	6R-38		12.31	8.70	14.78			0.14	35.93	47.68	83.61
Dry Peanuts	ton	25.92						0.10	26.02		26.02
Cleaning Peanuts	ton	27.54						0.11	27.65		27.65
Haul Peanuts	ton	26.10						0.10	26.20		26.20
Peanut Dump Cart	6-Row		5.15	2.66	7.33			0.06	15.20	14.84	30.04
TOTALS			407.18	24.81	18.35	34.41	0.00	6.48	491.23	92.24	583.47

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 43.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38 inch  
 All Areas, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	720.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	27.55	11.20	9.93
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	9.16	35.31	40.74	19.76	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.83	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.50	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	7.50	15.00	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	0.00	26.10
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.18	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.50	4.37	1.00	2.00	1.00	25.54
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	0.00	0.00	0.00	0.00	0.00	0.00	0.27	2.59	0.54	1.08	0.54	19.79
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	3.55	0.36	0.72	0.36	13.18
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.68	3.35	0.97	0.79	0.11	0.58
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.27	172.23	61.04	66.90	13.21	148.58
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-172.23	-61.04	-66.90	-13.21	571.42
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-201.50	-262.54	-329.44	-342.65	228.77

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

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

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 43.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38 inch  
 All Areas, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.90	ton	-181 -273	-163 -255	-145 -237	-127 -219	-109 -201	-91 -183	-73 -165	-55 -147	-37 -129	-19 -111	-1 -93
60	1.08	ton	-135 -227	-113 -205	-92 -184	-70 -162	-48 -141	-27 -119	-5 -97	15 -76	37 -54	59 -33	80 -11
70	1.26	ton	-89 -181	-64 -156	-38 -131	-13 -105	11 -80	36 -55	61 -30	87 -5	112 20	137 45	162 70
80	1.44	ton	-43 -135	-14 -106	14 -77	43 -49	71 -20	100 8	129 37	158 66	187 94	215 123	244 152
90	1.62	ton	2 -89	35 -57	67 -24	99 7	132 40	164 72	197 104	229 137	261 169	294 202	326 234
100	1.80	ton	48 -43	84 -7	120 28	156 64	192 100	228 136	264 172	300 208	336 244	372 280	408 316
110	1.98	ton	94 2	134 42	173 81	213 121	253 160	292 200	332 240	371 279	411 319	451 358	490 398
120	2.16	ton	140 48	183 91	227 134	270 178	313 221	356 264	399 307	443 350	486 394	529 437	572 480
130	2.34	ton	186 94	233 141	280 188	327 234	374 281	420 328	467 375	514 422	561 468	608 515	654 562
140	2.52	ton	232 140	283 190	333 241	384 291	434 342	484 392	535 442	585 493	636 543	686 594	736 644
150	2.70	ton	278 186	332 240	386 294	440 348	494 402	548 456	602 510	656 564	710 618	764 672	818 726

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





## APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2017

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (250-299 hp)	265 hp	323,000	300	8	13.64	13.14	23.18	33.64	69.97	132.75	202.73
Combine (300-349 hp)	325 hp	336,000	300	8	16.73	13.14	28.44	35.00	76.58	138.10	214.68
Combine (350-399 hp)	355 hp	340,000	300	8	18.27	13.14	31.05	35.41	79.61	139.74	219.36
Combine (400-449 hp)	425 hp	409,000	300	8	21.87	13.14	37.18	42.60	92.93	168.10	261.03
Combine (450-499hp)	475 hp	423,000	300	8	24.44	13.14	41.56	44.06	98.76	173.86	272.62
Tractor ( 20-39hp)CB	MFWD 30	28,500	600	8	1.54	13.14	2.62	0.89	16.65	5.35	22.01
Tractor ( 20-39hp)RB	MFWD 30	21,300	600	8	1.54	13.14	2.62	0.66	16.43	4.00	20.43
Tractor ( 40-59hp)CB	2WD 50	32,200	600	8	2.57	13.14	4.37	1.00	18.52	6.05	24.57
Tractor ( 40-59hp)CB	MFWD 50	39,100	600	8	2.57	13.14	4.37	1.22	18.73	7.35	26.08
Tractor ( 40-59hp)RB	2WD 50	20,900	600	8	2.57	13.14	4.37	0.65	18.16	3.93	22.09
Tractor ( 40-59hp)RB	MFWD 50	24,300	600	8	2.57	13.14	4.37	0.75	18.27	4.56	22.84
Tractor ( 60-89hp)CB	2WD 75	48,300	600	8	3.86	13.14	6.56	1.50	21.21	9.08	30.29
Tractor ( 60-89hp)CB	MFWD 75	54,100	600	8	3.86	13.14	6.56	1.69	21.39	10.17	31.56
Tractor ( 60-89hp)RB	2WD 75	34,400	600	8	3.86	13.14	6.56	1.07	20.77	6.46	27.24
Tractor ( 60-89hp)RB	MFWD 75	35,800	600	8	3.86	13.14	6.56	1.11	20.82	6.73	27.55
Tractor ( 90-119hp)CB	2WD 105	65,300	600	8	5.40	13.14	9.18	2.04	24.36	12.28	36.64
Tractor ( 90-119hp)CB	MFWD 105	77,400	600	8	5.40	13.14	9.18	2.41	24.74	14.55	39.30
Tractor ( 90-119hp)RB	2WD 105	57,600	600	8	5.40	13.14	9.18	1.80	24.12	10.83	34.95
Tractor ( 90-119hp)RB	MFWD 105	62,100	600	8	5.40	13.14	9.18	1.94	24.26	11.67	35.94
Tractor (120-139hp)CB	2WD 130	177,000	600	8	6.69	13.14	11.37	5.53	30.04	33.28	63.33
Tractor (120-139hp)CB	MFWD 130	123,000	600	8	6.69	13.14	11.37	3.84	28.35	23.13	51.48
Tractor (140-159hp)CB	MFWD 150	143,000	600	8	7.72	13.14	13.12	4.46	30.73	26.89	57.62
Tractor (160-179hp)CB	MFWD 170	170,000	600	8	8.75	13.14	14.87	5.31	33.32	33.45	66.78
Tractor (180-199hp)CB	MFWD 190	186,000	600	8	9.77	13.14	16.62	5.81	35.57	36.60	72.17
Tractor (200-249hp)CB	MFWD 225	218,000	600	8	11.58	13.14	19.68	6.81	39.64	42.89	82.53
Tractor (250-349hp)CB	4WD 300	281,000	600	8	15.44	13.14	26.25	8.78	48.17	55.29	103.46
Tractor (250-349hp)CB	MFWD 300	297,000	600	8	15.44	13.14	26.25	9.28	48.67	58.44	107.11
Tractor (250-349hp)CB	Track 300	292,000	600	8	15.44	13.14	26.25	9.12	48.51	57.46	105.97
Tractor (350-449hp)	Track 400	351,000	600	8	20.58	13.14	35.00	10.96	59.11	69.07	128.18
Tractor (350-449hp)CB	4WD 400	325,000	600	8	20.58	13.14	35.00	10.15	58.29	63.95	122.25
Tractor (450-550hp)CB	4WD 500	359,000	600	8	25.73	13.14	43.75	11.21	68.10	70.64	138.75
Tractor (450-550hp)CB	Track 500	400,000	600	8	25.73	13.14	43.75	12.50	69.39	78.71	148.10
Utility Vehicle	800 CC	9,700	200	8	0.70	13.14	1.33	1.51	15.98	5.98	21.96
Utility Vehicle	900 CC	12,200	200	8	1.00	13.14	1.90	1.90	16.94	7.52	24.46
Utility Vehicle-mule	600 CC	6,500	200	8	0.50	13.14	0.95	1.01	15.10	4.00	19.11

## Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

CB = Cab, RB = Roll Bar

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2017

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	5.72	5.63	10.79	22.15	42.59	64.74
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.72	7.89	14.13	27.75	55.78	83.53
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.82	5.27	9.61	18.71	37.92	56.63
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.84	6.77	15.85	27.48	62.56	90.05
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.82	5.35	12.51	21.69	49.39	71.09
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	5.72	9.02	21.58	36.33	85.18	121.51
Cotton Picker/Modu	6R-30 (500)	744,000	200	8	25.73	0.218	4.84	9.54	25.37	39.76	100.11	139.87
Cotton Picker/Modu	6R-38 (365)	536,000	200	8	20.58	0.172	3.82	6.03	14.43	24.28	56.94	81.22
Cotton Picker/Module	6R-38 (500)	745,000	200	8	25.73	0.172	3.82	7.53	20.05	31.42	79.14	110.56
Dry Applicator SP	70'300cuft	312,000	350	8	16.98	0.015	0.26	0.43	0.25	0.95	1.66	2.61
Sprayer 600-750gal	60' 175hp	193,000	350	8	9.00	0.017	0.31	0.26	0.18	0.76	1.19	1.96
Sprayer 600-825gal	80' 175hp	202,000	350	8	11.81	0.013	0.23	0.26	0.14	0.64	0.94	1.58
Sprayer 600-825gal	90' 250hp	273,000	350	8	12.73	0.011	0.20	0.25	0.17	0.63	1.13	1.76
Sprayer 800gal	100' 250hp	261,000	350	8	14.15	0.010	0.18	0.25	0.14	0.58	0.97	1.56
Sprayer 800gal	80' 250hp	250,000	350	8	12.86	0.013	0.23	0.28	0.17	0.69	1.16	1.86
Sprayer 1000-1400gal	90' 275hp	294,000	350	8	14.15	0.010	0.18	0.25	0.16	0.60	1.09	1.70
Sprayer 1000gal	100' 300hp	308,000	350	8	15.44	0.010	0.18	0.27	0.17	0.63	1.14	1.78
Sprayer 1200+gal	120' 300hp	343,000	350	8	15.44	0.008	0.15	0.23	0.16	0.54	1.06	1.61

Notes:

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

Direct: Does not include interest on operating capital.

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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost	
									Imp.	P.U.		Imp.	P.U.		
			dollars	hours	years	hr/ac	-----\$/acre-----								
Bed-Paratill	Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.06	1.59	1.58	0.55	4.78	2.75	3.46	11.00
Bed-Paratill	Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.70	1.05	1.34	0.36	3.47	2.32	2.30	8.10
Bed-Paratill	Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.70	1.05	1.34	0.36	3.47	2.32	2.30	8.10
Bed-Paratill	Rigid	4R-30	MFWD 225	13,500	150	12	0.204	2.68	4.02	0.99	1.39	9.09	1.72	8.76	19.58
Bed-Paratill	Rigid	4R-38	MFWD 225	13,500	150	12	0.160	2.11	3.16	0.78	1.09	7.16	1.36	6.90	15.42
Bed-Paratill	Rigid	6R-30	MFWD 225	19,900	150	12	0.136	1.78	2.68	0.97	0.92	6.37	1.69	5.84	13.92
Bed-Paratill	Rigid	6R-38	MFWD 225	18,800	150	12	0.107	1.41	2.11	0.73	0.73	4.99	1.26	4.61	10.87
Bed-Paratill	Rigid	8R-30	MFWD 225	25,000	150	12	0.102	1.34	2.01	0.92	0.69	4.97	1.60	4.38	10.95
Bed-Paratill	Rigid	8R-38	MFWD 225	25,000	150	12	0.080	1.06	1.59	0.72	0.55	3.93	1.26	3.46	8.65
Bed-Paratill	w/rol	4R-30	MFWD 225	17,900	150	12	0.204	2.68	4.02	1.32	1.39	9.42	2.29	8.76	20.47
Bed-Paratill	w/rol	4R-38	MFWD 225	17,900	150	12	0.160	2.11	3.16	1.03	1.09	7.41	1.80	6.90	16.12
Bed-Paratill	w/rol	6R-38	MFWD 225	25,200	150	12	0.107	1.41	2.11	0.97	0.73	5.24	1.69	4.61	11.55
Bed-Rip/Disk	Fold.	8R-38	MFWD 190	36,900	300	20	0.073	0.96	1.21	0.13	0.42	2.73	0.63	2.67	6.04
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	54,400	300	20	0.061	0.80	1.21	0.16	0.41	2.61	0.79	2.64	6.04
Bed-Rip/Disk	Fold.	12R-38	MFWD 225	54,400	300	20	0.046	0.60	0.90	0.12	0.31	1.95	0.59	1.98	4.53
Bed-Rip/Disk	Rigid	4R-30	MFWD 190	17,300	300	20	0.184	2.42	3.07	0.15	1.07	6.73	0.75	6.76	14.26
Bed-Rip/Disk	Rigid	4R-38	MFWD 190	17,300	300	20	0.146	1.92	2.43	0.12	0.85	5.34	0.60	5.37	11.32
Bed-Rip/Disk	Rigid	6R-38	MFWD 190	23,900	300	20	0.097	1.27	1.61	0.11	0.56	3.57	0.55	3.56	7.69
Bed-Rip/Disk	Rigid	8R-30	MFWD 190	31,300	300	20	0.139	1.82	2.31	0.21	0.80	5.16	1.03	5.08	11.28
Bed-Rip/Disk	Rigid	8R-38	MFWD 190	31,300	300	20	0.073	0.96	1.21	0.11	0.42	2.71	0.54	2.67	5.93
Bed-Rip/Disk	Rigid	6R-30	MFWD 190	23,900	300	20	0.123	1.61	2.04	0.14	0.71	4.53	0.69	4.51	9.74
Bed-Rip/Disk/Cond.		6-Row	MFWD 225	24,600	150	12	0.107	1.41	2.11	0.95	0.73	5.21	1.65	4.61	11.48
Bed-Rip/Disk/Cond.		8-Row	MFWD 225	32,700	150	12	0.080	1.06	1.59	0.95	0.55	4.15	1.65	3.46	9.27
Bed/Disk (Hipper)		4R-38	MFWD 150	8,800	160	10	0.147	1.93	1.93	0.32	0.65	4.86	0.85	3.97	9.69
Bed/Disk (Hipper)		6R-30	MFWD 170	15,100	160	10	0.125	1.64	1.85	0.47	0.66	4.63	1.24	4.18	10.06
Bed/Disk (Hipper)		6R-38	MFWD 170	15,100	160	10	0.098	1.29	1.46	0.37	0.52	3.66	0.98	3.30	7.94
Bed/Disk (Hipper)		8R-30	MFWD 190	17,400	160	10	0.093	1.23	1.55	0.40	0.54	3.74	1.07	3.43	8.25
Bed/Disk (Hipper)		8R-38 2x1	MFWD 190	33,600	160	10	0.049	0.64	0.82	0.41	0.28	2.16	1.09	1.80	5.07
Bed/Disk (Hipper)		12R-30	MFWD 225	30,700	160	10	0.062	0.82	1.23	0.47	0.42	2.95	1.26	2.68	6.90
Bed/Disk (Hipper)		12R-38	MFWD 225	33,600	160	10	0.049	0.64	0.97	0.41	0.33	2.37	1.09	2.11	5.58
Bed/Disk (Hipper)		16R40	MFWD 300	47,000	160	10	0.035	0.46	0.92	0.41	0.32	2.13	1.09	2.06	5.30
Bed/Disk (Hipper)Fl		8R-38	MFWD 190	20,200	160	10	0.074	0.97	1.23	0.37	0.43	3.01	0.98	2.71	6.71
Bed/Disk (Hipper)Rd		8R-38	MFWD 190	14,600	160	10	0.074	0.97	1.23	0.27	0.43	2.90	0.71	2.71	6.33
Bed/Disk w/roller		8R-30/40	MFWD 190	27,800	160	10	0.093	1.23	1.55	0.65	0.54	3.98	1.72	3.43	9.13
Bed/Disk w/roller		12R-30/40	MFWD 225	44,400	160	10	0.062	0.82	1.23	0.69	0.42	3.17	1.83	2.68	7.68
Bed/Disk w/roller		8R-38	MFWD 190	27,400	160	10	0.074	0.97	1.23	0.50	0.43	3.14	1.34	2.71	7.19
Bed/Lister		4R-38	MFWD 150	18,200	160	8	0.228	3.00	2.99	0.97	1.02	7.99	3.06	6.14	17.20
Bed/Lister		6R-38	MFWD 150	18,900	160	8	0.120	1.57	1.57	0.53	0.53	4.22	1.67	3.23	9.13
Bed/Lister		8R-30	MFWD 190	20,500	160	8	0.114	1.50	1.89	0.54	0.66	4.61	1.72	4.17	10.51
Bed/Lister		8R-38	MFWD 190	23,500	160	8	0.090	1.18	1.50	0.49	0.52	3.70	1.56	3.30	8.57
Bed/Lister		8R-38 2x1	MFWD 190	46,200	160	8	0.060	0.78	0.99	0.65	0.34	2.78	2.04	2.19	7.03
Bed/Lister		12R-38	MFWD 225	46,200	160	8	0.060	0.78	1.18	0.65	0.40	3.03	2.04	2.57	7.66
Bed/Lister		16R-30	MFWD 225	59,400	160	8	0.035	0.46	0.69	0.48	0.23	1.88	1.53	1.50	4.92
Bed/Lister		16R40	MFWD 300	82,400	160	8	0.043	0.56	1.13	0.83	0.39	2.92	2.62	2.51	8.06
Bed/Lister-Roll-Fold		8R-38	MFWD 190	24,400	160	10	0.074	0.97	1.23	0.45	0.43	3.08	1.19	2.71	6.99
Bed/Lister-Roll-Fold		12R-30	MFWD 225	29,200	160	10	0.062	0.82	1.23	0.45	0.42	2.93	1.20	2.68	6.82
Bed/Lister-Roll-Fold		12R-38	MFWD 225	33,400	160	10	0.049	0.64	0.97	0.41	0.33	2.36	1.08	2.11	5.57
Bed/Lister-Roll-Fold		16R-30	MFWD 225	34,800	160	10	0.046	0.61	0.92	0.40	0.31	2.26	1.07	2.01	5.35
Bed/Lister-Roll-Rig.		8R-38	MFWD 190	21,300	160	10	0.074	0.97	1.23	0.39	0.43	3.03	1.04	2.71	6.78
Blade-Box		6'-7'	MFWD 105	1,150	200	20	0.020	0.26	0.18	0.01	0.03	0.49	0.00	0.23	0.73
Blade-Box		8'-10'	MFWD 105	3,010	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box		12'-16'	MFWD 105	6,270	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		6'-7'	MFWD 105	1,100	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		8'-10'	MFWD 105	3,390	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper		12'-16'	MFWD 105	6,860	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boll Buggy		4R-38(250)	MFWD 190	30,500	200	10	0.257	3.38	4.28	1.96	1.49	11.13	3.99	9.43	24.56
Boll Buggy		4R-38(350)	MFWD 190	30,500	200	10	0.257	3.38	4.28	1.96	1.49	11.13	3.99	9.43	24.56
Boll Buggy		4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.26	2.86	1.31	1.00	7.44	2.67	6.30	16.42
Boll Buggy		6R-30(355)	MFWD 190	30,500	200	10	0.218	2.86	3.62	1.66	1.26	9.42	3.38	7.98	20.80
Boll Buggy		6R-38(355)	MFWD 190	30,500	200	10	0.172	2.26	2.86	1.31	1.00	7.44	2.67	6.30	16.42
Chisel Plow-Folding		24'	MFWD 190	38,000	150	12	0.076	1.00	1.27	1.04	0.44	3.76	1.82	2.79	8.38
Chisel Plow-Folding		32'	MFWD 225	49,900	150	12	0.057	0.75	1.13	1.04	0.39	3.33	1.80	2.47	7.61
Chisel Plow-Folding		42'	MFWD 225	60,600	150	12	0.044	0.57	0.86	0.96	0.29	2.70	1.67	1.88	6.26
Chisel Plow-Folding		50'	MFWD 225	79,400	150	10	0.036	0.48	0.72	1.27	0.25	2.73	2.06	1.58	6.39
Chisel Plow-Folding		61'	MFWD 225	88,400	150	12	0.030	0.39	0.59	0.96	0.20	2.16	1.67	1.30	5.14
Chisel Plow-Rigid		10'	MFWD 170	6,300	150	12	0.184	2.42	2.75	0.42	0.98	6.58	0.72	6.18	13.49
Chisel Plow-Rigid		15'	2WD 130	11,400	150	12	0.123	1.61	1.40	0.50	0.68	4.21	0.88	4.10	9.19
Chisel Plow-Rigid		20'	MFWD 225	11,300	150	12	0.102	1.34	2.02	0.41	0.69	4.49	0.72	4.40	9.62
Chisel Plow-Rigid		24'	MFWD 190	12,100	150	12	0.077	1.01	1.28	0.33	0.44	3.07	0.58	2.81	6.48
Cultivate		4R-30	2WD 105	11,900	150	10	0.206	2.71	1.89	0.65	0.42	5.68	1.72	2.53	9.94
Cultivate		4R-38	2WD 105	12,000	150	10	0.162	2.13	1.49	0.51	0.29	4.43	1.37	1.75	7.56
Cultivate		6R-30	MFWD 150	16,200	150	10	0.137	1.80	1.80	0.59	0.61	4.81	1.56	3.69	10.08
Cultivate		6R-38	MFWD 150	17,100	150	10	0.108	1.42	1.42	0.49	0.48	3.83	1.30	2.91	8.05
Cultivate		8R-30	MFWD 190	20,500	150	10	0.103	1.35	1.71	0.56	0.59	4.23	1.48	3.77	9.49
Cultivate		8R-38	MFWD 190	21,300	150	10	0.073	0.96	1.22	0.41	0.42	3.03	1.10	2.69	6.84
Cultivate		8R-38 2x1	MFWD 190	30,400	150	10	0.054	0.71	0.90	0.44	0.31	2.37	1.16	1.98	5.52
Cultivate		12R-30	MFWD 225	35,500	150	10	0.068	0.90	1.35	0.65	0.46	3.37	1.71	2.94	8.04
Cultivate		12R-38	MFWD 225	37,000	150	10	0.054	0.71	1.06	0.53	0.36	2.68	1.41	2.32	6.43

(continued)

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

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

(continued)

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

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

(continued)

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

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

(continued)

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

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

(continued)



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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Spray (Spot)	40'	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Spot)	50'	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Spot)	53'	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Spot)	60'	MFWD 225	18,600	200	8	0.028	0.49	0.55	0.24	0.19	1.49	0.29	1.21	2.99
Stalk Shredder	14'	MFWD 150	12,800	200	10	0.117	1.54	1.54	1.32	0.52	4.94	0.79	3.16	8.90
Stalk Shredder Flex	20'	MFWD 150	29,800	200	10	0.082	1.08	1.08	2.15	0.36	4.68	1.29	2.21	8.20
Stalk Shredder-Flail	12'	MFWD 150	15,500	200	10	0.137	1.80	1.80	1.86	0.61	6.09	1.12	3.69	10.91
Stalk Shredder-Flail	15'	MFWD 150	19,800	200	10	0.110	1.44	1.44	1.90	0.49	5.28	1.15	2.95	9.39
Stalk Shredder-Flail	18'	MFWD 150	26,900	200	10	0.091	1.20	1.20	2.15	0.40	4.97	1.30	2.46	8.74
Stalk Shredder-Flail	20'	MFWD 150	27,000	200	10	0.082	1.08	1.08	1.94	0.36	4.48	1.17	2.21	7.87
Stalk Shredder-Flail	25'	MFWD 150	39,600	200	10	0.066	0.86	0.86	2.28	0.29	4.31	1.38	1.77	7.47
Strip Till	8R-38	MFWD 225	38,100	150	10	0.061	0.80	1.21	1.01	0.41	3.46	1.65	2.64	7.75
Strip Till	12R-30	MFWD 225	61,100	150	10	0.061	0.80	1.21	1.63	0.41	4.07	2.65	2.64	9.36
Strip Till	12R-40	MFWD 225	58,500	150	10	0.046	0.60	0.90	1.17	0.31	3.00	1.90	1.98	6.89
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.68	3.39	0.24	1.18	7.51	0.59	7.47	15.58
Subsoiler	4 shank	MFWD 225	9,340	100	15	0.153	2.01	3.02	0.47	1.04	6.56	1.18	6.59	14.34
Subsoiler	5 shank	MFWD 225	10,800	100	15	0.122	1.60	2.40	0.44	0.83	5.29	1.08	5.24	11.62
Subsoiler low-till	4 shank	MFWD 225	10,800	100	15	0.153	2.01	3.02	0.55	1.04	6.64	1.36	6.59	14.60
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.34	2.01	0.56	0.69	4.61	1.39	4.38	10.39
Subsoiler low-till	8 shank	MFWD 225	20,600	100	15	0.076	1.00	1.50	0.52	0.52	3.55	1.29	3.28	8.14

Notes:

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

Total Direct: Does not include interest on operating capital.

HB = Hooded Boom, HD = Hooded Direct

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

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

(continued)

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

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

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

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

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

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

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

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	13.14
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)	
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2017

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

<sup>a</sup> Average of the daily closing futures contract prices during the first 5 trading days in October 2016 for the stated contract months.

<sup>b</sup> Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2016 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.

<sup>c</sup> The forward contract price for corn, cotton, rice, soybeans and wheat is the futures contract price plus the basis. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The forward contract price for peanuts is an estimate from a poll of Extension Peanut Marketing Specialists.

<sup>d</sup> Average Mississippi County CCC Loan Rate for 2016 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2016 Farm-stored Loan Rate for long grain rough rice. National 2017 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

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

<sup>f</sup> Cottonseed price is the average marketing year price over the years 2006-2015.

Appendix Table 8. Estimated costs for field operations, per acre  
 Cotton irrigated with roll-out pipe  
 160-acre roll-out pipe system, 10.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		0.63	0.33	0.50			0.01	1.47	1.68	3.15
Set Up Engine											
IRRIGATE LABOR	hour				0.23			0.01	0.24		0.24
Ditcher (1m/160a)			0.14	0.07	0.12			0.01	0.34	0.34	0.68
Roll-Out Pipe	ft	8.25						0.16	8.41		8.41
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.19	0.10	0.39			0.01	0.69	0.70	1.39
IRRIGATE LABOR	hour				1.81			0.04	1.85		1.85
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.28	0.14	0.59			0.01	1.02	1.05	2.07
Land Forming (\$450)	each									31.93	31.93
Well & Pump, Furrow	each			2.44				0.05	2.49	7.21	9.70
Main Line Pipe	each									4.01	4.01
Engine, RPF, 75	each									8.38	8.38
June Irrigation	ac-in		4.85	1.30				0.12	6.27		6.27
July Irrigation	ac-in		4.85	1.30				0.10	6.25		6.25
August Irrigation	ac-in		4.85	1.30				0.07	6.22		6.22
TOTALS		8.25	15.79	6.98	4.33	0.00		0.59	35.94	55.30	91.24

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

Appendix Table 9. Estimated costs for field operations, per acre  
 Cotton irrigated with center pivot  
 135-acre 1/4-mile pivot system, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			TOTAL	
-----dollars-----											
Set Up Engine											
IRRIGATE LABOR	hour				0.27			0.01	0.28	0.28	
Maintenance											
IRRIGATE LABOR	hour				1.07			0.03	1.10	1.10	
Apply Water											
IRRIGATE LABOR	hour				0.15				0.15	0.15	
Apply Water											
IRRIGATE LABOR	hour				0.20				0.20	0.20	
Apply Water											
IRRIGATE LABOR	hour				0.15				0.15	0.15	
Pivot, 1/4 CP	each			11.24				0.22	11.46	45.08	56.54
Well & Pump, 1/4 CP	each			2.89				0.06	2.95	8.54	11.49
Engine, 1/4 CP, 65	each									9.93	9.93
June Irr. 3app@.75"	ac-in		5.71	1.39				0.14	7.24		7.24
July Irr. 4app@.75"	ac-in		7.62	1.86				0.15	9.63		9.63
Aug Irr. 3app@.75"	ac-in		5.71	1.39				0.08	7.18		7.18
TOTALS		0.00	19.04	18.77	1.84	0.00	0.69	40.34	63.55	103.89	

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



Appendix Table 10. Estimated costs for field operations, per acre  
 Early soybeans irrigated with roll-out pipe  
 160-acre system, 9 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		0.63	0.33	0.50			0.07	1.53	1.68	3.21
Set Up Engine											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Ditcher (1m/160a)			0.14	0.07	0.12			0.01	0.34	0.34	0.68
Roll-Out Pipe	ft	8.25						0.13	8.38		8.38
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.19	0.10	0.39			0.01	0.69	0.70	1.39
IRRIGATE LABOR	hour				1.81			0.03	1.84		1.84
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.28	0.14	0.59				1.01	1.05	2.06
Land Forming (\$450)	each									31.93	31.93
Well & Pump, Furrow	each			2.44				0.04	2.48	7.21	9.69
Main Line Pipe	each									4.01	4.01
Engine, RPF, ESB	each									8.38	8.38
1st June Irrigation	ac-in		4.15	1.30				0.09	5.54		5.54
2nd June Irrigation	ac-in		4.15	1.30				0.09	5.54		5.54
July Irrigation	ac-in		4.15	1.30				0.06	5.51		5.51
TOTALS		8.25	13.69	6.98	4.33	0.00	0.53		33.78	55.30	89.08

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

Appendix Table 11. Estimated costs for field operations, per acre  
 Irrigation with a contour flood system  
 80-acre system, 13.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.24	0.11	0.21			0.01	0.57	1.23
Survey & Mark Levees	acre	2.25						0.04	2.29	2.29
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.32	0.14	0.28			0.01	0.75	1.63
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.01	0.69	1.37
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.25	0.11	0.22			0.01	0.59	1.28
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.32	0.14	0.28			0.01	0.75	1.63
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.01	0.69	1.37
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.25	0.11	0.22			0.01	0.59	1.28
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.32	0.14	0.28			0.01	0.75	1.63
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.01	0.69	1.37
IRRIGATE LABOR	hour				0.68			0.01	0.69	0.69
Apply Water										
IRRIGATE LABOR	hour				0.11				0.11	0.11
Tear Down Levees										
Levee Splitter (1/80	32"		0.25	0.11	0.22			0.01	0.59	1.28
Tear Down Levees										
Levee Splitter (1/80	32"		0.19	0.09	0.16				0.44	0.95
Land Forming (\$113)	each								8.02	8.02
Well & Pump, Flood	each			4.88				0.10	4.98	19.39
Engine, CF, 75	each								16.75	16.75
June Irrigation	ac-in		6.23	2.61				0.17	9.01	9.01
July Irrigation	ac-in		6.23	2.61				0.14	8.98	8.98
August Irrigation	ac-in		6.23	2.61				0.10	8.94	8.94
TOTALS		2.25	21.73	14.02	5.47	0.00	0.69	44.16	47.10	91.26

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

Appendix Table 12. Estimated costs for field operations, per acre  
 Late soybeans irrigated with roll-out pipe  
 160-acre system, 12 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		0.63	0.33	0.50			0.07	1.53	1.68	3.21
Set Up Engine											
IRRIGATE LABOR	hour				0.23			0.01	0.24		0.24
Ditcher (1m/160a)			0.14	0.07	0.12			0.01	0.34	0.34	0.68
Roll-Out Pipe	ft	8.25						0.16	8.41		8.41
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.19	0.10	0.39			0.01	0.69	0.70	1.39
IRRIGATE LABOR	hour				1.81			0.04	1.85		1.85
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.28	0.14	0.59			0.01	1.02	1.05	2.07
Land Forming (\$450)	each									31.93	31.93
Well & Pump, Furrow	each			2.44				0.05	2.49	7.21	9.70
Main Line Pipe	each									4.01	4.01
Engine, RPF, LSB	each									8.38	8.38
1st July Irrigation	ac-in		4.15	0.98				0.08	5.21		5.21
2nd July Irrigation	ac-in		4.15	0.98				0.08	5.21		5.21
1st Aug Irrigation	ac-in		4.15	0.98				0.06	5.19		5.19
2nd Aug Irrigation	ac-in		4.15	0.98				0.06	5.19		5.19
TOTALS		8.25	17.84	7.00	4.56	0.00		0.64	38.29	55.30	93.59

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

Appendix Table 13. Estimated costs for field operations, per acre  
 Irrigation with a 1/2-mile center pivot system  
 530-acre system, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Set Up Engine									
IRRIGATE LABOR	hour				0.07			0.07	0.07
Maintenance									
IRRIGATE LABOR	hour				0.27		0.01	0.28	0.28
Apply Water									
IRRIGATE LABOR	hour				0.04			0.04	0.04
Apply Water									
IRRIGATE LABOR	hour				0.05			0.05	0.05
Apply Water									
IRRIGATE LABOR	hour				0.04			0.04	0.04
Pivot, 1/2 CP	each			6.87			0.14	7.01	27.56
Well & Pump, 1/2 CP	each			0.95			0.02	0.97	2.81
Engine, 1/2 CP, 164	each								3.85
June Irr. 3app@.75"	ac-in		8.37	0.54			0.18	9.09	9.09
July Irr. 4app@.75"	ac-in		11.16	0.72			0.19	12.07	12.07
Aug Irr. 3app@.75"	ac-in		8.37	0.54			0.11	9.02	9.02
TOTALS		0.00	27.90	9.62	0.47	0.00	0.65	38.64	34.22

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

Appendix Table 14. Estimated costs for field operations, per acre  
 Corn irrigated with roll-out pipe  
 160-acre system, 13 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		0.63	0.33	0.50			0.07	1.53	1.68	3.21
Set Up Engine											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Ditcher (1m/160a)			0.14	0.07	0.12			0.01	0.34	0.34	0.68
Roll-Out Pipe	ft	8.25						0.13	8.38		8.38
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.19	0.10	0.39			0.01	0.69	0.70	1.39
IRRIGATE LABOR	hour				1.81			0.03	1.84		1.84
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.28	0.14	0.59			0.01	1.02	1.05	2.07
Land Forming (\$450)	each									31.93	31.93
Well & Pump, Furrow	each			2.44				0.04	2.48	7.21	9.69
Main Line Pipe	each									4.01	4.01
Engine, RPF, Corn	each									8.38	8.38
1st June Irrigation	ac-in		4.50	0.98				0.09	5.57		5.57
2nd June Irrigation	ac-in		4.50	0.98				0.09	5.57		5.57
3rd June Irrigation	ac-in		4.50	0.98				0.09	5.57		5.57
1st July Irrigation	ac-in		4.50	0.98				0.07	5.55		5.55
TOTALS		8.25	19.24	7.00	4.56	0.00		0.64	39.69	55.30	94.99

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

Appendix Table 15. Estimated costs for field operations, per acre  
 Contour levee rice flood irrigation system  
 80-acre system, 33 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Build Outside Levee										
Levee Pull (1m/80a)	8 blade		0.24	0.11	0.21			0.01	0.57	0.66
Survey & Mark Levees	acre	4.50						0.11	4.61	4.61
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.64	0.29	0.56			0.04	1.53	1.76
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.02	0.70	0.68
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Install Gates										
IRRIGATE LABOR	hour				2.72			0.06	2.78	2.78
Apply Water										
IRRIGATE LABOR	hour				6.80			0.16	6.96	6.96
Apply Water										
IRRIGATE LABOR	hour				6.80			0.13	6.93	6.93
Apply Water										
IRRIGATE LABOR	hour				6.80			0.11	6.91	6.91
Apply Water										
IRRIGATE LABOR	hour				6.80			0.08	6.88	6.88
Remove Gates										
IRRIGATE LABOR	hour				0.91			0.01	0.92	0.92
Tear Down Levees										
Levee Splitter (1/80)	32"		0.50	0.23	0.44			0.01	1.18	1.36
Tear Down Levees										
Levee Splitter (1/80)	32"		0.19	0.09	0.16				0.44	0.51
Land Forming (\$113)	each								8.02	8.02
Levee Gates	each								0.77	0.77
Well & Pump, Flood	each			4.88				0.10	4.98	14.41
Engine, Rice CL, 75	each								16.75	16.75
May Irrigation	ac-in		8.31	1.42				0.23	9.96	9.96
June Irrigation	ac-in		12.46	2.13				0.29	14.88	14.88
July Irrigation	ac-in		12.46	2.13				0.23	14.82	14.82
August Irrigation	ac-in		12.46	2.13				0.17	14.76	14.76
TOTALS		4.50	47.56	13.53	33.59	0.00	1.79	100.97	44.92	145.89

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

Appendix Table 16. Estimated costs for field operations, per acre  
 Straight levee rice flood irrigation system  
 80-acre system, 27 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Survey & Mark Levees	acre	2.25						0.05	2.30	2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.48	0.22	0.42			0.03	1.15	1.32
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.02	0.70	0.68
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Install Gates										
IRRIGATE LABOR	hour				1.36			0.03	1.39	1.39
Apply Water										
IRRIGATE LABOR	hour				4.53			0.11	4.64	4.64
Apply Water										
IRRIGATE LABOR	hour				4.53			0.09	4.62	4.62
Apply Water										
IRRIGATE LABOR	hour				4.53			0.07	4.60	4.60
Apply Water										
IRRIGATE LABOR	hour				4.53			0.05	4.58	4.58
Remove Gates										
IRRIGATE LABOR	hour				0.91			0.01	0.92	0.92
Tear Down Levees										
Levee Splitter (1/80)	32"		0.37	0.17	0.33			0.01	0.88	1.03
Land Forming (\$450)	each									31.93
Levee Gates	each									0.77
Well & Pump, Flood	each			4.88				0.10	4.98	14.41
Engine, Rice SL, 75	each									16.75
May Irrigation	ac-in		8.31	1.74				0.24	10.29	10.29
June Irrigation	ac-in		9.69	2.03				0.23	11.95	11.95
July Irrigation	ac-in		9.69	2.03				0.19	11.91	11.91
August Irrigation	ac-in		9.69	2.03				0.14	11.86	11.86
TOTALS		2.25	38.53	13.22	22.53	0.00	1.40	77.93	66.89	144.82

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

Appendix Table 17. Estimated costs for field operations, per acre  
 Straight levee rice multi inlet flood irrigation system  
 80-acre system, 23 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45			0.01	0.46	0.46
Survey & Mark Levees	acre	2.25						0.05	2.30	2.30
Build Inside Levees										
Levee Pull (1m/80a)	8 blade		0.48	0.22	0.42			0.03	1.15	1.32
Butt Levees										
Blade-Box	6'-7'		0.30	0.12	0.26			0.02	0.70	0.68
IRRIGATE LABOR	hour				0.68			0.02	0.70	0.70
Ditcher (1m/160a)			0.14	0.07	0.12			0.01	0.34	0.34
Roll-Out Pipe	ft	8.25						0.20	8.45	8.45
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.19	0.10	0.39			0.02	0.70	0.70
Install Gates										
IRRIGATE LABOR	hour				1.36			0.03	1.39	1.39
Apply Water										
IRRIGATE LABOR	hour				1.81			0.04	1.85	1.85
Apply Water										
IRRIGATE LABOR	hour				1.81			0.04	1.85	1.85
Apply Water										
IRRIGATE LABOR	hour				1.81			0.03	1.84	1.84
Apply Water										
IRRIGATE LABOR	hour				1.81			0.02	1.83	1.83
Remove Gates										
IRRIGATE LABOR	hour				0.45				0.45	0.45
Tear Down Levees										
Levee Splitter (1/80	32"		0.37	0.17	0.33			0.01	0.88	1.03
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.09	0.04	0.19				0.32	0.35
Land Forming (\$450)	each								31.93	31.93
Levee Gates	each								0.33	0.33
Well & Pump, Flood	each			4.88				0.10	4.98	14.41
Engine, Mult In Rice	each								16.75	16.75
May Irrigation	ac-in		6.92	1.63				0.20	8.75	8.75
June Irrigation	ac-in		8.31	1.96				0.20	10.47	10.47
July Irrigation	ac-in		8.31	1.96				0.16	10.43	10.43
August Irrigation	ac-in		8.31	1.96				0.12	10.39	10.39
TOTALS		10.50	33.42	13.11	11.89	0.00	1.31	70.23	67.84	138.07

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



Appendix Table 18. Estimated costs for field operations, per acre  
 Straight levee rice - zero grade flood irrigation  
 80-acre system, 19 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.05	2.32	2.32	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.04	2.31	2.31	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.04	2.31	2.31	
Apply Water										
IRRIGATE LABOR	hour				2.27		0.03	2.30	2.30	
Land Forming (\$450)	each							31.93	31.93	
Well & Pump, Flood	each			4.88			0.10	4.98	14.41	
Engine, Rice SL, 75	each							16.75	16.75	
May Irrigation	ac-in		5.54	1.16			0.16	6.86	6.86	
June Irrigation	ac-in		6.92	1.45			0.17	8.54	8.54	
July Irrigation	ac-in		6.92	1.45			0.13	8.50	8.50	
August Irrigation	ac-in		6.92	1.45			0.10	8.47	8.47	
TOTALS		0.00	26.30	10.39	9.53	0.00	0.83	47.05	63.09	110.14

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



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