

**COTTON  
2016  
PLANNING BUDGETS**

**Mississippi State University  
Department of Agricultural Economics  
Budget Report 2015-01**

**October 2015**



## Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses.**" Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2015 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

## Acknowledgments

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

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

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

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.

## 2016 Budget Committees

### **Corn, Grain Sorghum, and Wheat**

Brian Williams, MSU-ES, Chairman  
Jason Bond, MSU-ES  
Angus Catchot, MSU-ES  
Don Cook, MAFES  
Bobby Golden, MSU-ES  
Jeff Gore, MSU-ES/MAFES  
Jason Krutz, MSU-ES  
Eric Larson, MSU-ES/MAFES  
Larry Oldham, MSU-ES  
H. C. Pringle, MAFES

### **Cotton**

Larry Falconer, MSU-ES, Chairman  
Jason Bond, MAFES  
Angus Catchot, MSU-ES  
Darrin Dodds, MSU-ES  
Bobby Golden, MSU-ES  
Larry Oldham, MSU-ES  
H. C. Pringle, MAFES

### **Peanuts**

Bryon Parman, MSU-ES, Chairman  
Jeff Gore, MSU-ES/MAFES  
Allan Henn, MSU-ES  
Jason Sarver, MSU-ES

### **Rice**

Larry Falconer, MSU-ES, Chairman  
Tom Allen, MSU-ES  
Jason Bond, MAFES  
Bobby Golden, MSU-ES  
Jeff Gore, MSU-ES/MAFES  
H. C. Pringle, MAFES

### **Soybeans**

Larry Falconer, MSU-ES, Chairman  
Tom Allen, MSU-ES  
Jason Bond, MAFES  
Normie W. Buehring, MAFES  
Angus Catchot, MSU-ES  
Don Cook, MAFES  
Bobby Golden, MSU-ES  
Jeff Gore, MSU-ES/MAFES  
Trent Irby, MSU-ES  
Jason Krutz, MSU-ES  
H. C. Pringle, MAFES

### **Vegetables**

Alba Collart, MSU-ES, Chairman  
Blake Layton, MSU-ES  
David H. Nagel, MSU-ES

### **Fruit & Nut**

Alba Collart, MSU-ES, Chairman  
Eric Stafne, MSU-ES  
Frank Matta, MAFES

## Supporting Committees

### **Equipment**

Larry Falconer, MSU-ES, Chairman  
W. Gail Gillis, MSU-ES  
Dave Sites, MAFES

### **Prices**

Larry Falconer, MSU-ES, Chairman  
W. Gail Gillis, MSU-ES  
Dave Sites, MAFES

### **Documentation and Data Processing**

Larry Falconer, MSU-ES, Chairman  
W. Gail Gillis, MSU-ES  
Dave Sites, MAFES

### **Publication Review**

Larry Falconer, MSU-ES, Chairman  
W. Gail Gillis, MSU-ES  
Dave Sites, MAFES

## Table of Contents

	Page
Foreword.....	i
Acknowledgments.....	i
2015 Budget Committees.....	ii
2015 Planning Budgets .....	1
Budgets for Agricultural Enterprises.....	1
Methods and Procedures .....	1
Production Practices .....	1
Machinery .....	1
Estimates of Direct Costs.....	2
Estimates of Fixed Costs.....	2
Estimates of Returns .....	3
Irrigation Costs .....	3
Net Returns .....	3
 Enterprise Budgets	
Table	
1    Cotton, 8R-38", solid, conservation tillage B2RF variety, Delta Area.....	6
2    Cotton, 8R-38", solid, no-till B2RF variety, Delta Area.....	12
3    Cotton, 8R-38", 2x1 full-skip, (8 rows planted) Conservation tillage, B2RF variety, Delta Area.....	18
4    Cotton, 12R-38", solid, conservation tillage B2RF variety, Delta Area .....	24
5    Cotton, 12R-38", solid, conservation tillage, B2RF variety, furrow irrigated, 10.5 ac.-in., Delta Area.....	30
6    Cotton, 12R-38", solid, conservation tillage, B2RF variety, pivot irrigated, 7.5 ac.-in., Delta Area .....	36
7    Cotton, 12R-38" solid, no-till B2RF variety, Delta Area.....	42
8    Cotton, 8R-38", solid, conservation tillage B2RF variety, Non-Delta Area .....	48
9    Cotton, 8R-38", solid, no-till B2RF variety, Non-Delta Area.....	54

Appendix  
Table

1	Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed costs per hour .....	62
2	Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed costs per acre.....	63
3	Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed costs per acre .....	64
4	Operating inputs: estimated prices .....	70
5	Estimated fuel prices and interest rates .....	73
6	Labor types, wage rates and unallocated labor multipliers for crop enterprises.....	73
7	Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets .....	74
8	Cotton irrigated with roll-out pipe 160-acre roll-out pipe system, 10.5 ac-in., Delta Area.....	75
9	Cotton irrigated with center pivot 135-acre ¼-mile pivot system, 7.5 ac-in., Delta Area.....	76
	Literature Cited .....	77

# 2016 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 2015. (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 2015 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

The futures price for an appropriate contract month is determined by averaging the closing prices for the month of September. The basis is determined by subtracting the average daily cash price for the month of September from the average daily closing price of the 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 and 9. 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, 8R-38" solid, conservation tillage  
 B2RF variety, Delta Area, Mississippi, 2016

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	0.79	2.3000	1.82	_____
Ethephon 6E	pt	4.69	2.3125	10.85	_____
Tribufos 6lb	pt	9.90	0.5000	4.95	_____
GINNING					
Gin & Haul	lb	0.11	1100.0000	121.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	21.27	1.5000	31.91	_____
UAN (32% N)	cwt	15.95	4.0000	63.80	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	12.35	1.0000	12.35	_____
Gramoxone SL 2.0	oz	0.31	96.0000	29.76	_____
Reflex 2LC	pt	6.30	1.0000	6.30	_____
Cotoran 4L	pt	5.99	2.0000	11.98	_____
Dual Magnum	pt	13.01	2.0000	26.02	_____
Diuron 4L	pt	4.15	1.6000	6.64	_____
INSECTICIDES					
Acephate 90%	lb	7.45	2.2500	16.76	_____
Centric 40WG	oz	4.95	2.0000	9.90	_____
Diamond .83EC	oz	1.33	6.0000	7.98	_____
Admire Pro	oz	2.95	2.0000	5.90	_____
Bifenthrin	oz	0.89	12.8000	11.39	_____
Karate Z	oz	2.80	0.5000	1.40	_____
Bidrin 8WM	oz	1.09	2.0000	2.18	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.74	1.5000	11.61	_____
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	45.0000	32.40	_____
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	45.0000	67.05	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	5.35	0.4000	2.14	_____
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	13.40	1.1055	14.81	_____
Self-Propelled	hour	13.40	0.3459	4.65	_____
HAND LABOR					
Implements	hour	9.06	0.4491	4.07	_____
Self-Propelled	hour	9.06	0.3018	2.74	_____
UNALLOCATED LABOR					
	hour	13.40	1.1611	15.56	_____
DIESEL FUEL					
Tractors	gal	2.00	12.8036	25.61	_____
Self-Propelled	gal	2.00	5.4372	10.89	_____
REPAIR & MAINTENANCE					
Implements	acre	11.07	1.0000	11.07	_____
Tractors	acre	7.88	1.0000	7.88	_____
Self-Propelled	acre	14.94	1.0000	14.94	_____
INTEREST ON OP. CAP.	acre	14.24	1.0000	14.24	_____
TOTAL DIRECT EXPENSES				774.62	_____
FIXED EXPENSES					
Implements	acre	18.07	1.0000	18.07	_____
Tractors	acre	49.60	1.0000	49.60	_____
Self-Propelled	acre	61.18	1.0000	61.18	_____
TOTAL FIXED EXPENSES				128.85	_____
TOTAL SPECIFIED EXPENSES				903.47	_____

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, conservation tillage  
B2RF variety, Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	1100.0000	660.00	_____
Cotton Seed	lb	0.11	1650.0000	188.10	_____
				-----	
TOTAL INCOME				848.10	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	121.00	1.0000	121.00	_____
FERTILIZERS	acre	95.71	1.0000	95.71	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	117.42	1.0000	117.42	_____
INSECTICIDES	acre	79.14	1.0000	79.14	_____
SEED/PLANTS	acre	32.40	1.0000	32.40	_____
TECHNOLOGY FEE	acre	67.05	1.0000	67.05	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	2.14	1.0000	2.14	_____
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	0.7509	6.81	_____
OPERATOR LABOR	hour	13.40	1.4514	19.46	_____
UNALLOCATED LABOR	hour	13.40	1.1611	15.56	_____
DIESEL FUEL	gal	2.00	18.2409	36.50	_____
REPAIR & MAINTENANCE	acre	33.89	1.0000	33.89	_____
INTEREST ON OP. CAP.	acre	14.24	1.0000	14.24	_____
				-----	
TOTAL DIRECT EXPENSES				774.62	_____
RETURNS ABOVE DIRECT EXPENSES				73.48	_____
				-----	
TOTAL FIXED EXPENSES				128.85	_____
				-----	
TOTAL SPECIFIED EXPENSES				903.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-55.37	_____

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, conservation tillage  
 B2RF variety, Delta Area, Mississippi, 2016

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	8R-38	MFWD 225	0.080	1.00	Nov		0.08	0.08	0.08	0.06
Bed/Disk (Hipper)Rd	8R-38	MFWD 225	0.074	0.50	Nov		0.03	0.03	0.03	0.02
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				
Fert Appl (Liquid)	8R-38	MFWD 225	0.077	1.00	Apr		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Reflex 2LC	pt					1.0000				
Surfactant	pt					0.2000				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	May		0.05	0.05	0.05	0.04
Plant & Pre-Rigid	8R-38	MFWD 225	0.080	1.00	May		0.08	0.08	0.16	0.06
Cotton Seed B2RF	thous					45.0000				
B2RF Cot Tech Fee	thous					45.0000				
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 4L	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
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				
Acephate 90%	lb					0.7500				
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				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	8R-38	MFWD 225	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					2.0000				
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	MFWD 225	0.066	1.00	Jul		0.06	0.06	0.10	0.05
Diuron 4L	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				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R-38 (350)		0.257	1.00	Oct			0.25	0.51	0.20
Boll Buggy	4R-38 (350)	MFWD 225	0.257	1.00	Oct		0.25	0.25	0.25	0.20
Module Builder	4R-38 (350)	MFWD 225	0.257	1.00	Oct		0.25	0.25	0.51	0.20
Gin & Haul	lb			1.00	Oct	1100.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.45	1.10	2.20	1.16

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, conservation tillage  
B2RF variety, Delta Area, Mississippi, 2016

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						0.15	3.45		3.45
Lime (Spread)	ton	30.36						1.37	31.73		31.73
Custom Apply Fert	acre	7.00						0.32	7.32		7.32
Potash (60% K2O)	cwt	31.91						1.44	33.35		33.35
Bed-Paratill Fold	8R-38		1.87	2.17	1.95			0.27	6.26	6.37	12.63
Bed/Disk (Hipper)Rd	8R-38		0.86	0.43	0.90			0.10	2.29	2.12	4.41
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Clarity	pt	6.45						0.19	6.64		6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Select Max	pt	12.35						0.37	12.72		12.72
Fert Appl (Liquid)	8R-38		1.80	1.32	2.22			0.14	5.48	4.35	9.83
UAN (32% N)	cwt	31.90						0.84	32.74		32.74
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08	2.10
Gramoxone SL 2.0	oz	14.88						0.39	15.27		15.27
Reflex 2LC	pt	6.30						0.17	6.47		6.47
Surfactant	pt	1.07						0.03	1.10		1.10
Row Cond Rigid	26'		1.38	0.64	1.44			0.08	3.54	3.57	7.11
Plant & Pre-Rigid	8R-38		1.86	1.70	2.67			0.14	6.37	5.77	12.14
Cotton Seed B2RF	thous	32.40						0.73	33.13		33.13
B2RF Cot Tech Fee	thous	67.05						1.51	68.56		68.56
Cotton Seed Trt.	acre	20.00						0.45	20.45		20.45
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Gramoxone SL 2.0	oz	14.88						0.33	15.21		15.21
Cotoran 4L	pt	11.98						0.27	12.25		12.25
Surfactant	pt	1.07						0.02	1.09		1.09
Cotton Consultant	acre	8.00						0.18	8.18		8.18
Eradication	acre	1.00						0.02	1.02		1.02
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Acephate 90%	lb	5.59						0.13	5.72		5.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Centric 40WG	oz	9.90						0.19	10.09		10.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Fert Appl (Liquid)	8R-38		1.80	1.32	2.22			0.10	5.44	4.35	9.79
UAN (32% N)	cwt	31.90						0.60	32.50		32.50
App by Air ( 3 gal)	appl	5.00						0.09	5.09		5.09
Diamond .83EC	oz	7.98						0.15	8.13		8.13
Admire Pro	oz	5.90						0.11	6.01		6.01
Spray (Direct/Layby)	8R-38		1.55	0.76	1.92			0.06	4.29	3.34	7.63
Diuron 4L	pt	6.64						0.10	6.74		6.74
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55		4.55
App by Air ( 3 gal)	appl	5.00						0.07	5.07		5.07
Acephate 90%	lb	5.59						0.08	5.67		5.67
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Bifenthrin	oz	5.70						0.09	5.79		5.79
App by Air ( 3 gal)	appl	1.25						0.02	1.27		1.27
Karate Z	oz	1.40						0.02	1.42		1.42
Bidrin 8WM	oz	2.18						0.03	2.21		2.21
Incidental Pest											
App by Air ( 3 gal)	appl	5.00						0.07	5.07		5.07
Incidental Pest Trt	acre	12.00						0.18	12.18		12.18
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Acephate 90%	lb	5.59						0.06	5.65		5.65
Bifenthrin	oz	5.70						0.06	5.76		5.76
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Transform WG	oz	11.61						0.13	11.74		11.74
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Thidiazuron 4lb	oz	1.82						0.01	1.83		1.83
Ethephon 6E	pt	9.38						0.07	9.45		9.45
App by Air ( 5 gal)	appl	3.25						0.02	3.27		3.27
Ethephon 6E	pt	1.47						0.01	1.48		1.48
Tribufos 6lb	pt	4.95						0.04	4.99		4.99
Cotton Picker	4R-38(350)		9.29	14.14	8.55			0.12	32.10	55.78	87.88
Boll Buggy	4R-38(350)		5.97	3.81	6.21			0.06	16.05	15.57	31.62
Module Builder	4R-38(350)		5.97	4.08	8.55			0.07	18.67	16.12	34.79
Gin & Haul	lb	121.00						0.45	121.45		121.45
Stalk Shredder-Flail	15'		2.55	2.72	2.65			0.03	7.95	6.11	14.06
TOTALS		648.16	36.50	33.89	41.83	0.00	14.24	774.62	128.85	903.47	

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, conservation tillage  
B2RF variety, Delta Area, Mississippi, 2016

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	848.10
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	17.62	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	31.91	0.00	0.00	0.00	0.00	31.90	0.00	31.90	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	23.28	21.18	61.84	0.00	11.12	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.59	23.78	26.87	22.90	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	32.40	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	67.05	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	0.00	1.07	1.07	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	2.85	0.00	0.00	0.00	0.00	2.73	5.64	2.73	1.92	0.00	0.00	25.96
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	2.73	0.00	0.00	0.00	0.00	2.12	4.20	2.12	1.55	0.00	0.00	23.78
REPAIR & MAINTENANCE	2.60	0.00	0.00	0.00	0.00	1.48	2.82	1.48	0.76	0.00	0.00	24.75
INTEREST ON OP. CAP.	3.65	0.00	0.00	0.00	0.88	1.60	4.70	1.29	0.82	0.37	0.20	0.73
TOTAL DIRECT EXPENSES	84.40	0.00	0.00	0.00	30.66	62.08	214.31	70.06	56.05	33.27	27.57	196.22
NET INCOME	-84.40	0.00	0.00	0.00	-30.66	-62.08	-214.31	-70.06	-56.05	-33.27	-27.57	651.88
NET INCOME TO DATE	-84.40	-84.40	-84.40	-84.40	-115.06	-177.14	-391.45	-461.51	-517.56	-550.83	-578.40	73.48

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, conservation tillage  
 B2RF variety, Delta Area, Mississippi, 2016

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75
PERCENT	YIELD	UNIT	dollars										
50	550.00	lb	-278 -407	-261 -390	-245 -374	-228 -357	-212 -341	-195 -324	-179 -308	-162 -291	-146 -275	-129 -258	-113 -242
60	660.00	lb	-240 -369	-221 -349	-201 -330	-181 -310	-161 -290	-141 -270	-122 -250	-102 -231	-82 -211	-62 -191	-42 -171
70	770.00	lb	-203 -332	-180 -309	-157 -286	-134 -263	-111 -240	-88 -216	-64 -193	-41 -170	-18 -147	4 -124	27 -101
80	880.00	lb	-166 -295	-139 -268	-113 -242	-87 -215	-60 -189	-34 -163	-7 -136	18 -110	44 -83	71 -57	97 -31
90	990.00	lb	-128 -257	-99 -228	-69 -198	-39 -168	-10 -138	19 -109	49 -79	79 -49	108 -20	138 9	168 39
100	1100.00	lb	-91 -220	-58 -187	-25 -154	7 -121	40 -88	73 -55	106 -22	139 10	172 43	205 76	238 109
110	1210.00	lb	-54 -183	-17 -146	18 -110	54 -74	91 -37	127 -1	163 34	199 71	236 107	272 143	308 179
120	1320.00	lb	-16 -145	22 -106	62 -66	101 -26	141 12	181 52	220 91	260 131	299 171	339 210	379 250
130	1430.00	lb	20 -108	63 -65	106 -22	149 20	192 63	235 106	277 149	320 191	363 234	406 277	449 320
140	1540.00	lb	57 -70	104 -24	150 21	196 67	242 113	288 160	335 206	381 252	427 298	473 344	519 391
150	1650.00	lb	95 -33	144 15	194 65	243 114	293 164	342 213	392 263	441 312	491 362	540 411	590 461

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 2015 input prices.

Table 2.A Estimated costs per acre  
 Cotton, 8R-38" solid, no-till  
 B2RF variety, Delta Area, Mississippi, 2016

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	0.79	2.3000	1.82	_____
Ethephon 6E	pt	4.69	2.3125	10.85	_____
Tribufos 6lb	pt	9.90	0.5000	4.95	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Urea, Solid (46% N)	cwt	20.83	1.5000	31.24	_____
Potash (60% K2O)	cwt	21.27	1.5000	31.91	_____
UAN (32% N)	cwt	15.95	2.0000	31.90	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	12.35	1.0000	12.35	_____
Gramoxone SL 2.0	oz	0.31	96.0000	29.76	_____
Reflex 2LC	pt	6.30	1.0000	6.30	_____
Cotoran 4L	pt	5.99	2.0000	11.98	_____
Dual Magnum	pt	13.01	2.0000	26.02	_____
Diuron 4L	pt	4.15	1.6000	6.64	_____
INSECTICIDES					
Acephate 90%	lb	7.45	2.2500	16.76	_____
Centric 40WG	oz	4.95	2.0000	9.90	_____
Diamond .83EC	oz	1.33	6.0000	7.98	_____
Admire Pro	oz	2.95	2.0000	5.90	_____
Bifenthrin	oz	0.89	12.8000	11.39	_____
Karate Z	oz	2.80	0.5000	1.40	_____
Bidrin 8WM	oz	1.09	2.0000	2.18	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.74	1.5000	11.61	_____
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	45.0000	32.40	_____
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	45.0000	67.05	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	5.35	0.4000	2.14	_____
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	13.40	0.9134	12.23	_____
Self-Propelled	hour	13.40	0.3459	4.65	_____
HAND LABOR					
Implements	hour	9.06	0.4136	3.75	_____
Self-Propelled	hour	9.06	0.3018	2.74	_____
UNALLOCATED LABOR					
	hour	13.39	1.0074	13.50	_____
DIESEL FUEL					
Tractors	gal	2.00	10.5787	21.16	_____
Self-Propelled	gal	2.00	5.4372	10.89	_____
REPAIR & MAINTENANCE					
Implements	acre	8.70	1.0000	8.70	_____
Tractors	acre	6.52	1.0000	6.52	_____
Self-Propelled	acre	14.94	1.0000	14.94	_____
INTEREST ON OP. CAP.	acre	14.28	1.0000	14.28	_____
TOTAL DIRECT EXPENSES				738.86	_____
FIXED EXPENSES					
Implements	acre	14.30	1.0000	14.30	_____
Tractors	acre	40.99	1.0000	40.99	_____
Self-Propelled	acre	61.18	1.0000	61.18	_____
TOTAL FIXED EXPENSES				116.47	_____
TOTAL SPECIFIED EXPENSES				855.33	_____

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, no-till  
 B2RF variety, Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	900.0000	540.00	_____
Cotton Seed	lb	0.11	1350.0000	153.90	_____
				-----	
TOTAL INCOME				693.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	95.05	1.0000	95.05	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	117.42	1.0000	117.42	_____
INSECTICIDES	acre	79.14	1.0000	79.14	_____
SEED/PLANTS	acre	32.40	1.0000	32.40	_____
TECHNOLOGY FEE	acre	67.05	1.0000	67.05	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	2.14	1.0000	2.14	_____
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	0.7155	6.49	_____
OPERATOR LABOR	hour	13.40	1.2593	16.88	_____
UNALLOCATED LABOR	hour	13.39	1.0074	13.50	_____
DIESEL FUEL	gal	2.00	16.0159	32.05	_____
REPAIR & MAINTENANCE	acre	30.16	1.0000	30.16	_____
INTEREST ON OP. CAP.	acre	14.28	1.0000	14.28	_____
				-----	
TOTAL DIRECT EXPENSES				738.86	_____
RETURNS ABOVE DIRECT EXPENSES				-44.96	_____
				-----	
TOTAL FIXED EXPENSES				116.47	_____
				-----	
TOTAL SPECIFIED EXPENSES				855.33	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-161.43	_____

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, no-till  
 B2RF variety, Delta Area, Mississippi, 2016

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				
Urea, Solid (46% N)	cwt					1.5000				
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				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Reflex 2LC	pt					1.0000				
Surfactant	pt					0.2000				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	May		0.05	0.05	0.05	0.04
NT Plant&Pre-Rigid	8R-38	MFWD 225	0.083	1.00	May		0.08	0.08	0.16	0.06
Cotton Seed B2RF	thous					45.0000				
B2RF Cot Tech Fee	thous					45.0000				
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 4L	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
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				
Acephate 90%	lb					0.7500				
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				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	8R-38	MFWD 225	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					2.0000				
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	MFWD 225	0.066	1.00	Jun		0.06	0.06	0.10	0.05
Diuron 4L	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				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R-38 (350)		0.257	1.00	Oct			0.25	0.51	0.20
Boll Buggy	4R-38 (350)	MFWD 225	0.257	1.00	Oct		0.25	0.25	0.25	0.20
Module Builder	4R-38 (350)	MFWD 225	0.257	1.00	Oct		0.25	0.25	0.51	0.20
Gin & Haul	lb			1.00	Oct	900.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.25	0.91	1.97	1.00

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, no-till  
B2RF variety, Delta Area, Mississippi, 2016

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						0.15	3.45	3.45
Lime (Spread)	ton	30.36						1.37	31.73	31.73
Custom Apply Fert	acre	7.00						0.32	7.32	7.32
Urea, Solid (46% N)	cwt	31.24						1.41	32.65	32.65
Potash (60% K2O)	cwt	31.91						1.44	33.35	33.35
App by Air ( 5 gal)	appl	6.50						0.19	6.69	6.69
Clarity	pt	6.45						0.19	6.64	6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Select Max	pt	12.35						0.37	12.72	12.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08
Gramoxone SL 2.0	oz	14.88						0.39	15.27	15.27
Reflex 2LC	pt	6.30						0.17	6.47	6.47
Surfactant	pt	1.07						0.03	1.10	1.10
Row Cond Rigid	26'		1.38	0.64	1.44			0.08	3.54	3.57
NT Plant&Pre-Rigid	8R-38		1.94	1.89	2.78			0.15	6.76	6.23
Cotton Seed B2RF	thous	32.40						0.73	33.13	33.13
B2RF Cot Tech Fee	thous	67.05						1.51	68.56	68.56
Cotton Seed Trt.	acre	20.00						0.45	20.45	20.45
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08
Gramoxone SL 2.0	oz	14.88						0.33	15.21	15.21
Cotoran 4L	pt	11.98						0.27	12.25	12.25
Surfactant	pt	1.07						0.02	1.09	1.09
Cotton Consultant	acre	8.00						0.18	8.18	8.18
Eradication	acre	1.00						0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08
Dual Magnum	pt	13.01						0.29	13.30	13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58	4.58
Acephate 90%	lb	5.59						0.13	5.72	5.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08
Dual Magnum	pt	13.01						0.29	13.30	13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58	4.58
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08
Centric 40WG	oz	9.90						0.19	10.09	10.09
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Fert Appl (Liquid)	8R-38		1.80	1.32	2.22			0.10	5.44	4.35
UAN (32% N)	cwt	31.90						0.60	32.50	32.50
App by Air ( 3 gal)	appl	5.00						0.09	5.09	5.09
Diamond .83EC	oz	7.98						0.15	8.13	8.13
Admire Pro	oz	5.90						0.11	6.01	6.01
Spray (Direct/Layby)	8R-38		1.55	0.76	1.92			0.08	4.31	3.34
Diuron 4L	pt	6.64						0.12	6.76	6.76
Glyphosate 3lbs a.e	oz	4.48						0.08	4.56	4.56
App by Air ( 3 gal)	appl	5.00						0.07	5.07	5.07
Acephate 90%	lb	5.59						0.08	5.67	5.67
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	5.70						0.09	5.79	5.79
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.40						0.02	1.42	1.42
Bidrin 8WM	oz	2.18						0.03	2.21	2.21
Incidental Pest										
App by Air ( 3 gal)	appl	5.00						0.07	5.07	5.07
Incidental Pest Trt	acre	12.00						0.18	12.18	12.18
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	5.59						0.06	5.65	5.65
Bifenthrin	oz	5.70						0.06	5.76	5.76
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Transform WG	oz	11.61						0.13	11.74	11.74
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	1.82						0.01	1.83	1.83
Ethephon 6E	pt	9.38						0.07	9.45	9.45
App by Air ( 5 gal)	appl	3.25						0.02	3.27	3.27
Ethephon 6E	pt	1.47						0.01	1.48	1.48
Tribufos 6lb	pt	4.95						0.04	4.99	4.99
Cotton Picker	4R-38(350)		9.29	14.14	8.55			0.12	32.10	55.78
Boll Buggy	4R-38(350)		5.97	3.81	6.21			0.06	16.05	15.57
Module Builder	4R-38(350)		5.97	4.08	8.55			0.07	18.67	16.12
Gin & Haul	lb	99.00						0.37	99.37	99.37
Stalk Shredder-Flail	15'		2.55	2.72	2.65			0.03	7.95	6.11
TOTALS		625.50	32.05	30.16	36.87	0.00	14.28	738.86	116.47	855.33

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, no-till  
 B2RF variety, Delta Area, Mississippi, 2016

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	693.90
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	17.62	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	63.15	0.00	0.00	0.00	0.00	0.00	0.00	31.90	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	23.28	21.18	61.84	11.12	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.59	23.78	26.87	22.90	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	32.40	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	67.05	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	0.00	1.07	1.07	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	0.51	5.75	4.65	0.00	0.00	0.00	25.96
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	0.32	4.28	3.67	0.00	0.00	0.00	23.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.16	3.01	2.24	0.00	0.00	0.00	24.75
INTEREST ON OP. CAP.	4.69	0.00	0.00	0.00	0.88	0.62	4.71	1.57	0.59	0.37	0.20	0.65
TOTAL DIRECT EXPENSES	108.50	0.00	0.00	0.00	30.66	23.86	214.70	85.69	40.47	33.27	27.57	174.14
NET INCOME	-108.50	0.00	0.00	0.00	-30.66	-23.86	-214.70	-85.69	-40.47	-33.27	-27.57	519.76
NET INCOME TO DATE	-108.50	-108.50	-108.50	-108.50	-139.16	-163.02	-377.72	-463.41	-503.88	-537.15	-564.72	-44.96

Note: Cost of production estimates are based on 2015 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, 8R-38" solid, no-till  
 B2RF variety, Delta Area, Mississippi, 2016

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75		
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-332	-319	-305	-292	-278	-265	-251	-238	-224	-211	-197
			-449	-435	-422	-408	-395	-381	-368	-354	-341	-327	-314
60	540.00	lb	-302	-286	-269	-253	-237	-221	-205	-188	-172	-156	-140
			-418	-402	-386	-370	-353	-337	-321	-305	-289	-272	-256
70	630.00	lb	-271	-252	-233	-214	-196	-177	-158	-139	-120	-101	-82
			-388	-369	-350	-331	-312	-293	-274	-255	-236	-218	-199
80	720.00	lb	-241	-219	-197	-176	-154	-133	-111	-89	-68	-46	-25
			-357	-335	-314	-292	-271	-249	-227	-206	-184	-163	-141
90	810.00	lb	-210	-186	-161	-137	-113	-89	-64	-40	-16	8	32
			-326	-302	-278	-254	-229	-205	-181	-156	-132	-108	-83
100	900.00	lb	-179	-152	-125	-98	-71	-44	-17	9	36	63	90
			-296	-269	-242	-215	-188	-161	-134	-107	-80	-53	-26
110	990.00	lb	-149	-119	-89	-60	-30	-0	28	58	88	117	147
			-265	-236	-206	-176	-147	-117	-87	-57	-28	1	31
120	1080.00	lb	-118	-86	-54	-21	10	43	75	107	140	172	205
			-235	-202	-170	-138	-105	-73	-40	-8	23	56	88
130	1170.00	lb	-88	-53	-18	17	52	87	122	157	192	227	262
			-204	-169	-134	-99	-64	-29	5	40	76	111	146
140	1260.00	lb	-57	-19	17	55	93	131	169	206	244	282	320
			-174	-136	-98	-60	-22	14	52	90	128	166	203
150	1350.00	lb	-27	13	53	94	134	175	215	256	296	337	377
			-143	-103	-62	-22	18	58	99	139	180	220	261

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 2015 input prices.

Table 3.A Estimated costs per acre  
 Cotton, 8R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2RF variety, Delta Area, Mississippi, 2016

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	0.79	2.3000	1.82	_____
Ethephon 6E	pt	4.69	2.3125	10.85	_____
Tribufos 6lb	pt	9.90	0.5000	4.95	_____
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	_____
FERTILIZERS					
Potash (60% K2O)	cwt	21.27	1.3500	28.71	_____
UAN (32% N)	cwt	15.95	3.6000	57.42	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	_____
Glyphosate 3lbs a.e	oz	0.14	106.8800	14.96	_____
Select Max	pt	12.35	1.0000	12.35	_____
Gramoxone SL 2.0	oz	0.31	96.0000	29.76	_____
Reflex 2LC	pt	6.30	1.0000	6.30	_____
Cotoran 4L	pt	5.99	2.0000	11.98	_____
Dual Magnum	pt	13.01	1.6700	21.73	_____
Diuron 4L	pt	4.15	1.1000	4.57	_____
INSECTICIDES					
Acephate 90%	lb	7.45	2.0000	14.90	_____
Centric 40WG	oz	4.95	1.3400	6.63	_____
Diamond .83EC	oz	1.33	6.0000	7.98	_____
Admire Pro	oz	2.95	2.0000	5.90	_____
Bifenthrin	oz	0.89	12.8000	11.39	_____
Karate Z	oz	2.80	0.5000	1.40	_____
Bidrin 8WM	oz	1.09	2.0000	2.18	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.74	1.5000	11.61	_____
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	30.0000	21.60	_____
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	30.0000	44.70	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	26.7200	2.94	_____
ADJUVANTS					
Surfactant	pt	5.35	0.4000	2.14	_____
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	13.40	0.8643	11.59	_____
Self-Propelled	hour	13.40	0.2252	3.03	_____
HAND LABOR					
Implements	hour	9.06	0.3442	3.10	_____
Self-Propelled	hour	9.06	0.1987	1.80	_____
UNALLOCATED LABOR					
	hour	13.41	0.8716	11.69	_____
DIESEL FUEL					
Tractors	gal	2.00	10.0101	20.03	_____
Self-Propelled	gal	2.00	3.5802	7.17	_____
REPAIR & MAINTENANCE					
Implements	acre	10.08	1.0000	10.08	_____
Tractors	acre	6.17	1.0000	6.17	_____
Self-Propelled	acre	10.09	1.0000	10.09	_____
INTEREST ON OP. CAP.	acre	12.38	1.0000	12.38	_____
TOTAL DIRECT EXPENSES				649.14	_____
FIXED EXPENSES					
Implements	acre	16.09	1.0000	16.09	_____
Tractors	acre	38.79	1.0000	38.79	_____
Self-Propelled	acre	41.17	1.0000	41.17	_____
TOTAL FIXED EXPENSES				96.05	_____
TOTAL SPECIFIED EXPENSES				745.19	_____

Note: Cost of production estimates are based on 2015 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, 8R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2RF variety, Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	811.0000	486.60	_____
Cotton Seed	lb	0.11	1217.0000	138.74	_____
				-----	
TOTAL INCOME				625.34	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	86.13	1.0000	86.13	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	108.10	1.0000	108.10	_____
INSECTICIDES	acre	74.01	1.0000	74.01	_____
SEED/PLANTS	acre	21.60	1.0000	21.60	_____
TECHNOLOGY FEE	acre	44.70	1.0000	44.70	_____
GROWTH REGULATORS	acre	2.94	1.0000	2.94	_____
ADJUVANTS	acre	2.14	1.0000	2.14	_____
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	0.5429	4.90	_____
OPERATOR LABOR	hour	13.40	1.0895	14.62	_____
UNALLOCATED LABOR	hour	13.41	0.8716	11.69	_____
DIESEL FUEL	gal	2.00	13.5904	27.20	_____
REPAIR & MAINTENANCE	acre	26.34	1.0000	26.34	_____
INTEREST ON OP. CAP.	acre	12.38	1.0000	12.38	_____
				-----	
TOTAL DIRECT EXPENSES				649.14	_____
RETURNS ABOVE DIRECT EXPENSES				-23.80	_____
TOTAL FIXED EXPENSES					
				96.05	_____
				-----	
TOTAL SPECIFIED EXPENSES				745.19	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-119.85	_____

Note: Cost of production estimates are based on 2015 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, 8R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2RF variety, Delta Area, Mississippi, 2016

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	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				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32% N)	cwt					1.8000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Reflex 2LC	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
Plant & Pre-Folding	8R-38 2x1	MFWD 225	0.053	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed B2RF	thous					30.0000				
B2RF 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 4L	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					21.4400				
Acephate 90%	lb					0.5000				
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				
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% N)	cwt					1.8000				
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 4L	pt					1.1000				
Glyphosate 3lbs a.e	oz					21.4400				
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							1.08	0.86	1.63	0.87

Note: Cost of production estimates are based on 2015 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, 8R-38" 2X1 full-skip (8 rows planted)  
Conservation tillage, B2RF variety, Delta Area, Mississippi, 2016

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						0.15	3.45	3.45
Lime (Spread)	ton	30.36						1.37	31.73	31.73
Custom Apply Fert	acre	7.00						0.32	7.32	7.32
Potash (60% K2O)	cwt	28.71						1.29	30.00	30.00
Bed-Paratill Fold	8R-38 2x1		1.25	1.72	1.30			0.19	4.46	4.74
Bed/Disk (Hipper)	8R-38 2x1		0.57	0.37	0.59			0.07	1.60	1.62
App by Air ( 5 gal)	appl	6.50						0.19	6.69	6.69
Clarity	pt	6.45						0.19	6.64	6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Select Max	pt	12.35						0.37	12.72	12.72
Fert Appl (Liquid)	8R-38 2x1		1.20	0.97	1.47			0.10	3.74	3.00
UAN (32% N)	cwt	28.71						0.75	29.46	29.46
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08
Gramoxone SL 2.0	oz	14.88						0.39	15.27	15.27
Reflex 2LC	pt	6.30						0.17	6.47	6.47
Surfactant	pt	1.07						0.03	1.10	1.10
Row Cond Folding	38'		0.95	0.54	0.99			0.06	2.54	2.89
Plant & Pre-Folding	8R-38 2x1		1.24	1.96	1.77			0.11	5.08	5.42
Cotton Seed B2RF	thous	21.60						0.49	22.09	22.09
B2RF Cot Tech Fee	thous	44.70						1.01	45.71	45.71
Cotton Seed Trt.	acre	13.40						0.30	13.70	13.70
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08
Gramoxone SL 2.0	oz	14.88						0.33	15.21	15.21
Cotoran 4L	pt	11.98						0.27	12.25	12.25
Surfactant	pt	1.07						0.02	1.09	1.09
Cotton Consultant	acre	8.00						0.18	8.18	8.18
Eradication	acre	1.00						0.02	1.02	1.02
Spray (Direct/Layby)	8R-38 2x1		1.03	0.58	1.28			0.07	2.96	2.31
Dual Magnum	pt	8.72						0.20	8.92	8.92
Glyphosate 3lbs a.e	oz	3.00						0.07	3.07	3.07
Acephate 90%	lb	3.73						0.08	3.81	3.81
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08
Dual Magnum	pt	13.01						0.29	13.30	13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58	4.58
Spray (Direct/Layby)	8R-38 2x1		1.03	0.58	1.28			0.05	2.94	2.31
Centric 40WG	oz	6.63						0.12	6.75	6.75
Mepiquat Chloride	oz	1.18						0.02	1.20	1.20
Fert Appl (Liquid)	8R-38 2x1		1.20	0.97	1.47			0.07	3.71	3.00
UAN (32% N)	cwt	28.71						0.54	29.25	29.25
App by Air ( 3 gal)	appl	5.00						0.09	5.09	5.09
Diamond .83EC	oz	7.98						0.15	8.13	8.13
Admire Pro	oz	5.90						0.11	6.01	6.01
Spray (Direct/Layby)	8R-38 2x1		1.03	0.58	1.28			0.04	2.93	2.31
Diuron 4L	pt	4.57						0.07	4.64	4.64
Glyphosate 3lbs a.e	oz	3.00						0.05	3.05	3.05
App by Air ( 3 gal)	appl	5.00						0.07	5.07	5.07
Acephate 90%	lb	5.59						0.08	5.67	5.67
Mepiquat Chloride	oz	1.76						0.03	1.79	1.79
Bifenthrin	oz	5.70						0.09	5.79	5.79
App by Air ( 3 gal)	appl	1.25						0.02	1.27	1.27
Karate Z	oz	1.40						0.02	1.42	1.42
Bidrin 8WM	oz	2.18						0.03	2.21	2.21
Incidental Pest										
App by Air ( 3 gal)	appl	5.00						0.07	5.07	5.07
Incidental Pest Trt	acre	12.00						0.18	12.18	12.18
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Acephate 90%	lb	5.59						0.06	5.65	5.65
Bifenthrin	oz	5.70						0.06	5.76	5.76
App by Air ( 3 gal)	appl	5.00						0.06	5.06	5.06
Transform WG	oz	11.61						0.13	11.74	11.74
App by Air ( 5 gal)	appl	6.50						0.05	6.55	6.55
Thidiazuron 4lb	oz	1.82						0.01	1.83	1.83
Ethephon 6E	pt	9.38						0.07	9.45	9.45
App by Air ( 5 gal)	appl	3.25						0.02	3.27	3.27
Ethephon 6E	pt	1.47						0.01	1.48	1.48
Tribufos 6lb	pt	4.95						0.04	4.99	4.99
Cotton Picker	4R2x1(350)		6.21	9.61	5.72			0.08	21.62	37.93
Boll Buggy	4R2x1(350)		3.99	2.54	4.16			0.04	10.73	10.40
Module Builder	4R2x1(350)		3.99	2.72	5.72			0.05	12.48	10.77
Bin & Haul	lb	89.21						0.33	89.54	89.54
Stalk Shredder-Flail	15'		2.55	2.72	2.65			0.03	7.95	6.11
TOTALS		552.01	27.20	26.34	31.21	0.00	12.38	649.14	96.05	745.19

Note: Cost of production estimates are based on 2015 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, 8R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2RF variety, Delta Area, Mississippi, 2016

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	625.34
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	17.62	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	28.71	0.00	0.00	0.00	0.00	28.71	0.00	28.71	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	23.28	21.18	56.07	0.00	7.57	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	3.73	20.51	26.87	22.90	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	21.60	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	0.00	1.07	1.07	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	1.89	0.00	0.00	0.00	0.00	1.98	5.06	2.75	1.28	0.00	0.00	18.25
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	1.82	0.00	0.00	0.00	0.00	1.52	3.86	2.23	1.03	0.00	0.00	16.74
REPAIR & MAINTENANCE	2.09	0.00	0.00	0.00	0.00	1.13	3.40	1.55	0.58	0.00	0.00	17.59
INTEREST ON OP. CAP.	3.39	0.00	0.00	0.00	0.88	1.47	3.64	1.15	0.75	0.37	0.20	0.53
TOTAL DIRECT EXPENSES	78.56	0.00	0.00	0.00	30.66	57.06	165.53	63.08	51.09	33.27	27.57	142.32
NET INCOME	-78.56	0.00	0.00	0.00	-30.66	-57.06	-165.53	-63.08	-51.09	-33.27	-27.57	483.02
NET INCOME TO DATE	-78.56	-78.56	-78.56	-78.56	-109.22	-166.28	-331.81	-394.89	-445.98	-479.25	-506.82	-23.80

Note: Cost of production estimates are based on 2015 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, 8R-38" 2X1 full-skip (8 rows planted)  
 Conservation tillage, B2RF variety, Delta Area, Mississippi, 2016

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75		
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-283	-270	-258	-246	-234	-222	-210	-198	-185	-173	-161
			-379	-367	-354	-342	-330	-318	-306	-294	-281	-269	-257
60	486.60	lb	-255	-241	-226	-211	-197	-182	-168	-153	-138	-124	-109
			-351	-337	-322	-307	-293	-278	-264	-249	-234	-220	-205
70	567.70	lb	-228	-211	-194	-176	-159	-142	-125	-108	-91	-74	-57
			-324	-307	-290	-273	-255	-238	-221	-204	-187	-170	-153
80	648.80	lb	-200	-181	-161	-142	-122	-103	-83	-64	-44	-25	-5
			-296	-277	-257	-238	-218	-199	-179	-160	-140	-121	-101
90	729.90	lb	-172	-151	-129	-107	-85	-63	-41	-19	2	24	45
			-269	-247	-225	-203	-181	-159	-137	-115	-93	-71	-50
100	811.00	lb	-145	-121	-96	-72	-48	-23	0	24	49	73	97
			-241	-217	-192	-168	-144	-119	-95	-71	-46	-22	1
110	892.10	lb	-117	-91	-64	-37	-10	15	42	69	96	122	149
			-213	-187	-160	-133	-106	-80	-53	-26	0	26	53
120	973.20	lb	-90	-61	-31	-2	26	55	84	114	143	172	201
			-186	-157	-128	-98	-69	-40	-11	17	47	76	105
130	1054.30	lb	-62	-31	0	32	63	95	126	158	190	221	253
			-158	-127	-95	-63	-32	-0	30	62	94	125	157
140	1135.40	lb	-35	-1	32	66	100	135	169	203	237	271	305
			-131	-97	-63	-29	4	38	73	107	141	175	209
150	1216.50	lb	-7	28	65	101	138	174	211	247	284	320	357
			-103	-67	-30	5	42	78	115	151	188	224	261

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 2015 input prices.

Table 4.A Estimated costs per acre  
Cotton, 12R-38" solid, conservation tillage  
B2RF variety, Delta Area, Mississippi, 2016

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	0.79	2.3000	1.82	_____
Ethephon 6E	pt	4.69	2.3125	10.85	_____
Tribufos 6lb	pt	9.90	0.5000	4.95	_____
GINNING					
Gin & Haul	lb	0.11	1100.0000	121.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	21.27	1.5000	31.91	_____
UAN (32% N)	cwt	15.95	4.0000	63.80	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	12.35	1.0000	12.35	_____
Gramoxone SL 2.0	oz	0.31	96.0000	29.76	_____
Reflex 2LC	pt	6.30	1.0000	6.30	_____
Cotoran 4L	pt	5.99	2.0000	11.98	_____
Dual Magnum	pt	13.01	2.0000	26.02	_____
Diuron 4L	pt	4.15	1.6000	6.64	_____
INSECTICIDES					
Acephate 90%	lb	7.45	2.2500	16.76	_____
Centric 40WG	oz	4.95	2.0000	9.90	_____
Diamond .83EC	oz	1.33	6.0000	7.98	_____
Admire Pro	oz	2.95	2.0000	5.90	_____
Bifenthrin	oz	0.89	12.8000	11.39	_____
Karate Z	oz	2.80	0.5000	1.40	_____
Bidrin 8WM	oz	1.09	2.0000	2.18	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.74	1.5000	11.61	_____
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	45.0000	32.40	_____
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	45.0000	67.05	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	5.35	0.4000	2.14	_____
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	13.40	0.4031	5.41	_____
Self-Propelled	hour	13.40	0.2487	3.35	_____
HAND LABOR					
Implements	hour	9.06	0.1273	1.14	_____
Self-Propelled	hour	9.06	0.2105	1.90	_____
UNALLOCATED LABOR					
Tractors	gal	2.00	4.6691	9.35	_____
Self-Propelled	gal	2.00	5.2099	10.43	_____
REPAIR & MAINTENANCE					
Implements	acre	6.81	1.0000	6.81	_____
Tractors	acre	2.88	1.0000	2.88	_____
Self-Propelled	acre	20.37	1.0000	20.37	_____
INTEREST ON OP. CAP.	acre	13.86	1.0000	13.86	_____
TOTAL DIRECT EXPENSES				730.65	_____
FIXED EXPENSES					
Implements	acre	9.83	1.0000	9.83	_____
Tractors	acre	18.09	1.0000	18.09	_____
Self-Propelled	acre	82.59	1.0000	82.59	_____
TOTAL FIXED EXPENSES				110.51	_____
TOTAL SPECIFIED EXPENSES				841.16	_____

Note: Cost of production estimates are based on 2015 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  
 B2RF variety, Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	1100.0000	660.00	_____
Cotton Seed	lb	0.11	1650.0000	188.10	_____
				-----	
TOTAL INCOME				848.10	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	121.00	1.0000	121.00	_____
FERTILIZERS	acre	95.71	1.0000	95.71	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	117.42	1.0000	117.42	_____
INSECTICIDES	acre	79.14	1.0000	79.14	_____
SEED/PLANTS	acre	32.40	1.0000	32.40	_____
TECHNOLOGY FEE	acre	67.05	1.0000	67.05	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	2.14	1.0000	2.14	_____
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	0.3379	3.04	_____
OPERATOR LABOR	hour	13.40	0.6518	8.76	_____
UNALLOCATED LABOR	hour	13.40	0.5214	6.99	_____
DIESEL FUEL	gal	2.00	9.8790	19.78	_____
REPAIR & MAINTENANCE	acre	30.06	1.0000	30.06	_____
INTEREST ON OP. CAP.	acre	13.86	1.0000	13.86	_____
				-----	
TOTAL DIRECT EXPENSES				730.65	_____
RETURNS ABOVE DIRECT EXPENSES				117.45	_____
				-----	
TOTAL FIXED EXPENSES				110.51	_____
				-----	
TOTAL SPECIFIED EXPENSES				841.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				6.94	_____

Note: Cost of production estimates are based on 2015 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  
 B2RF variety, Delta Area, Mississippi, 2016

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				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32% N)	cwt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Reflex 2LC	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
Plant & Pre-Folding	12R-38	MFWD 225	0.053	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed B2RF	thous					45.0000				
B2RF Cot Tech Fee	thous					45.0000				
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 4L	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					0.7500				
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				
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% N)	cwt					2.0000				
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 4L	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
<b>TOTALS</b>							<b>0.65</b>	<b>0.40</b>	<b>0.98</b>	<b>0.52</b>

Note: Cost of production estimates are based on 2015 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  
B2RF variety, Delta Area, Mississippi, 2016

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						0.15	3.45		3.45
Lime (Spread)	ton	30.36						1.37	31.73		31.73
Custom Apply Fert	acre	7.00						0.32	7.32		7.32
Potash (60% K2O)	cwt	31.91						1.44	33.35		33.35
Bed-Paratill Fold	12R-38		1.25	1.72	1.30			0.19	4.46	4.74	9.20
Bed/Disk (Hipper)	12R-38		0.57	0.39	0.59			0.07	1.62	1.67	3.29
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Clarity	pt	6.45						0.19	6.64		6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Select Max	pt	12.35						0.37	12.72		12.72
Fert Appl (Liquid)	12R-38		1.20	0.97	1.47			0.10	3.74	3.00	6.74
UAN (32% N)	cwt	31.90						0.84	32.74		32.74
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08	2.10
Gramoxone SL 2.0	oz	14.88						0.39	15.27		15.27
Reflex 2LC	pt	6.30						0.17	6.47		6.47
Surfactant	pt	1.07						0.03	1.10		1.10
Row Cond Folding	38'		0.95	0.54	0.99			0.06	2.54	2.89	5.43
Plant & Pre-Folding	12R-38		1.24	1.96	1.77			0.11	5.08	5.42	10.50
Cotton Seed B2RF	thous	32.40						0.73	33.13		33.13
B2RF Cot Tech Fee	thous	67.05						1.51	68.56		68.56
Cotton Seed Trt.	acre	20.00						0.45	20.45		20.45
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Gramoxone SL 2.0	oz	14.88						0.33	15.21		15.21
Cotoran 4L	pt	11.98						0.27	12.25		12.25
Surfactant	pt	1.07						0.02	1.09		1.09
Cotton Consultant	acre	8.00						0.18	8.18		8.18
Eradication	acre	1.00						0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.30	0.16	0.34			0.02	0.82	1.06	1.88
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Acephate 90%	lb	5.59						0.13	5.72		5.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Sprayer 600-825gal	90' 250hp		0.30	0.16	0.34			0.02	0.82	1.06	1.88
Centric 40WG	oz	9.90						0.19	10.09		10.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Fert Appl (Liquid)	12R-38		1.20	0.97	1.47			0.07	3.71	3.00	6.71
UAN (32% N)	cwt	31.90						0.60	32.50		32.50
App by Air ( 3 gal)	appl	5.00						0.09	5.09		5.09
Diamond .83EC	oz	7.98						0.15	8.13		8.13
Admire Pro	oz	5.90						0.11	6.01		6.01
Spray (Direct/Layby)	12R-38		1.03	0.58	1.28			0.04	2.93	2.31	5.24
Diuron 4L	pt	6.64						0.10	6.74		6.74
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55		4.55
App by Air ( 3 gal)	appl	5.00						0.07	5.07		5.07
Acephate 90%	lb	5.59						0.08	5.67		5.67
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Bifenthrin	oz	5.70						0.09	5.79		5.79
App by Air ( 3 gal)	appl	1.25						0.02	1.27		1.27
Karate Z	oz	1.40						0.02	1.42		1.42
Bidrin 8WM	oz	2.18						0.03	2.21		2.21
Incidental Pest											
App by Air ( 3 gal)	appl	5.00						0.07	5.07		5.07
Incidental Pest Trt	acre	12.00						0.18	12.18		12.18
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Acephate 90%	lb	5.59						0.06	5.65		5.65
Bifenthrin	oz	5.70						0.06	5.76		5.76
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Transform WG	oz	11.61						0.13	11.74		11.74
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Thidiazuron 4lb	oz	1.82						0.01	1.83		1.83
Ethephon 6E	pt	9.38						0.07	9.45		9.45
App by Air ( 5 gal)	appl	3.25						0.02	3.27		3.27
Tribufos 6lb	pt	4.95						0.04	4.99		4.99
Ethephon 6E	pt	1.47						0.01	1.48		1.48
Cotton Picker/Module	6R-38(500)		8.87	19.57	5.72			0.13	34.29	77.23	111.52
Gin & Haul	lb	121.00						0.45	121.45		121.45
Stalk Shredder-Flail	20'		1.91	2.56	1.99			0.02	6.48	4.89	11.37
TOTALS		648.16	19.78	30.06	18.79	0.00	13.86	730.65	110.51	841.16	

Note: Cost of production estimates are based on 2015 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  
 B2RF variety, Delta Area, Mississippi, 2016

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	848.10
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	17.62	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	31.91	0.00	0.00	0.00	0.00	31.90	0.00	31.90	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	23.28	21.18	61.84	0.00	11.12	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.59	23.78	26.87	22.90	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	32.40	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	67.05	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	0.00	1.07	1.07	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	1.89	0.00	0.00	0.00	0.00	1.98	4.12	1.81	1.28	0.00	0.00	7.71
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	1.82	0.00	0.00	0.00	0.00	1.52	3.13	1.50	1.03	0.00	0.00	10.78
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.00	1.13	2.98	1.13	0.58	0.00	0.00	22.13
INTEREST ON OP. CAP.	3.54	0.00	0.00	0.00	0.88	1.56	4.65	1.26	0.80	0.37	0.20	0.60
TOTAL DIRECT EXPENSES	81.93	0.00	0.00	0.00	30.66	60.34	211.83	68.14	54.69	33.27	27.57	162.22
NET INCOME	-81.93	0.00	0.00	0.00	-30.66	-60.34	-211.83	-68.14	-54.69	-33.27	-27.57	685.88
NET INCOME TO DATE	-81.93	-81.93	-81.93	-81.93	-112.59	-172.93	-384.76	-452.90	-507.59	-540.86	-568.43	117.45

Note: Cost of production estimates are based on 2015 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  
 B2RF variety, Delta Area, Mississippi, 2016

PRODUCT	PERCENT													
	75	80	85	90	95	100	105	110	115	120	125			
Cotton Lint	0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75			
PERCENT	YIELD	UNIT	dollars											
50	550.00	lb	-234 -344	-217 -328	-201 -311	-184 -295	-168 -278	-151 -262	-135 -245	-118 -229	-102 -212	-85 -196	-69 -179	
60	660.00	lb	-196 -307	-177 -287	-157 -267	-137 -248	-117 -228	-97 -208	-78 -188	-58 -168	-38 -149	-18 -129	1 -109	
70	770.00	lb	-159 -270	-136 -247	-113 -223	-90 -200	-67 -177	-44 -154	-21 -131	2 -108	25 -85	48 -62	71 -39	
80	880.00	lb	-122 -232	-95 -206	-69 -179	-43 -153	-16 -127	9 -100	36 -74	62 -47	88 -21	115 4	141 31	
90	990.00	lb	-84 -195	-55 -165	-25 -136	4 -106	33 -76	63 -46	93 -17	122 12	152 42	182 71	212 101	
100	1100.00	lb	-47 -158	-14 -125	18 -92	51 -59	84 -26	117 6	150 39	183 72	216 105	249 138	282 171	
110	1210.00	lb	-10 -120	26 -84	62 -48	98 -11	135 24	171 60	207 97	243 133	280 169	316 205	352 242	
120	1320.00	lb	27 -83	66 -43	106 -4	145 35	185 75	225 114	264 154	304 193	343 233	383 273	423 312	
130	1430.00	lb	64 -45	107 -3	150 39	193 82	236 125	279 168	321 211	364 254	407 297	450 340	493 383	
140	1540.00	lb	101 -8	148 37	194 83	240 129	286 176	332 222	379 268	425 314	471 360	517 407	563 453	
150	1650.00	lb	139 28	188 78	238 127	287 177	337 226	386 276	436 325	485 375	535 424	584 474	634 523	

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 2015 input prices.

Table 5.A Estimated costs per acre  
Cotton, 12R-38" solid, conservation tillage,  
B2RF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2016

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	0.79	2.3000	1.82	
Ethephon 6E	pt	4.69	2.3125	10.85	
Tribufos 6lb	pt	9.90	0.5000	4.95	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	21.27	1.5000	31.91	
UAN (32% N)	cwt	15.95	4.6000	73.37	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	
Select Max	pt	12.35	1.0000	12.35	
Gramoxone SL 2.0	oz	0.31	96.0000	29.76	
Reflex 2LC	pt	6.30	1.0000	6.30	
Cotoran 4L	pt	5.99	2.0000	11.98	
Dual Magnum	pt	13.01	2.0000	26.02	
Caparol 4L	pt	4.02	1.0000	4.02	
MSMA 6.6	pt	3.38	2.7500	9.30	
Diuron 4L	pt	4.15	1.6000	6.64	
INSECTICIDES					
Acephate 90%	lb	7.45	2.2500	16.76	
Centric 40WG	oz	4.95	2.0000	9.90	
Diamond .83EC	oz	1.33	6.0000	7.98	
Admire Pro	oz	2.95	2.0000	5.90	
Bifenthrin	oz	0.89	12.8000	11.39	
Karate Z	oz	2.80	0.5000	1.40	
Bidrin 8WM	oz	1.09	2.0000	2.18	
Incidental Pest Trt	acre	12.00	1.5000	18.00	
Transform WG	oz	7.74	1.5000	11.61	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.26	33.0000	8.58	
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	45.0000	32.40	
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	45.0000	67.05	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	48.0000	5.28	
ADJUVANTS					
Surfactant	pt	5.35	0.4000	2.14	
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	13.40	0.5508	7.40	
Self-Propelled	hour	13.40	0.2487	3.35	
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	0.1496	1.34	
Self-Propelled	hour	9.06	0.2105	1.90	
UNALLOCATED LABOR					
	hour	13.41	0.5768	7.74	
DIESEL FUEL					
Tractors	gal	2.00	6.1131	12.24	
Self-Propelled	gal	2.00	5.2099	10.43	
Roll-Out Pipe Irr.	gal	2.00	8.5535	17.10	
REPAIR & MAINTENANCE					
Implements	acre	7.78	1.0000	7.78	
Tractors	acre	3.71	1.0000	3.71	
Self-Propelled	acre	20.37	1.0000	20.37	
Roll-Out Pipe Irr.	acre	6.34	1.0000	6.34	
INTEREST ON OP. CAP.	acre	15.35	1.0000	15.35	
TOTAL DIRECT EXPENSES				824.23	
FIXED EXPENSES					
Implements	acre	12.08	1.0000	12.08	
Tractors	acre	23.27	1.0000	23.27	
Self-Propelled	acre	82.59	1.0000	82.59	
Roll-Out Pipe Irr.	acre	52.50	1.0000	52.50	
TOTAL FIXED EXPENSES				170.44	
TOTAL SPECIFIED EXPENSES				994.67	

Note: Cost of production estimates are based on 2015 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,  
 B2RF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	1200.0000	720.00	_____
Cotton Seed	lb	0.11	1800.0000	205.20	_____
				-----	
TOTAL INCOME				925.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	50.00	1.0000	50.00	_____
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	105.27	1.0000	105.27	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	130.74	1.0000	130.74	_____
INSECTICIDES	acre	85.14	1.0000	85.14	_____
IRRIGATION SUPPLIES	acre	8.58	1.0000	8.58	_____
SEED/PLANTS	acre	32.40	1.0000	32.40	_____
TECHNOLOGY FEE	acre	67.05	1.0000	67.05	_____
GROWTH REGULATORS	acre	5.28	1.0000	5.28	_____
ADJUVANTS	acre	2.14	1.0000	2.14	_____
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	0.3601	3.24	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	13.40	0.7995	10.75	_____
UNALLOCATED LABOR	hour	13.41	0.5768	7.74	_____
DIESEL FUEL	gal	2.00	19.8767	39.77	_____
REPAIR & MAINTENANCE	acre	38.20	1.0000	38.20	_____
INTEREST ON OP. CAP.	acre	15.35	1.0000	15.35	_____
				-----	
TOTAL DIRECT EXPENSES				824.23	_____
RETURNS ABOVE DIRECT EXPENSES				100.97	_____
				-----	
TOTAL FIXED EXPENSES				170.44	_____
				-----	
TOTAL SPECIFIED EXPENSES				994.67	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-69.47	_____

Note: Cost of production estimates are based on 2015 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,  
 B2RF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2016

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	0.04
Bed/Disk (Hipper)		12R-38	MFWD 225	0.049	1.00	Nov		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				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32% N)	cwt					2.3000				
Sprayer 600-750gal	60' 175hp			0.017	1.00	Apr		0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Reflex 2LC	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
Plant & Pre-Folding	12R-38	MFWD 225	0.053	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed B2RF	thous					45.0000				
B2RF Cot Tech Fee	thous					45.0000				
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 4L	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					0.7500				
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				
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% N)	cwt					2.3000				
App by Air ( 3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
Spray (Direct/Hood)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Caparol 4L	pt					1.0000				
MSMA 6.6	pt					2.7500				
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 4L	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							0.79	0.55	1.52	0.57

Note: Cost of production estimates are based on 2015 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,  
 B2RF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2016

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						0.15	3.45		3.45
Lime (Spread)	ton	30.36						1.37	31.73		31.73
Custom Apply Fert	acre	7.00						0.32	7.32		7.32
Potash (60% K2O)	cwt	31.91						1.44	33.35		33.35
Bed-Paratill Fold	12R-38		1.25	1.72	1.30			0.19	4.46	4.74	9.20
Bed/Disk (Hipper)	12R-38		1.14	0.77	1.19			0.14	3.24	3.32	6.56
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Clarity	pt	6.45						0.19	6.64		6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Select Max	pt	12.35						0.37	12.72		12.72
Fert Appl (Liquid)	12R-38		1.20	0.97	1.47			0.10	3.74	3.00	6.74
UAN (32% N)	cwt	36.68						0.96	37.64		37.64
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08	2.10
Gramoxone SL 2.0	oz	14.88						0.39	15.27		15.27
Reflex 2LC	pt	6.30						0.17	6.47		6.47
Surfactant	pt	1.07						0.03	1.10		1.10
Row Cond Folding	38'		0.95	0.54	0.99			0.06	2.54	2.89	5.43
Plant & Pre-Folding	12R-38		1.24	1.96	1.77			0.11	5.08	5.42	10.50
Cotton Seed B2RF	thous	32.40						0.73	33.13		33.13
B2RF Cot Tech Fee	thous	67.05						1.51	68.56		68.56
Cotton Seed Trt.	acre	20.00						0.45	20.45		20.45
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Gramoxone SL 2.0	oz	14.88						0.33	15.21		15.21
Cotoran 4L	pt	11.98						0.27	12.25		12.25
Surfactant	pt	1.07						0.02	1.09		1.09
Cotton Consultant	acre	8.00						0.18	8.18		8.18
Eradication	acre	1.00						0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.30	0.16	0.34			0.02	0.82	1.06	1.88
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Acephate 90%	lb	5.59						0.13	5.72		5.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Sprayer 600-825gal	90' 250hp		0.30	0.16	0.34			0.02	0.82	1.06	1.88
Centric 40WG	oz	9.90						0.19	10.09		10.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Fert Appl (Liquid)	12R-38		1.20	0.97	1.47			0.07	3.71	3.00	6.71
UAN (32% N)	cwt	36.68						0.69	37.37		37.37
App by Air ( 3 gal)	appl	5.00						0.09	5.09		5.09
Diamond .83EC	oz	7.98						0.15	8.13		8.13
Admire Pro	oz	5.90						0.11	6.01		6.01
Spray (Direct/Hood)	12R-38		1.03	0.88	1.28			0.06	3.25	2.67	5.92
Caparol 4L	pt	4.02						0.08	4.10		4.10
MSMA 6.6	pt	9.30						0.17	9.47		9.47
App by Air ( 3 gal)	appl	5.00						0.09	5.09		5.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Spray (Direct/Layby)	12R-38		1.03	0.58	1.28			0.04	2.93	2.31	5.24
Diuron 4L	pt	6.64						0.10	6.74		6.74
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55		4.55
App by Air ( 3 gal)	appl	5.00						0.07	5.07		5.07
Acephate 90%	lb	5.59						0.08	5.67		5.67
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Bifenthrin	oz	5.70						0.09	5.79		5.79
App by Air ( 3 gal)	appl	1.25						0.02	1.27		1.27
Karate Z	oz	1.40						0.02	1.42		1.42
Bidrin 8WM	oz	2.18						0.03	2.21		2.21
Incidental Pest											
App by Air ( 3 gal)	appl	7.50						0.11	7.61		7.61
Incidental Pest Trt	acre	18.00						0.27	18.27		18.27
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Acephate 90%	lb	5.59						0.06	5.65		5.65
Bifenthrin	oz	5.70						0.06	5.76		5.76
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Transform WG	oz	11.61						0.13	11.74		11.74
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Thidiazuron 4lb	oz	1.82						0.01	1.83		1.83
Ethephon 6E	pt	9.38						0.07	9.45		9.45
App by Air ( 5 gal)	appl	3.25						0.02	3.27		3.27
Tribufos 6lb	pt	4.95						0.04	4.99		4.99
Ethephon 6E	pt	1.47						0.01	1.48		1.48
Cotton Picker/Module	6R-38(500)		8.87	19.57	5.72			0.13	34.29	77.23	111.52
Gin & Haul	lb	132.00						0.49	132.49		132.49
Stalk Shredder-Flail	20'		1.91	2.56	1.99			0.02	6.48	4.89	11.37
Roll-Out Pipe Irr.	acre	8.58	18.39	6.88	4.36			0.61	38.82	55.61	94.43
TOTALS		705.88	39.77	38.20	25.03	0.00	15.35	824.23	170.44	994.67	

Note: Cost of production estimates are based on 2015 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,  
 B2RF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2016

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	925.20
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	17.62	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	31.91	0.00	0.00	0.00	0.00	36.68	0.00	36.68	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	23.28	21.18	61.84	13.32	11.12	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.59	23.78	32.87	22.90	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.58	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	32.40	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	67.05	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	0.00	1.07	1.07	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	2.49	0.00	0.00	0.00	0.00	1.98	4.35	5.66	1.51	0.23	0.59	8.22
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	2.39	0.00	0.00	0.00	0.00	1.52	3.13	8.53	6.73	5.70	0.25	11.52
REPAIR & MAINTENANCE	2.49	0.00	0.00	0.00	0.00	1.13	2.98	5.87	1.88	1.30	0.10	22.45
INTEREST ON OP. CAP.	3.61	0.00	0.00	0.00	0.88	1.68	4.66	2.17	1.04	0.45	0.21	0.65
TOTAL DIRECT EXPENSES	83.55	0.00	0.00	0.00	30.66	65.24	212.07	118.11	70.66	40.58	28.52	174.84
NET INCOME	-83.55	0.00	0.00	0.00	-30.66	-65.24	-212.07	-118.11	-70.66	-40.58	-28.52	750.36
NET INCOME TO DATE	-83.55	-83.55	-83.55	-83.55	-114.21	-179.45	-391.52	-509.63	-580.29	-620.87	-649.39	100.97

Note: Cost of production estimates are based on 2015 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,  
 B2RF variety, furrow irrigated, 10.5 ac-in., Delta Area, Mississippi, 2016

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-282 -453	-264 -435	-246 -417	-228 -399	-210 -381	-192 -363	-174 -345	-156 -327	-138 -309	-120 -291	-102 -273
60	720.00	lb	-242 -412	-220 -390	-198 -369	-177 -347	-155 -326	-134 -304	-112 -282	-90 -261	-69 -239	-47 -218	-26 -196
70	840.00	lb	-201 -371	-176 -346	-150 -321	-125 -296	-100 -270	-75 -245	-50 -220	-24 -195	0 -170	25 -144	50 -119
80	960.00	lb	-160 -330	-131 -302	-102 -273	-74 -244	-45 -215	-16 -186	12 -158	41 -129	69 -100	98 -71	127 -42
90	1080.00	lb	-119 -290	-87 -257	-54 -225	-22 -193	9 -160	42 -128	74 -95	107 -63	139 -31	171 1	204 33
100	1200.00	lb	-79 -249	-43 -213	-7 -177	28 -141	64 -105	100 -69	136 -33	172 2	208 38	244 74	280 110
110	1320.00	lb	-38 -208	1 -169	40 -129	80 -89	120 -50	159 -10	199 28	238 68	278 108	318 147	357 187
120	1440.00	lb	2 -167	45 -124	88 -81	132 -38	175 4	218 48	261 91	304 134	348 177	391 220	434 264
130	1560.00	lb	43 -127	90 -80	136 -33	183 13	230 59	277 106	324 153	370 200	417 247	464 293	511 340
140	1680.00	lb	83 -86	134 -36	184 14	235 64	285 115	335 165	386 215	436 266	487 316	537 367	587 417
150	1800.00	lb	124 -45	178 8	232 62	286 116	340 170	394 224	448 278	502 332	556 386	610 440	664 494

The top number in each cell is Returns Above Direct Expenses.  
 The bottom number in each cell is Returns Above Total Specified Expenses.  
 Only the product listed has been varied to calculate net returns.  
 Note: Cost of production estimates are based on 2015 input prices.

Table 6.A Estimated costs per acre  
Cotton, 12R-38" solid, conservation tillage, B2RF  
Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2016

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	0.79	2.3000	1.82	
Ethephon 6E	pt	4.69	2.3125	10.85	
Tribufos 6lb	pt	9.90	0.5000	4.95	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	21.27	1.5000	31.91	
UAN (32% N)	cwt	15.95	4.6000	73.37	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	
Select Max	pt	12.35	1.0000	12.35	
Gramoxone SL 2.0	oz	0.31	96.0000	29.76	
Reflex 2LC	pt	6.30	1.0000	6.30	
Cotoran 4L	pt	5.99	2.0000	11.98	
Dual Magnum	pt	13.01	2.0000	26.02	
Caparol 4L	pt	4.02	1.0000	4.02	
MSMA 6.6	pt	3.38	2.7500	9.30	
Diuron 4L	pt	4.15	1.6000	6.64	
INSECTICIDES					
Acephate 90%	lb	7.45	2.2500	16.76	
Centric 40WG	oz	4.95	2.0000	9.90	
Diamond .83EC	oz	1.33	6.0000	7.98	
Admire Pro	oz	2.95	2.0000	5.90	
Bifenthrin	oz	0.89	12.8000	11.39	
Karate Z	oz	2.80	0.5000	1.40	
Bidrin 8WM	oz	1.09	2.0000	2.18	
Incidental Pest Trt	acre	12.00	1.5000	18.00	
Transform WG	oz	7.74	1.5000	11.61	
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	45.0000	32.40	
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	45.0000	67.05	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	48.0000	5.28	
ADJUVANTS					
Surfactant	pt	5.35	0.4000	2.14	
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	13.40	0.4476	6.01	
Self-Propelled	hour	13.40	0.2487	3.35	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	
HAND LABOR					
Implements	hour	9.06	0.1496	1.34	
Self-Propelled	hour	9.06	0.2105	1.90	
UNALLOCATED LABOR					
hour	hour	13.40	0.5571	7.47	
DIESEL FUEL					
Tractors	gal	2.00	5.1848	10.38	
Self-Propelled	gal	2.00	5.2099	10.43	
1/4-mi. Pivot Irr.	gal	2.00	11.2011	22.40	
REPAIR & MAINTENANCE					
Implements	acre	7.37	1.0000	7.37	
Tractors	acre	3.20	1.0000	3.20	
Self-Propelled	acre	20.37	1.0000	20.37	
1/4-mi. Pivot Irr.	acre	18.77	1.0000	18.77	
INTEREST ON OP. CAP.	acre	15.40	1.0000	15.40	
TOTAL DIRECT EXPENSES				830.53	
FIXED EXPENSES					
Implements	acre	10.50	1.0000	10.50	
Tractors	acre	20.09	1.0000	20.09	
Self-Propelled	acre	82.59	1.0000	82.59	
1/4-mi. Pivot Irr.	acre	63.55	1.0000	63.55	
TOTAL FIXED EXPENSES				176.73	
TOTAL SPECIFIED EXPENSES				1007.26	

Note: Cost of production estimates are based on 2015 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, conservation tillage, B2RF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	1200.0000	720.00	_____
Cotton Seed	lb	0.11	1800.0000	205.20	_____
				-----	
TOTAL INCOME				925.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.00	1.0000	53.00	_____
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	105.27	1.0000	105.27	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	130.74	1.0000	130.74	_____
INSECTICIDES	acre	85.14	1.0000	85.14	_____
SEED/PLANTS	acre	32.40	1.0000	32.40	_____
TECHNOLOGY FEE	acre	67.05	1.0000	67.05	_____
GROWTH REGULATORS	acre	5.28	1.0000	5.28	_____
ADJUVANTS	acre	2.14	1.0000	2.14	_____
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	0.3601	3.24	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	13.40	0.6963	9.36	_____
UNALLOCATED LABOR	hour	13.40	0.5571	7.47	_____
DIESEL FUEL	gal	2.00	21.5959	43.21	_____
REPAIR & MAINTENANCE	acre	49.71	1.0000	49.71	_____
INTEREST ON OP. CAP.	acre	15.40	1.0000	15.40	_____
				-----	
TOTAL DIRECT EXPENSES				830.53	_____
RETURNS ABOVE DIRECT EXPENSES				94.67	_____
TOTAL FIXED EXPENSES				176.73	_____
				-----	
TOTAL SPECIFIED EXPENSES				1007.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-82.06	_____

Note: Cost of production estimates are based on 2015 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, conservation tillage, B2RF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2016

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				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32% N)	cwt					2.3000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Reflex 2LC	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
Plant & Pre-Folding	12R-38	MFWD 225	0.053	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed B2RF	thous					45.0000				
B2RF Cot Tech Fee	thous					45.0000				
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 4L	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					0.7500				
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				
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% N)	cwt					2.3000				
App by Air ( 5 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Admire Pro	oz					2.0000				
Spray (Direct/Hood)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Caparol 4L	pt					1.0000				
MSMA 6.6	pt					2.7500				
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 4L	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							0.69	0.44	1.26	0.55

Note: Cost of production estimates are based on 2015 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, conservation tillage, B2RF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2016

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						0.15	3.45		3.45
Lime (Spread)	ton	30.36						1.37	31.73		31.73
Custom Apply Fert	acre	7.00						0.32	7.32		7.32
Potash (60% K2O)	cwt	31.91						1.44	33.35		33.35
Bed-Paratill Fold	12R-38		1.25	1.72	1.30			0.19	4.46	4.74	9.20
Bed/Disk (Hipper)	12R-38		0.57	0.39	0.59			0.07	1.62	1.67	3.29
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Clarity	pt	6.45						0.19	6.64		6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Select Max	pt	12.35						0.37	12.72		12.72
Fert Appl (Liquid)	12R-38		1.20	0.97	1.47			0.10	3.74	3.00	6.74
UAN (32% N)	cwt	36.68						0.96	37.64		37.64
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08	2.10
Gramoxone SL 2.0	oz	14.88						0.39	15.27		15.27
Reflex 2LC	pt	6.30						0.17	6.47		6.47
Surfactant	pt	1.07						0.03	1.10		1.10
Row Cond Folding	38'		0.95	0.54	0.99			0.06	2.54	2.89	5.43
Plant & Pre-Folding	12R-38		1.24	1.96	1.77			0.11	5.08	5.42	10.50
Cotton Seed B2RF	thous	32.40						0.73	33.13		33.13
B2RF Cot Tech Fee	thous	67.05						1.51	68.56		68.56
Cotton Seed Trt.	acre	20.00						0.45	20.45		20.45
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Gramoxone SL 2.0	oz	14.88						0.33	15.21		15.21
Cotoran 4L	pt	11.98						0.27	12.25		12.25
Surfactant	pt	1.07						0.02	1.09		1.09
Cotton Consultant	acre	8.00						0.18	8.18		8.18
Eradication	acre	1.00						0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.30	0.16	0.34			0.02	0.82	1.06	1.88
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Acephate 90%	lb	5.59						0.13	5.72		5.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Sprayer 600-825gal	90' 250hp		0.30	0.16	0.34			0.02	0.82	1.06	1.88
Centric 40WG	oz	9.90						0.19	10.09		10.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Fert Appl (Liquid)	12R-38		1.20	0.97	1.47			0.07	3.71	3.00	6.71
UAN (32% N)	cwt	36.68						0.69	37.37		37.37
App by Air ( 5 gal)	appl	6.50						0.12	6.62		6.62
Diamond .83EC	oz	7.98						0.15	8.13		8.13
Admire Pro	oz	5.90						0.11	6.01		6.01
Spray (Direct/Hood)	12R-38		1.03	0.88	1.28			0.06	3.25	2.67	5.92
Caparol 4L	pt	4.02						0.08	4.10		4.10
MSMA 6.6	pt	9.30						0.17	9.47		9.47
App by Air ( 3 gal)	appl	5.00						0.09	5.09		5.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Spray (Direct/Layby)	12R-38		1.03	0.58	1.28			0.04	2.93	2.31	5.24
Diuron 4L	pt	6.64						0.10	6.74		6.74
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55		4.55
App by Air ( 3 gal)	appl	5.00						0.07	5.07		5.07
Acephate 90%	lb	5.59						0.08	5.67		5.67
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Bifenthrin	oz	5.70						0.09	5.79		5.79
App by Air ( 3 gal)	appl	1.25						0.02	1.27		1.27
Karate Z	oz	1.40						0.02	1.42		1.42
Bidrin 8WM	oz	2.18						0.03	2.21		2.21
Incidental Pest											
App by Air ( 3 gal)	appl	7.50						0.11	7.61		7.61
Incidental Pest Trt	acre	18.00						0.27	18.27		18.27
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Acephate 90%	lb	5.59						0.06	5.65		5.65
Bifenthrin	oz	5.70						0.06	5.76		5.76
App by Air ( 5 gal)	appl	6.50						0.07	6.57		6.57
Transform WG	oz	11.61						0.13	11.74		11.74
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Thidiazuron 4lb	oz	1.82						0.01	1.83		1.83
Ethephon 6E	pt	9.38						0.07	9.45		9.45
App by Air ( 5 gal)	appl	3.25						0.02	3.27		3.27
Tribufos 6lb	pt	4.95						0.04	4.99		4.99
Ethephon 6E	pt	1.47						0.01	1.48		1.48
Cotton Picker/Module	6R-38(500)		8.87	19.57	5.72			0.13	34.29	77.23	111.52
Gin & Haul	lb	132.00						0.49	132.49		132.49
Stalk Shredder-Flail	20'		1.91	2.56	1.99			0.02	6.48	4.89	11.37
1/4-mi. Pivot Irr.	acre		22.40	18.77	1.84			0.69	43.70	63.55	107.25
TOTALS		700.30	43.21	49.71	21.91	0.00	15.40	830.53	176.73	1007.26	

Note: Cost of production estimates are based on 2015 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, conservation tillage, B2RF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2016

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	925.20
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	17.62	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	31.91	0.00	0.00	0.00	0.00	36.68	0.00	36.68	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	23.28	21.18	61.84	13.32	11.12	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.59	23.78	32.87	22.90	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	32.40	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	67.05	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	0.00	1.07	1.07	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	1.89	0.00	0.00	0.00	0.00	1.98	5.46	3.24	1.48	0.15	0.00	7.71
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	1.82	0.00	0.00	0.00	0.00	1.52	3.13	9.25	9.99	6.72	0.00	10.78
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.00	1.13	2.98	17.53	2.44	1.39	0.00	22.13
INTEREST ON OP. CAP.	3.54	0.00	0.00	0.00	0.88	1.68	4.68	2.22	1.09	0.47	0.20	0.64
TOTAL DIRECT EXPENSES	81.93	0.00	0.00	0.00	30.66	65.24	213.20	121.04	74.50	43.13	27.57	173.26
NET INCOME	-81.93	0.00	0.00	0.00	-30.66	-65.24	-213.20	-121.04	-74.50	-43.13	-27.57	751.94
NET INCOME TO DATE	-81.93	-81.93	-81.93	-81.93	-112.59	-177.83	-391.03	-512.07	-586.57	-629.70	-657.27	94.67

Note: Cost of production estimates are based on 2015 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, conservation tillage, B2RF  
 Pivot irrigated, 7.5 ac.-in., Delta Area, Mississippi, 2016

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75		
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-289	-271	-253	-235	-217	-199	-181	-163	-145	-127	-109
			-465	-447	-429	-411	-393	-375	-357	-339	-321	-303	-285
60	720.00	lb	-248	-226	-205	-183	-161	-140	-118	-97	-75	-53	-32
			-425	-403	-381	-360	-338	-317	-295	-273	-252	-230	-209
70	840.00	lb	-207	-182	-157	-131	-106	-81	-56	-31	-5	19	44
			-384	-359	-333	-308	-283	-258	-233	-207	-182	-157	-132
80	960.00	lb	-166	-138	-109	-80	-51	-22	5	34	63	92	121
			-343	-314	-285	-257	-228	-199	-170	-141	-113	-84	-55
90	1080.00	lb	-126	-93	-61	-28	3	35	68	100	133	165	197
			-302	-270	-238	-205	-173	-140	-108	-76	-43	-11	21
100	1200.00	lb	-85	-49	-13	22	58	94	130	166	202	238	274
			-262	-226	-190	-154	-118	-82	-46	-10	25	61	97
110	1320.00	lb	-44	-4	34	74	113	153	193	232	272	311	351
			-221	-181	-142	-102	-62	-23	16	55	95	135	174
120	1440.00	lb	-3	39	82	125	168	212	255	298	341	384	428
			-180	-137	-94	-50	-7	35	78	121	165	208	251
130	1560.00	lb	36	83	130	177	224	270	317	364	411	458	504
			-139	-93	-46	0	47	94	140	187	234	281	328
140	1680.00	lb	77	128	178	228	279	329	380	430	480	531	581
			-99	-48	1	52	102	152	203	253	304	354	404
150	1800.00	lb	118	172	226	280	334	388	442	496	550	604	658
			-58	-4	49	103	157	211	265	319	373	427	481

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 2015 input prices.

Table 7.A Estimated costs per acre  
Cotton, 12R-38" solid, no-till  
B2RF variety, Delta Area, Mississippi, 2016

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	0.79	2.3000	1.82	_____
Ethephon 6E	pt	4.69	2.3125	10.85	_____
Tribufos 6lb	pt	9.90	0.5000	4.95	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	21.27	1.5000	31.91	_____
Urea, Solid (46% N)	cwt	20.83	1.5000	31.24	_____
UAN (32% N)	cwt	15.95	2.0000	31.90	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	12.35	1.0000	12.35	_____
Gramoxone SL 2.0	oz	0.31	96.0000	29.76	_____
Reflex 2LC	pt	6.30	1.0000	6.30	_____
Cotoran 4L	pt	5.99	2.0000	11.98	_____
Dual Magnum	pt	13.01	2.0000	26.02	_____
Diuron 4L	pt	4.15	1.6000	6.64	_____
INSECTICIDES					
Acephate 90%	lb	7.45	2.2500	16.76	_____
Centric 40WG	oz	4.95	2.0000	9.90	_____
Diamond .83EC	oz	1.33	6.0000	7.98	_____
Admire Pro	oz	2.95	2.0000	5.90	_____
Bifenthrin	oz	0.89	12.8000	11.39	_____
Karate Z	oz	2.80	0.5000	1.40	_____
Bidrin 8WM	oz	1.09	2.0000	2.18	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
Transform WG	oz	7.74	1.5000	11.61	_____
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	45.0000	32.40	_____
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	45.0000	67.05	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	5.35	0.4000	2.14	_____
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	13.40	0.2752	3.70	_____
Self-Propelled	hour	13.40	0.2487	3.35	_____
HAND LABOR					
Implements	hour	9.06	0.1037	0.93	_____
Self-Propelled	hour	9.06	0.2105	1.90	_____
UNALLOCATED LABOR					
	hour	13.43	0.4191	5.63	_____
DIESEL FUEL					
Tractors	gal	2.00	3.1878	6.38	_____
Self-Propelled	gal	2.00	5.2099	10.43	_____
REPAIR & MAINTENANCE					
Implements	acre	4.84	1.0000	4.84	_____
Tractors	acre	1.97	1.0000	1.97	_____
Self-Propelled	acre	20.37	1.0000	20.37	_____
INTEREST ON OP. CAP.	acre	14.04	1.0000	14.04	_____
TOTAL DIRECT EXPENSES				699.04	_____
FIXED EXPENSES					
Implements	acre	6.60	1.0000	6.60	_____
Tractors	acre	12.35	1.0000	12.35	_____
Self-Propelled	acre	82.59	1.0000	82.59	_____
TOTAL FIXED EXPENSES				101.54	_____
TOTAL SPECIFIED EXPENSES				800.58	_____

Note: Cost of production estimates are based on 2015 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" solid, no-till  
 B2RF variety, Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	900.0000	540.00	_____
Cotton Seed	lb	0.11	1350.0000	153.90	_____
				-----	
TOTAL INCOME				693.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	95.05	1.0000	95.05	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	117.42	1.0000	117.42	_____
INSECTICIDES	acre	79.14	1.0000	79.14	_____
SEED/PLANTS	acre	32.40	1.0000	32.40	_____
TECHNOLOGY FEE	acre	67.05	1.0000	67.05	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	2.14	1.0000	2.14	_____
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	0.3142	2.83	_____
OPERATOR LABOR	hour	13.40	0.5239	7.05	_____
UNALLOCATED LABOR	hour	13.43	0.4191	5.63	_____
DIESEL FUEL	gal	2.00	8.3978	16.81	_____
REPAIR & MAINTENANCE	acre	27.18	1.0000	27.18	_____
INTEREST ON OP. CAP.	acre	14.04	1.0000	14.04	_____
				-----	
TOTAL DIRECT EXPENSES				699.04	_____
RETURNS ABOVE DIRECT EXPENSES				-5.14	_____
TOTAL FIXED EXPENSES				101.54	_____
				-----	
TOTAL SPECIFIED EXPENSES				800.58	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-106.68	_____

Note: Cost of production estimates are based on 2015 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" solid, no-till  
 B2RF variety, Delta Area, Mississippi, 2016

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				
Urea, Solid (46% N)	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				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Reflex 2LC	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&Pre-Folding	12R-38	MFWD 225	0.055	1.00	May		0.05	0.05	0.11	0.04
Cotton Seed B2RF	thous					45.0000				
B2RF Cot Tech Fee	thous					45.0000				
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 4L	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					0.7500				
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				
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% N)	cwt					2.0000				
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 4L	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							0.52	0.27	0.83	0.41

Note: Cost of production estimates are based on 2015 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" solid, no-till  
B2RF variety, Delta Area, Mississippi, 2016

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						0.15	3.45		3.45
Lime (Spread)	ton	30.36						1.37	31.73		31.73
Custom Apply Fert	acre	7.00						0.32	7.32		7.32
Potash (60% K2O)	cwt	31.91						1.44	33.35		33.35
Urea, Solid (46% N)	cwt	31.24						1.41	32.65		32.65
App by Air ( 5 gal)	appl	6.50						0.19	6.69		6.69
Clarity	pt	6.45						0.19	6.64		6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Select Max	pt	12.35						0.37	12.72		12.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08	2.10
Gramoxone SL 2.0	oz	14.88						0.39	15.27		15.27
Reflex 2LC	pt	6.30						0.17	6.47		6.47
Surfactant	pt	1.07						0.03	1.10		1.10
Row Cond Folding	38'		0.95	0.54	0.99			0.06	2.54	2.89	5.43
NT Plant&Pre-Folding	12R-38		1.29	2.16	1.85			0.12	5.42	5.86	11.28
Cotton Seed B2RF	thous	32.40						0.73	33.13		33.13
B2RF Cot Tech Fee	thous	67.05						1.51	68.56		68.56
Cotton Seed Trt.	acre	20.00						0.45	20.45		20.45
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Gramoxone SL 2.0	oz	14.88						0.33	15.21		15.21
Cotoran 4L	pt	11.98						0.27	12.25		12.25
Surfactant	pt	1.07						0.02	1.09		1.09
Cotton Consultant	acre	8.00						0.18	8.18		8.18
Eradication	acre	1.00						0.02	1.02		1.02
Sprayer 600-825gal	90' 250hp		0.30	0.16	0.34			0.02	0.82	1.06	1.88
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Acephate 90%	lb	5.59						0.13	5.72		5.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Sprayer 600-825gal	90' 250hp		0.30	0.16	0.34			0.02	0.82	1.06	1.88
Centric 40WG	oz	9.90						0.19	10.09		10.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Fert Appl (Liquid)	12R-38		1.20	0.97	1.47			0.07	3.71	3.00	6.71
UAN (32% N)	cwt	31.90						0.60	32.50		32.50
App by Air ( 3 gal)	appl	5.00						0.09	5.09		5.09
Diamond .83EC	oz	7.98						0.15	8.13		8.13
Admire Pro	oz	5.90						0.11	6.01		6.01
Spray (Direct/Layby)	12R-38		1.03	0.58	1.28			0.05	2.94	2.31	5.25
Diuron 4L	pt	6.64						0.12	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.08	4.56		4.56
App by Air ( 3 gal)	appl	5.00						0.07	5.07		5.07
Acephate 90%	lb	5.59						0.08	5.67		5.67
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Bifenthrin	oz	5.70						0.09	5.79		5.79
App by Air ( 3 gal)	appl	1.25						0.02	1.27		1.27
Karate Z	oz	1.40						0.02	1.42		1.42
Bidrin 8WM	oz	2.18						0.03	2.21		2.21
Incidental Pest											
App by Air ( 3 gal)	appl	5.00						0.07	5.07		5.07
Incidental Pest Trt	acre	12.00						0.18	12.18		12.18
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Acephate 90%	lb	5.59						0.06	5.65		5.65
Bifenthrin	oz	5.70						0.06	5.76		5.76
App by Air ( 3 gal)	appl	5.00						0.06	5.06		5.06
Transform WG	oz	11.61						0.13	11.74		11.74
App by Air ( 5 gal)	appl	6.50						0.05	6.55		6.55
Thidiazuron 4lb	oz	1.82						0.01	1.83		1.83
Ethephon 6E	pt	9.38						0.07	9.45		9.45
App by Air ( 5 gal)	appl	3.25						0.02	3.27		3.27
Tribufos 6lb	pt	4.95						0.04	4.99		4.99
Ethephon 6E	pt	1.47						0.01	1.48		1.48
Cotton Picker/Module	6R-38(500)		8.87	19.57	5.72			0.13	34.29	77.23	111.52
Gin & Haul	lb	99.00						0.37	99.37		99.37
Stalk Shredder-Flail	20'		1.91	2.56	1.99			0.02	6.48	4.89	11.37
TOTALS		625.50	16.81	27.18	15.51	0.00	14.04	699.04	101.54	800.58	

Note: Cost of production estimates are based on 2015 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" solid, no-till  
B2RF variety, Delta Area, Mississippi, 2016

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	693.90
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	17.62	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	63.15	0.00	0.00	0.00	0.00	0.00	0.00	31.90	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	23.28	21.18	61.84	11.12	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.59	23.78	26.87	22.90	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	32.40	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	67.05	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	0.00	1.07	1.07	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	0.51	4.20	3.09	0.00	0.00	0.00	7.71
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	0.32	3.18	2.53	0.00	0.00	0.00	10.78
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.16	3.18	1.71	0.00	0.00	0.00	22.13
INTEREST ON OP. CAP.	4.69	0.00	0.00	0.00	0.88	0.62	4.66	1.51	0.59	0.37	0.20	0.52
TOTAL DIRECT EXPENSES	108.50	0.00	0.00	0.00	30.66	23.86	212.17	82.40	40.47	33.27	27.57	140.14
NET INCOME	-108.50	0.00	0.00	0.00	-30.66	-23.86	-212.17	-82.40	-40.47	-33.27	-27.57	553.76
NET INCOME TO DATE	-108.50	-108.50	-108.50	-108.50	-139.16	-163.02	-375.19	-457.59	-498.06	-531.33	-558.90	-5.14

Note: Cost of production estimates are based on 2015 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" solid, no-till  
 B2RF variety, Delta Area, Mississippi, 2016

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75		
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-292 -394	-279 -380	-265 -367	-252 -353	-238 -340	-225 -326	-211 -313	-198 -299	-184 -286	-171 -272	-157 -259
60	540.00	lb	-262 -363	-246 -347	-229 -331	-213 -315	-197 -299	-181 -282	-165 -266	-148 -250	-132 -234	-116 -218	-100 -201
70	630.00	lb	-231 -333	-212 -314	-194 -295	-175 -276	-156 -257	-137 -238	-118 -219	-99 -201	-80 -182	-61 -163	-42 -144
80	720.00	lb	-201 -302	-179 -281	-158 -259	-136 -238	-114 -216	-93 -194	-71 -173	-50 -151	-28 -130	-6 -108	14 -86
90	810.00	lb	-170 -272	-146 -247	-122 -223	-97 -199	-73 -175	-49 -150	-24 -126	-0 -102	23 -77	47 -53	72 -29
100	900.00	lb	-140 -241	-113 -214	-86 -187	-59 -160	-32 -133	-5 -106	21 -79	48 -52	75 -25	102 1	129 28
110	990.00	lb	-109 -211	-79 -181	-50 -151	-20 -122	9 -92	38 -62	68 -32	98 -3	128 26	157 56	187 85
120	1080.00	lb	-79 -180	-46 -148	-14 -115	18 -83	50 -50	82 -18	115 13	147 46	180 78	212 111	244 143
130	1170.00	lb	-48 -149	-13 -114	21 -79	56 -44	91 -9	127 25	162 60	197 95	232 130	267 165	302 201
140	1260.00	lb	-17 -119	19 -81	57 -43	95 -6	133 31	171 69	208 107	246 145	284 182	322 220	360 258
150	1350.00	lb	12 -88	53 -48	93 -7	134 32	174 73	215 113	255 154	296 194	336 235	377 275	417 316

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 2015 input prices.

Table 8.A Estimated costs per acre  
 Cotton, 8R-38" solid, conservation tillage  
 B2RF variety, Non-Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	0.79	2.3000	1.82	_____
Ethephon 6E	pt	4.69	2.3125	10.85	_____
Tribufos 6lb	pt	9.90	0.5000	4.95	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	21.27	1.4000	29.78	_____
UAN (32% N)	cwt	15.95	3.2000	51.04	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	12.35	1.0000	12.35	_____
Gramoxone SL 2.0	oz	0.31	48.0000	14.88	_____
Cotoran 4L	pt	5.99	2.0000	11.98	_____
Dual Magnum	pt	13.01	2.0000	26.02	_____
Diuron 4L	pt	4.15	1.6000	6.64	_____
INSECTICIDES					
Acephate 90%	lb	7.45	2.2500	16.76	_____
Centric 40WG	oz	4.95	2.0000	9.90	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	45.0000	32.40	_____
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	45.0000	67.05	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	5.35	0.2000	1.07	_____
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	13.40	1.1055	14.81	_____
Self-Propelled	hour	13.40	0.4252	5.73	_____
HAND LABOR					
Implements	hour	9.06	0.4491	4.07	_____
Self-Propelled	hour	9.06	0.3415	3.10	_____
UNALLOCATED LABOR					
	hour	13.39	1.2246	16.41	_____
DIESEL FUEL					
Tractors	gal	2.00	10.8120	21.62	_____
Self-Propelled	gal	2.00	6.1512	12.33	_____
REPAIR & MAINTENANCE					
Implements	acre	11.07	1.0000	11.07	_____
Tractors	acre	6.23	1.0000	6.23	_____
Self-Propelled	acre	15.66	1.0000	15.66	_____
INTEREST ON OP. CAP.	acre	11.92	1.0000	11.92	_____
TOTAL DIRECT EXPENSES				629.00	_____
FIXED EXPENSES					
Implements	acre	18.07	1.0000	18.07	_____
Tractors	acre	39.16	1.0000	39.16	_____
Self-Propelled	acre	66.04	1.0000	66.04	_____
TOTAL FIXED EXPENSES				123.27	_____
TOTAL SPECIFIED EXPENSES				752.27	_____

Note: Cost of production estimates are based on 2015 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 8.B Summary of estimated costs and returns per acre  
Cotton, 8R-38" solid, conservation tillage  
B2RF variety, Non-Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	900.0000	540.00	_____
Cotton Seed	lb	0.11	1350.0000	153.90	_____
				-----	
TOTAL INCOME				693.90	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	80.82	1.0000	80.82	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	96.24	1.0000	96.24	_____
INSECTICIDES	acre	38.67	1.0000	38.67	_____
SEED/PLANTS	acre	32.40	1.0000	32.40	_____
TECHNOLOGY FEE	acre	67.05	1.0000	67.05	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	1.07	1.0000	1.07	_____
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	0.7906	7.17	_____
OPERATOR LABOR	hour	13.40	1.5308	20.54	_____
UNALLOCATED LABOR	hour	13.39	1.2246	16.41	_____
DIESEL FUEL	gal	2.00	16.9632	33.95	_____
REPAIR & MAINTENANCE	acre	32.96	1.0000	32.96	_____
INTEREST ON OP. CAP.	acre	11.92	1.0000	11.92	_____
				-----	
TOTAL DIRECT EXPENSES				629.00	_____
RETURNS ABOVE DIRECT EXPENSES				64.90	_____
				-----	
TOTAL FIXED EXPENSES				123.27	_____
				-----	
TOTAL SPECIFIED EXPENSES				752.27	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-58.37	_____

Note: Cost of production estimates are based on 2015 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 8.C Estimated resource use for field operations, per acre  
 Cotton, 8R-38" solid, conservation tillage  
 B2RF variety, Non-Delta Area, Mississippi, 2016

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					1.4000				
Bed-Paratill	Fold	8R-38	MFWD 190	0.080	1.00	Nov	0.08	0.08	0.08	0.06
Bed/Disk (Hipper)Rd		8R-38	MFWD 190	0.074	0.50	Nov	0.03	0.03	0.03	0.02
Sprayer 600-750gal	60' 175hp			0.017	1.00	Mar		0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					1.6000				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	May		0.05	0.05	0.05	0.04
Plant & Pre-Rigid	8R-38	MFWD 190	0.080	1.00	May		0.08	0.08	0.16	0.06
Cotton Seed B2RF	thous					45.0000				
B2RF Cot Tech Fee	thous					45.0000				
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 4L	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre				1.00	May				
Eradication	acre					1.0000				
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				
Acephate 90%	lb					0.7500				
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				
Sprayer 600-750gal	60' 175hp			0.017	1.00	Jun		0.01	0.02	0.01
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					1.6000				
Spray (Direct/Layby)	8R-38	MFWD 190	0.066	1.00	Jul		0.06	0.06	0.10	0.05
Diuron 4L	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
Sprayer 600-750gal	60' 175hp			0.017	1.00	Jul		0.01	0.02	0.01
Mepiquat Chloride	oz					16.0000				
Acephate 90%	lb					0.7500				
Incidental Pest					1.00	Jul				
Sprayer 600-750gal	60' 175hp			0.017				0.01	0.02	0.01
Incidental Pest Trt	acre					1.0000				
Sprayer 600-750gal	60' 175hp			0.017	1.00	Aug		0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp			0.017	1.00	Sep		0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp			0.017	0.50	Sep		0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker	4R-38(350)		0.257	1.00	Oct			0.25	0.51	0.20
Boll Buggy	4R-38(350)	MFWD 190	0.257	1.00	Oct		0.25	0.25	0.25	0.20
Module Builder	4R-38(350)	MFWD 190	0.257	1.00	Oct		0.25	0.25	0.51	0.20
Gin & Haul	lb				1.00	Oct	900.0000			
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.53	1.10	2.32	1.22

Note: Cost of production estimates are based on 2015 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 8.D Estimated costs for field operations, per acre  
Cotton, 8R-38" solid, conservation tillage  
B2RF variety, Non-Delta Area, Mississippi, 2016

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						0.15	3.45		3.45
Lime (Spread)	ton	30.36						1.37	31.73		31.73
Custom Apply Fert	acre	7.00						0.32	7.32		7.32
Potash (60% K2O)	cwt	29.78						1.34	31.12		31.12
Bed-Paratill Fold	8R-38		1.58	2.04	1.95			0.25	5.82	5.61	11.43
Bed/Disk (Hipper)Rd	8R-38		0.72	0.38	0.90			0.09	2.09	1.77	3.86
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08	2.10
Clarity	pt	6.45						0.19	6.64		6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Select Max	pt	12.35						0.37	12.72		12.72
Fert Appl (Liquid)	8R-38		1.52	1.21	2.22			0.13	5.08	3.62	8.70
UAN (32% N)	cwt	25.52						0.67	26.19		26.19
Row Cond Rigid	26'		1.17	0.55	1.44			0.07	3.23	3.01	6.24
Plant & Pre-Rigid	8R-38		1.57	1.58	2.67			0.13	5.95	5.01	10.96
Cotton Seed B2RF	thous	32.40						0.73	33.13		33.13
B2RF Cot Tech Fee	thous	67.05						1.51	68.56		68.56
Cotton Seed Trt.	acre	20.00						0.45	20.45		20.45
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Gramoxone SL 2.0	oz	14.88						0.33	15.21		15.21
Cotoran 4L	pt	11.98						0.27	12.25		12.25
Surfactant	pt	1.07						0.02	1.09		1.09
Cotton Consultant	acre	8.00						0.18	8.18		8.18
Eradication	acre	1.00						0.02	1.02		1.02
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Acephate 90%	lb	5.59						0.13	5.72		5.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Centric 40WG	oz	9.90						0.19	10.09		10.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Fert Appl (Liquid)	8R-38		1.52	1.21	2.22			0.09	5.04	3.62	8.66
UAN (32% N)	cwt	25.52						0.48	26.00		26.00
Spray (Direct/Layby)	8R-38		1.31	0.66	1.92			0.06	3.95	2.71	6.66
Diuron 4L	pt	6.64						0.10	6.74		6.74
Glyphosate 3lbs a.e	oz	4.48						0.07	4.55		4.55
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.01	1.00	1.08	2.08
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Acephate 90%	lb	5.59						0.08	5.67		5.67
Incidental Pest											
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.01	1.00	1.08	2.08
Incidental Pest Trt	acre	12.00						0.18	12.18		12.18
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.01	1.00	1.08	2.08
Acephate 90%	lb	5.59						0.06	5.65		5.65
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.01	1.00	1.08	2.08
Thidiazuron 4lb	oz	1.82						0.01	1.83		1.83
Ethephon 6E	pt	9.38						0.07	9.45		9.45
Sprayer 600-750gal	60' 175hp		0.16	0.08	0.25				0.49	0.54	1.03
Tribufos 6lb	pt	4.95						0.04	4.99		4.99
Ethephon 6E	pt	1.47						0.01	1.48		1.48
Cotton Picker	4R-38(350)		9.29	14.14	8.55			0.12	32.10	55.78	87.88
Boll Buggy	4R-38(350)		5.04	3.42	6.21			0.06	14.73	13.13	27.86
Module Builder	4R-38(350)		5.04	3.69	8.55			0.06	17.34	13.68	31.02
Gin & Haul	lb	99.00						0.37	99.37		99.37
Stalk Shredder-Flail	15'		2.15	2.56	2.65			0.03	7.39	5.07	12.46
TOTALS			506.05	33.95	32.96	44.12	0.00	11.92	629.00	123.27	752.27

Note: Cost of production estimates are based on 2015 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 8.E Estimated monthly income and expense flows per acre  
Cotton, 8R-38" solid, conservation tillage  
B2RF variety, Non-Delta Area, Mississippi, 2016

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	693.90
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.62	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	29.78	0.00	0.00	0.00	0.00	25.52	0.00	25.52	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	23.28	0.00	61.84	0.00	11.12	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.59	9.90	17.59	5.59	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	32.40	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	67.05	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	0.00	0.00	1.07	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	2.85	0.00	0.00	0.00	0.51	2.22	5.64	2.73	2.94	0.51	0.76	25.96
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	2.30	0.00	0.00	0.00	0.32	1.52	3.70	1.84	1.95	0.32	0.48	21.52
REPAIR & MAINTENANCE	2.42	0.00	0.00	0.00	0.16	1.21	2.61	1.37	0.98	0.16	0.24	23.81
INTEREST ON OP. CAP.	3.52	0.00	0.00	0.00	0.72	0.80	4.68	0.81	0.54	0.07	0.14	0.64
TOTAL DIRECT EXPENSES	81.53	0.00	0.00	0.00	24.99	31.27	213.58	43.93	36.88	6.65	19.24	170.93
NET INCOME	-81.53	0.00	0.00	0.00	-24.99	-31.27	-213.58	-43.93	-36.88	-6.65	-19.24	522.97
NET INCOME TO DATE	-81.53	-81.53	-81.53	-81.53	-106.52	-137.79	-351.37	-395.30	-432.18	-438.83	-458.07	64.90

Note: Cost of production estimates are based on 2015 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 8.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 8R-38" solid, conservation tillage  
 B2RF variety, Non-Delta Area, Mississippi, 2016

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75		
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-222	-209	-195	-182	-168	-155	-141	-128	-114	-101	-87
			-346	-332	-319	-305	-292	-278	-265	-251	-238	-224	-211
60	540.00	lb	-192	-176	-159	-143	-127	-111	-95	-78	-62	-46	-30
			-315	-299	-283	-267	-250	-234	-218	-202	-186	-169	-153
70	630.00	lb	-161	-142	-123	-105	-86	-67	-48	-29	-10	8	27
			-285	-266	-247	-228	-209	-190	-171	-152	-133	-114	-96
80	720.00	lb	-131	-109	-88	-66	-44	-23	-1	19	41	63	84
			-254	-232	-211	-189	-168	-146	-124	-103	-81	-60	-38
90	810.00	lb	-100	-76	-52	-27	-3	20	45	69	93	118	142
			-223	-199	-175	-151	-126	-102	-78	-53	-29	-5	19
100	900.00	lb	-70	-43	-16	10	37	64	91	118	145	172	199
			-193	-166	-139	-112	-85	-58	-31	-4	22	49	76
110	990.00	lb	-39	-9	19	49	79	108	138	168	198	227	257
			-162	-133	-103	-73	-44	-14	15	45	74	104	134
120	1080.00	lb	-8	23	55	88	120	153	185	217	250	282	315
			-132	-99	-67	-35	-2	29	62	94	126	159	191
130	1170.00	lb	21	56	91	126	161	197	232	267	302	337	372
			-101	-66	-31	3	38	73	108	144	179	214	249
140	1260.00	lb	52	89	127	165	203	241	278	316	354	392	430
			-71	-33	4	42	80	117	155	193	231	269	306
150	1350.00	lb	82	123	163	204	244	285	325	366	406	447	487
			-40	-0	40	80	121	161	202	242	283	323	364

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 2015 input prices.

Table 9.A Estimated costs per acre  
Cotton, 8R-38" solid, no-till  
B2RF variety, Non-Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	0.79	2.3000	1.82	_____
Ethephon 6E	pt	4.69	2.3125	10.85	_____
Tribufos 6lb	pt	9.90	0.5000	4.95	_____
GINNING					
Gin & Haul	lb	0.11	750.0000	82.50	_____
FERTILIZERS					
Urea, Solid (46% N)	cwt	20.83	1.3300	27.70	_____
Potash (60% K2O)	cwt	21.27	1.4000	29.78	_____
UAN (32% N)	cwt	15.95	1.6000	25.52	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	12.89	0.5000	6.45	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Select Max	pt	12.35	1.0000	12.35	_____
Gramoxone SL 2.0	oz	0.31	48.0000	14.88	_____
Cotoran 4L	pt	5.99	2.0000	11.98	_____
Dual Magnum	pt	13.01	2.0000	26.02	_____
Diuron 4L	pt	4.15	1.6000	6.64	_____
INSECTICIDES					
Acephate 90%	lb	7.45	2.2500	16.76	_____
Centric 40WG	oz	4.95	2.0000	9.90	_____
Incidental Pest Trt	acre	12.00	1.0000	12.00	_____
SEED/PLANTS					
Cotton Seed B2RF	thous	0.72	45.0000	32.40	_____
TECHNOLOGY FEE					
B2RF Cot Tech Fee	thous	1.49	45.0000	67.05	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.11	32.0000	3.52	_____
ADJUVANTS					
Surfactant	pt	5.35	0.2000	1.07	_____
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	13.40	0.9134	12.23	_____
Self-Propelled	hour	13.40	0.4252	5.73	_____
HAND LABOR					
Implements	hour	9.06	0.4136	3.75	_____
Self-Propelled	hour	9.06	0.3415	3.10	_____
UNALLOCATED LABOR					
	hour	13.39	1.0709	14.35	_____
DIESEL FUEL					
Tractors	gal	2.00	8.9331	17.87	_____
Self-Propelled	gal	2.00	6.1512	12.33	_____
REPAIR & MAINTENANCE					
Implements	acre	8.70	1.0000	8.70	_____
Tractors	acre	5.15	1.0000	5.15	_____
Self-Propelled	acre	15.66	1.0000	15.66	_____
INTEREST ON OP. CAP.	acre	12.02	1.0000	12.02	_____
TOTAL DIRECT EXPENSES				602.62	_____
FIXED EXPENSES					
Implements	acre	14.30	1.0000	14.30	_____
Tractors	acre	32.36	1.0000	32.36	_____
Self-Propelled	acre	66.04	1.0000	66.04	_____
TOTAL FIXED EXPENSES				112.70	_____
TOTAL SPECIFIED EXPENSES				715.32	_____

Note: Cost of production estimates are based on 2015 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 9.B Summary of estimated costs and returns per acre  
Cotton, 8R-38" solid, no-till  
B2RF variety, Non-Delta Area, Mississippi, 2016

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.60	750.0000	450.00	_____
Cotton Seed	lb	0.11	1125.0000	128.25	_____
				-----	
TOTAL INCOME				578.25	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	17.62	1.0000	17.62	_____
GINNING	acre	82.50	1.0000	82.50	_____
FERTILIZERS	acre	83.00	1.0000	83.00	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	96.24	1.0000	96.24	_____
INSECTICIDES	acre	38.67	1.0000	38.67	_____
SEED/PLANTS	acre	32.40	1.0000	32.40	_____
TECHNOLOGY FEE	acre	67.05	1.0000	67.05	_____
GROWTH REGULATORS	acre	3.52	1.0000	3.52	_____
ADJUVANTS	acre	1.07	1.0000	1.07	_____
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	0.7551	6.85	_____
OPERATOR LABOR	hour	13.40	1.3386	17.96	_____
UNALLOCATED LABOR	hour	13.39	1.0709	14.35	_____
DIESEL FUEL	gal	2.00	15.0844	30.20	_____
REPAIR & MAINTENANCE	acre	29.51	1.0000	29.51	_____
INTEREST ON OP. CAP.	acre	12.02	1.0000	12.02	_____
				-----	
TOTAL DIRECT EXPENSES				602.62	_____
RETURNS ABOVE DIRECT EXPENSES				-24.37	_____
				-----	
TOTAL FIXED EXPENSES				112.70	_____
				-----	
TOTAL SPECIFIED EXPENSES				715.32	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-137.07	_____

Note: Cost of production estimates are based on 2015 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 9.C Estimated resource use for field operations, per acre  
 Cotton, 8R-38" solid, no-till  
 B2RF variety, Non-Delta Area, Mississippi, 2016

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				
Urea, Solid (46% N)	cwt					1.3300				
Potash (60% K2O)	cwt					1.4000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	May		0.05	0.05	0.05	0.04
NT Plant&Pre-Rigid	8R-38	MFWD 190	0.083	1.00	May		0.08	0.08	0.16	0.06
Cotton Seed B2RF	thous					45.0000				
B2RF Cot Tech Fee	thous					45.0000				
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 4L	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.7500				
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				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32% N)	cwt					1.6000				
Spray (Direct/Layby)	8R-38	MFWD 190	0.066	1.00	Jun		0.06	0.06	0.10	0.05
Diuron 4L	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Mepiquat Chloride	oz					16.0000				
Acephate 90%	lb					0.7500				
Incidental Pest				1.00	Jul					
Sprayer 600-750gal	60' 175hp		0.017					0.01	0.02	0.01
Incidental Pest Trt	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker	4R-38 (350)		0.257	1.00	Oct			0.25	0.51	0.20
Boll Buggy	4R-38 (350)	MFWD 190	0.257	1.00	Oct		0.25	0.25	0.25	0.20
Module Builder	4R-38 (350)	MFWD 190	0.257	1.00	Oct		0.25	0.25	0.51	0.20
Gin & Haul	lb			1.00	Oct	750.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.33	0.91	2.09	1.07

Note: Cost of production estimates are based on 2015 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 9.D Estimated costs for field operations, per acre  
Cotton, 8R-38" solid, no-till  
B2RF variety, Non-Delta Area, Mississippi, 2016

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						0.15	3.45		3.45
Lime (Spread)	ton	30.36						1.37	31.73		31.73
Custom Apply Fert	acre	7.00						0.32	7.32		7.32
Urea, Solid (46% N)	cwt	27.70						1.25	28.95		28.95
Potash (60% K2O)	cwt	29.78						1.34	31.12		31.12
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.03	1.02	1.08	2.10
Clarity	pt	6.45						0.19	6.64		6.64
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Select Max	pt	12.35						0.37	12.72		12.72
Row Cond Rigid	26'		1.17	0.55	1.44			0.07	3.23	3.01	6.24
NT Plant&Pre-Rigid	8R-38		1.64	1.76	2.78			0.14	6.32	5.44	11.76
Cotton Seed B2RF	thous	32.40						0.73	33.13		33.13
B2RF Cot Tech Fee	thous	67.05						1.51	68.56		68.56
Cotton Seed Trt.	acre	20.00						0.45	20.45		20.45
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Gramoxone SL 2.0	oz	14.88						0.33	15.21		15.21
Cotoran 4L	pt	11.98						0.27	12.25		12.25
Surfactant	pt	1.07						0.02	1.09		1.09
Cotton Consultant	acre	8.00						0.18	8.18		8.18
Eradication	acre	1.00						0.02	1.02		1.02
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Dual Magnum	pt	13.01						0.29	13.30		13.30
Acephate 90%	lb	5.59						0.13	5.72		5.72
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Dual Magnum	pt	13.01						0.29	13.30		13.30
Glyphosate 3lbs a.e	oz	4.48						0.10	4.58		4.58
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.02	1.01	1.08	2.09
Centric 40WG	oz	9.90						0.19	10.09		10.09
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Fert Appl (Liquid)	8R-38		1.52	1.21	2.22			0.09	5.04	3.62	8.66
UAN (32% N)	cwt	25.52						0.48	26.00		26.00
Spray (Direct/Layby)	8R-38		1.31	0.66	1.92			0.07	3.96	2.71	6.67
Diuron 4L	pt	6.64						0.12	6.76		6.76
Glyphosate 3lbs a.e	oz	4.48						0.08	4.56		4.56
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.01	1.00	1.08	2.08
Mepiquat Chloride	oz	1.76						0.03	1.79		1.79
Acephate 90%	lb	5.59						0.08	5.67		5.67
Incidental Pest											
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.01	1.00	1.08	2.08
Incidental Pest Trt	acre	12.00						0.18	12.18		12.18
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.01	1.00	1.08	2.08
Acephate 90%	lb	5.59						0.06	5.65		5.65
Sprayer 600-750gal	60' 175hp		0.32	0.16	0.51			0.01	1.00	1.08	2.08
Thidiazuron 4lb	oz	1.82						0.01	1.83		1.83
Ethephon 6E	pt	9.38						0.07	9.45		9.45
Sprayer 600-750gal	60' 175hp		0.16	0.08	0.25				0.49	0.54	1.03
Tribufos 6lb	pt	4.95						0.04	4.99		4.99
Ethephon 6E	pt	1.47						0.01	1.48		1.48
Cotton Picker	4R-38(350)		9.29	14.14	8.55			0.12	32.10	55.78	87.88
Boll Buggy	4R-38(350)		5.04	3.42	6.21			0.06	14.73	13.13	27.86
Module Builder	4R-38(350)		5.04	3.69	8.55			0.06	17.34	13.68	31.02
Gin & Haul	lb	82.50						0.31	82.81		82.81
Stalk Shredder-Flail	15'		2.15	2.56	2.65			0.03	7.39	5.07	12.46
TOTALS		491.73	30.20	29.51	39.16	0.00	12.02	602.62	112.70	715.32	

Note: Cost of production estimates are based on 2015 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 9.E Estimated monthly income and expense flows per acre  
Cotton, 8R-38" solid, no-till  
B2RF variety, Non-Delta Area, Mississippi, 2016

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	578.25
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.62	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	82.50
FERTILIZERS	57.48	0.00	0.00	0.00	0.00	0.00	0.00	25.52	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	23.28	0.00	61.84	11.12	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	5.59	9.90	17.59	5.59	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	32.40	0.00	0.00	0.00	0.00	0.00
TECHNOLOGY FEE	0.00	0.00	0.00	0.00	0.00	0.00	67.05	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	0.00	0.00	1.07	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	0.51	0.00	5.75	4.65	1.02	0.51	0.76	25.96
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	0.32	0.00	3.77	3.15	0.64	0.32	0.48	21.52
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.16	0.00	2.79	2.03	0.32	0.16	0.24	23.81
INTEREST ON OP. CAP.	4.43	0.00	0.00	0.00	0.72	0.00	4.69	1.08	0.31	0.07	0.14	0.58
TOTAL DIRECT EXPENSES	102.57	0.00	0.00	0.00	24.99	0.00	213.95	59.21	21.64	6.65	19.24	154.37
NET INCOME	-102.57	0.00	0.00	0.00	-24.99	0.00	-213.95	-59.21	-21.64	-6.65	-19.24	423.88
NET INCOME TO DATE	-102.57	-102.57	-102.57	-102.57	-127.56	-127.56	-341.51	-400.72	-422.36	-429.01	-448.25	-24.37

Note: Cost of production estimates are based on 2015 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 9.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 8R-38" solid, no-till  
 B2RF variety, Non-Delta Area, Mississippi, 2016

PRODUCT	PERCENT													
	75	80	85	90	95	100	105	110	115	120	125			
	PRODUCT PRICE													
Cotton Lint	0.45	0.48	0.51	0.54	0.57	0.60	0.63	0.66	0.69	0.72	0.75			
PERCENT	YIELD	UNIT	dollars											
50	375.00	lb	-264 -376	-252 -365	-241 -354	-230 -343	-219 -331	-207 -320	-196 -309	-185 -298	-174 -286	-162 -275	-151 -264	
60	450.00	lb	-238 -351	-225 -337	-211 -324	-198 -310	-184 -297	-171 -283	-157 -270	-144 -256	-130 -243	-117 -229	-103 -216	
70	525.00	lb	-213 -325	-197 -310	-181 -294	-166 -278	-150 -262	-134 -247	-118 -231	-103 -215	-87 -199	-71 -184	-55 -168	
80	600.00	lb	-187 -300	-169 -282	-151 -264	-133 -246	-115 -228	-97 -210	-79 -192	-61 -174	-43 -156	-25 -138	-7 -120	
90	675.00	lb	-162 -275	-142 -254	-121 -234	-101 -214	-81 -194	-61 -173	-40 -153	-20 -133	-0 -113	19 -92	40 -72	
100	750.00	lb	-136 -249	-114 -227	-91 -204	-69 -182	-46 -159	-24 -137	-1 -114	20 -92	43 -69	65 -47	88 -24	
110	825.00	lb	-111 -224	-86 -199	-61 -174	-37 -149	-12 -125	12 -100	37 -75	61 -50	86 -26	111 -1	136 23	
120	900.00	lb	-85 -198	-58 -171	-31 -144	-4 -117	22 -90	49 -63	76 -36	103 -9	130 17	157 44	184 71	
130	975.00	lb	-60 -173	-31 -143	-1 -114	27 -85	56 -56	85 -26	115 2	144 31	173 60	202 90	232 119	
140	1050.00	lb	-34 -147	-3 -116	28 -84	59 -53	91 -21	122 9	154 41	185 72	217 104	248 135	280 167	
150	1125.00	lb	-9 -122	24 -88	57 -54	91 -20	125 12	159 46	192 80	226 114	260 147	294 181	327 215	

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 2015 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, 2016

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	315,000	300	8	13.64	13.40	27.28	32.81	73.49	129.47	202.96
Combine (300-349 hp)	325 hp	332,000	300	8	16.73	13.40	33.46	34.58	81.44	136.45	217.90
Combine (350-399 hp)	355 hp	332,000	300	8	18.27	13.40	36.54	34.58	84.52	136.45	220.98
Combine (400-449 hp)	425 hp	407,000	300	8	21.87	13.40	43.75	42.39	99.54	167.28	266.83
Combine (450-499hp)	475 hp	414,000	300	8	24.44	13.40	48.89	43.12	105.42	170.16	275.58
Tractor ( 20-39hp)CB	MFWD 30	31,000	600	8	1.54	13.40	3.08	0.96	17.45	5.82	23.28
Tractor ( 20-39hp)RB	MFWD 30	19,900	600	8	1.54	13.40	3.08	0.62	17.10	3.74	20.85
Tractor ( 40-59hp)CB	2WD 50	31,100	600	8	2.57	13.40	5.14	0.97	19.51	5.84	25.36
Tractor ( 40-59hp)CB	MFWD 50	38,100	600	8	2.57	13.40	5.14	1.19	19.73	7.16	26.90
Tractor ( 40-59hp)RB	2WD 50	18,500	600	8	2.57	13.40	5.14	0.57	19.12	3.47	22.60
Tractor ( 40-59hp)RB	MFWD 50	23,600	600	8	2.57	13.40	5.14	0.73	19.28	4.43	23.72
Tractor ( 60-89hp)CB	2WD 75	47,700	600	8	3.86	13.40	7.72	1.49	22.61	8.97	31.58
Tractor ( 60-89hp)CB	MFWD 75	49,300	600	8	3.86	13.40	7.72	1.54	22.66	9.27	31.93
Tractor ( 60-89hp)RB	2WD 75	37,000	600	8	3.86	13.40	7.72	1.15	22.27	6.95	29.23
Tractor ( 60-89hp)RB	MFWD 75	37,800	600	8	3.86	13.40	7.72	1.18	22.30	7.10	29.41
Tractor ( 90-119hp)CB	2WD 105	65,300	600	8	5.40	13.40	10.80	2.04	26.24	12.28	38.52
Tractor ( 90-119hp)CB	MFWD 105	78,300	600	8	5.40	13.40	10.80	2.44	26.65	14.72	41.38
Tractor ( 90-119hp)RB	2WD 105	59,900	600	8	5.40	13.40	10.80	1.87	26.08	11.26	37.34
Tractor ( 90-119hp)RB	MFWD 105	60,300	600	8	5.40	13.40	10.80	1.88	26.09	11.33	37.43
Tractor (120-139hp)CB	2WD 130	96,300	600	8	6.69	13.40	13.38	3.00	29.79	18.10	47.90
Tractor (120-139hp)CB	MFWD 130	116,000	600	8	6.69	13.40	13.38	3.62	30.40	21.81	52.22
Tractor (140-159hp)CB	2WD 150	108,000	600	8	7.72	13.40	15.44	3.37	32.21	20.30	52.52
Tractor (140-159hp)CB	MFWD 150	149,000	600	8	7.72	13.40	15.44	4.65	33.49	28.02	61.51
Tractor (160-179hp)CB	MFWD 170	166,000	600	8	8.75	13.40	17.50	5.18	36.08	32.66	68.75
Tractor (180-199hp)CB	MFWD 190	180,000	600	8	9.77	13.40	19.55	5.62	38.58	35.42	74.00
Tractor (200-249hp)CB	MFWD 225	228,000	600	8	11.58	13.40	23.16	7.12	43.68	44.86	88.55
Tractor (200-249hp)CB	Track 225	277,000	600	8	11.58	13.40	23.16	8.65	45.21	54.50	99.72
Tractor (250-349hp)CB	4WD 300	282,000	600	8	15.44	13.40	30.88	8.81	53.09	55.49	108.58
Tractor (250-349hp)CB	MFWD 300	287,000	600	8	15.44	13.40	30.88	8.96	53.25	56.47	109.72
Tractor (250-349hp)CB	Track 300	289,000	600	8	15.44	13.40	30.88	9.03	53.31	56.86	110.18
Tractor (350-449hp)CB	4WD 400	341,000	600	8	20.58	13.40	41.17	10.65	65.23	67.10	132.33
Tractor (350-449hp)CB	Track 400	364,000	600	8	20.58	13.40	41.17	11.37	65.95	71.62	137.58
Tractor (450-550hp)CB	4WD 500	383,000	600	8	25.73	13.40	51.47	11.96	76.84	75.36	152.20
Tractor (450-550hp)CB	Track 500	423,000	600	8	25.73	13.40	51.47	13.21	78.09	83.23	161.32
Utility Vehicle	900 CC	12,200	200	8	1.00	13.40	2.25	1.90	17.55	7.52	25.07
Utility Vehicle	800 CC	9,900	200	8	0.70	13.40	1.57	1.54	16.52	6.10	22.62
Utility Vehicle-mule	600 CC	7,000	200	8	0.50	13.40	1.12	1.09	15.61	4.31	19.93

## 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, 2016

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	5.78	6.63	10.79	23.21	42.59	65.81
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.78	9.28	14.13	29.21	55.78	84.99
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.87	6.20	9.61	19.69	37.92	57.61
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.90	7.97	15.85	28.73	62.56	91.30
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.87	6.29	12.51	22.68	49.39	72.08
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	5.78	10.61	21.58	37.99	85.18	123.17
Cotton Picker/Modu	6R-30 (500)	727,000	200	8	25.73	0.218	4.90	11.23	24.79	40.92	97.82	138.75
Cotton Picker/Modu	6R-38 (365)	536,000	200	8	20.58	0.172	3.87	7.09	14.43	25.39	56.94	82.33
Cotton Picker/Module	6R-38 (500)	727,000	200	8	25.73	0.172	3.87	8.86	19.57	32.31	77.23	109.54
Dry Applicator SP	70'300cuft	293,000	350	8	16.98	0.015	0.27	0.51	0.23	1.02	1.55	2.58
Sprayer 600-750gal	60' 175hp	174,000	350	8	9.00	0.017	0.31	0.31	0.16	0.79	1.08	1.87
Sprayer 600-825gal	80' 175hp	180,000	350	8	11.81	0.013	0.23	0.31	0.12	0.67	0.83	1.51
Sprayer 600-825gal	90' 250hp	255,000	350	8	12.73	0.011	0.21	0.29	0.16	0.67	1.05	1.72
Sprayer 800gal	100' 250hp	257,000	350	8	14.15	0.010	0.18	0.29	0.14	0.63	0.95	1.59
Sprayer 800gal	80' 250hp	212,000	350	8	12.86	0.013	0.23	0.34	0.15	0.72	0.98	1.71
Sprayer 1000-1400gal	90' 275hp	297,000	350	8	14.15	0.010	0.18	0.29	0.16	0.65	1.10	1.76
Sprayer 1000gal	100' 300hp	301,000	350	8	15.44	0.010	0.18	0.32	0.17	0.68	1.12	1.80
Sprayer 1200+gal	120' 300hp	336,000	350	8	15.44	0.008	0.15	0.27	0.15	0.58	1.04	1.63

## 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, 2016

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	1.08	1.87	1.58	0.57	5.11	2.75	3.62	11.49												
Bed-Paratill	Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.72	1.24	1.34	0.38	3.69	2.32	2.41	8.43												
Bed-Paratill	Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.72	1.24	1.34	0.38	3.69	2.32	2.41	8.43												
Bed-Paratill	Rigid	4R-30	MFWD 225	16,600	150	12	0.204	2.73	4.73	1.22	1.45	10.15	2.12	9.16	21.44												
Bed-Paratill	Rigid	4R-38	MFWD 225	13,500	150	12	0.160	2.15	3.72	0.78	1.14	7.81	1.36	7.21	16.39												
Bed-Paratill	Rigid	6R-30	MFWD 225	19,900	150	12	0.136	1.82	3.15	0.97	0.97	6.93	1.69	6.11	14.74												
Bed-Paratill	Rigid	6R-38	MFWD 225	18,800	150	12	0.107	1.44	2.49	0.73	0.76	5.42	1.26	4.82	11.51												
Bed-Paratill	Rigid	8R-30	MFWD 225	24,900	150	12	0.102	1.36	2.36	0.91	0.72	5.38	1.59	4.58	11.56												
Bed-Paratill	Rigid	8R-38	MFWD 225	24,900	150	12	0.080	1.08	1.87	0.72	0.57	4.25	1.25	3.62	9.13												
Bed-Paratill	w/rol	4R-30	MFWD 225	17,900	150	12	0.204	2.73	4.73	1.32	1.45	10.24	2.29	9.16	21.70												
Bed-Paratill	w/rol	4R-38	MFWD 225	17,900	150	12	0.160	2.15	3.72	1.03	1.14	8.06	1.80	7.21	17.09												
Bed-Paratill	w/rol	6R-38	MFWD 225	24,700	150	12	0.107	1.44	2.49	0.95	0.76	5.65	1.66	4.82	12.14												
Bed-Rip/Disk	Fold.	8R-38	MFWD 190	36,900	300	20	0.073	0.97	1.42	0.13	0.41	2.95	0.63	2.58	6.18												
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	54,400	300	20	0.061	0.82	1.42	0.16	0.43	2.85	0.79	2.76	6.41												
Bed-Rip/Disk	Fold.	12R-38	MFWD 225	54,400	300	20	0.046	0.61	1.07	0.12	0.32	2.14	0.59	2.07	4.81												
Bed-Rip/Disk	Rigid	4R-30	MFWD 190	17,300	300	20	0.184	2.47	3.61	0.15	1.03	7.29	0.75	6.54	14.60												
Bed-Rip/Disk	Rigid	4R-38	MFWD 190	17,300	300	20	0.146	1.96	2.86	0.12	0.82	5.78	0.60	5.19	11.58												
Bed-Rip/Disk	Rigid	6R-38	MFWD 190	23,900	300	20	0.097	1.30	1.90	0.11	0.54	3.87	0.55	3.44	7.86												
Bed-Rip/Disk	Rigid	8R-30	MFWD 190	31,300	300	20	0.139	1.86	2.71	0.21	0.78	5.58	1.03	4.92	11.53												
Bed-Rip/Disk	Rigid	8R-38	MFWD 190	31,300	300	20	0.073	0.97	1.42	0.11	0.41	2.93	0.54	2.58	6.06												
Bed-Rip/Disk	Rigid	6R-30	MFWD 190	23,900	300	20	0.123	1.65	2.41	0.14	0.69	4.90	0.69	4.36	9.96												
Bed-Rip/Disk/Cond.		6-Row	MFWD 225	20,100	150	12	0.107	1.44	2.49	0.78	0.76	5.47	1.35	4.82	11.65												
Bed-Rip/Disk/Cond.		8-Row	MFWD 225	28,700	150	12	0.080	1.08	1.87	0.83	0.57	4.36	1.45	3.62	9.44												
Bed/Disk (Hipper)		4R-38	MFWD 150	8,380	160	10	0.147	1.97	2.27	0.30	0.68	5.25	0.81	4.13	10.20												
Bed/Disk (Hipper)		6R-30	MFWD 170	15,100	160	10	0.125	1.67	2.18	0.47	0.64	4.98	1.24	4.08	10.31												
Bed/Disk (Hipper)		6R-38	MFWD 170	15,100	160	10	0.098	1.32	1.72	0.37	0.51	3.93	0.98	3.22	8.14												
Bed/Disk (Hipper)		8R-30	MFWD 190	18,100	160	10	0.093	1.25	1.83	0.42	0.52	4.04	1.12	3.32	8.48												
Bed/Disk (Hipper)		8R-38 2x1	MFWD 190	31,200	160	10	0.049	0.66	0.96	0.38	0.27	2.28	1.01	1.74	5.05												
Bed/Disk (Hipper)		12R-30	MFWD 225	31,300	160	10	0.062	0.83	1.44	0.48	0.44	3.21	1.29	2.80	7.31												
Bed/Disk (Hipper)		12R-38	MFWD 225	34,200	160	10	0.049	0.66	1.14	0.42	0.35	2.57	1.11	2.21	5.90												
Bed/Disk (Hipper)		16R40	MFWD 300	42,700	160	10	0.035	0.47	1.09	0.37	0.31	2.26	0.99	1.99	5.25												
Bed/Disk (Hipper)Fl		8R-38	MFWD 190	20,000	160	10	0.074	0.99	1.44	0.37	0.41	3.23	0.97	2.62	6.83												
Bed/Disk (Hipper)Rd		8R-38	MFWD 190	18,700	160	10	0.074	0.99	1.44	0.34	0.41	3.20	0.91	2.62	6.74												
Bed/Disk w/roller		8R-30/40	MFWD 190	28,600	160	10	0.093	1.25	1.83	0.67	0.52	4.28	1.77	3.32	9.37												
Bed/Disk w/roller		12R-30/40	MFWD 225	46,700	160	10	0.062	0.83	1.44	0.72	0.44	3.46	1.92	2.80	8.19												
Bed/Disk w/roller		8R-38	MFWD 190	28,600	160	10	0.074	0.99	1.44	0.52	0.41	3.38	1.39	2.62	7.41												
Bed/Lister		4R-38	MFWD 150	18,200	160	8	0.228	3.06	3.52	0.97	1.06	8.62	3.06	6.39	18.09												
Bed/Lister		6R-38	MFWD 150	19,600	160	8	0.120	1.61	1.85	0.55	0.55	4.57	1.73	3.36	9.68												
Bed/Lister		8R-30	MFWD 190	22,100	160	8	0.114	1.53	2.23	0.59	0.64	4.99	1.86	4.04	10.90												
Bed/Lister		8R-38	MFWD 190	27,000	160	8	0.090	1.20	1.76	0.57	0.50	4.05	1.79	3.19	9.05												
Bed/Lister		8R-38 2x1	MFWD 190	42,300	160	8	0.060	0.80	1.17	0.59	0.33	2.91	1.87	2.12	6.91												
Bed/Lister		12R-38	MFWD 225	42,300	160	8	0.060	0.80	1.39	0.59	0.42	3.22	1.87	2.69	7.79												
Bed/Lister		16R-30	MFWD 225	53,900	160	8	0.035	0.47	0.81	0.44	0.25	1.97	1.39	1.57	4.95												
Bed/Lister		16R40	MFWD 300	53,600	160	8	0.043	0.57	1.33	0.54	0.38	2.83	1.70	2.43	6.97												
Bed/Lister-Roll-Fold		8R-38	MFWD 190	24,400	160	10	0.074	0.99	1.44	0.45	0.41	3.31	1.19	2.62	7.13												
Bed/Lister-Roll-Fold		12R-30	MFWD 225	29,600	160	10	0.062	0.83	1.44	0.46	0.44	3.19	1.22	2.80	7.21												
Bed/Lister-Roll-Fold		12R-38	MFWD 225	33,800	160	10	0.049	0.66	1.14	0.41	0.35	2.57	1.10	2.21	5.88												
Bed/Lister-Roll-Fold		16R-30	MFWD 225	34,300	160	10	0.046	0.62	1.08	0.40	0.33	2.45	1.06	2.10	5.61												
Bed/Lister-Roll-Rig.		8R-38	MFWD 190	21,300	160	10	0.074	0.99	1.44	0.39	0.41	3.25	1.04	2.62	6.92												
Blade-Box		6'-7'	MFWD 105	1,100	200	20	0.020	0.26	0.21	0.01	0.03	0.53	0.00	0.22	0.76												
Blade-Box		8'-10'	MFWD 105	4,200	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	7,060	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	1,150	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												
Blade-Scraper		8'-10'	MFWD 105	3,340	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	6,700	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	3.45	5.04	1.96	1.45	11.91	3.99	9.13	25.03												
Boll Buggy		4R-38 (350)	MFWD 190	30,500	200	10	0.257	3.45	5.04	1.96	1.45	11.91	3.99	9.13	25.03												
Boll Buggy		4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.30	3.37	1.31	0.96	7.96	2.67	6.10	16.73												
Boll Buggy		6R-30 (355)	MFWD 190	30,500	200	10	0.218	2.92	4.26	1.66	1.22	10.08	3.38	7.73	21.19												
Boll Buggy		6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.30	3.37	1.31	0.96	7.96	2.67	6.10	16.73												
Chisel Plow-Folding		24'	MFWD 190	38,100	150	12	0.076	1.02	1.49	1.05	0.43	4.00	1.82	2.70	8.53												
Chisel Plow-Folding		32'	MFWD 225	49,100	150	12	0.057	0.77	1.33	1.02	0.41	3.54	1.77	2.59	7.91												
Chisel Plow-Folding		42'	MFWD 225	55,700	150	12	0.044	0.58	1.01	0.88	0.31	2.80	1.53	1.97	6.31												
Chisel Plow-Folding		50'	MFWD 225	78,400	150	10	0.036	0.49	0.85	1.25	0.26	2.87	2.04	1.65	6.57												
Chisel Plow-Folding		61'	MFWD 225	86,600	150	12	0.030	0.40	0.70	0.94	0.21	2.27	1.64	1.35	5.27												
Chisel Plow-Rigid		10'	MFWD 170	6,420	150	12	0.184	2.47	3.23	0.42	0.95	7.10	0.74	6.03	13.88												
Chisel Plow-Rigid		15'	2WD 130	11,400	150	12	0.123	1.65	1.64	0.50	0.37	4.17	0.88	2.23	7.29												
Chisel Plow-Rigid		20'	MFWD 225	13,400	150	12	0.102	1.37	2.37	0.49	0.73	4.98	0.86	4.60	10.45												
Chisel Plow-Rigid		24'	MFWD 190	13,200	150	12	0.077	1.03	1.50	0.36	0.43	3.33	0.63	2.72	6.70												
Cultivate		4R-30	2WD 105	11,700	150	10	0.206	2.76	2.22	0.64	0.42	6.05	1.69	2.53	10.28												
Cultivate		4R-38	2WD 105	11,800	150	10	0.162	2.17	1.75	0.51	0.30	4.74	1.34	1.82	7.92												
Cultivate		6R-30	MFWD 150	16,200	150	10	0.137	1.84	2.12	0.59	0.64	5.19	1.56	3.85	10.62												
Cultivate		6R-38	MFWD 150	16,500	150	10	0.108	1.45	1.67	0.47	0.50	4.11	1.26	3.04	8.41												
Cultivate		8R-30	MFWD 190	20,500	150	10	0.103	1.38	2.01	0.56	0.58	4.54	1.48	3.65	9.68												
Cultivate		8R-38	MFWD 190	21,200	150	10	0.073	0.98	1.44	0.41	0.41	3.25	1.09	2.60	6.96												
Cultivate		8R-38 2x1	MFWD 190	37,100	150	10	0.054	0.72	1.06	0.53	0.30	2.63	1.41	1.92	5.97												
Cultivate		12R-30	MFWD 225	35,300	150	10	0.068	0.92	1.59	0.64	0.48	3.65	1.70	3.08	8.44												
Cultivate		12R-38	MFWD 225	37,100	150	10	0.054	0.72	1.25	0.53	0.38	2.90	1.41	2.43	6.76												

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2016 (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	46,600	150	10	0.051	0.69	1.19	0.64	0.36	2.89	1.69	2.31	6.89
Cultivate & Post	4R-30	2WD 105	17,100	150	10	0.220	3.94	2.37	1.00	0.41	7.73	2.64	2.47	12.86
Cultivate & Post	4R-38	2WD 105	17,200	150	10	0.173	3.10	1.87	0.79	0.32	6.09	2.09	1.95	10.14
Cultivate & Post	6R-30	MFWD 150	21,600	150	10	0.146	2.62	2.26	0.84	0.68	6.42	2.23	4.10	12.76
Cultivate & Post	6R-38	MFWD 150	21,900	150	10	0.115	2.07	1.78	0.67	0.53	5.07	1.78	3.24	10.11
Cultivate & Post	8R-30	MFWD 190	25,900	150	10	0.110	1.97	2.15	0.75	0.61	5.50	2.00	3.89	11.40
Cultivate & Post	8R-38	MFWD 190	26,600	150	10	0.086	1.55	1.70	0.61	0.48	4.36	1.62	3.08	9.07
Cultivate & Post	8R-38 2x1	MFWD 190	37,900	150	10	0.057	1.03	1.13	0.58	0.32	3.08	1.54	2.05	6.67
Cultivate & Post	10R-30	MFWD 225	31,400	150	10	0.088	1.57	2.03	0.73	0.62	4.98	1.94	3.94	10.87
Cultivate & Post	12R-30	MFWD 225	40,700	150	10	0.073	1.31	1.69	0.79	0.52	4.33	2.10	3.29	9.72
Cultivate & Post	12R-38	MFWD 225	44,800	150	10	0.057	1.03	1.34	0.69	0.41	3.48	1.82	2.59	7.90
Cultivate & Post	16R-30	MFWD 225	54,300	150	10	0.055	0.98	1.27	0.79	0.39	3.44	2.10	2.46	8.01
Disk & Incorporate	14'	2WD 130	29,500	200	10	0.149	2.68	2.00	1.32	0.45	6.46	2.33	2.71	11.50
Disk & Incorporate	20'	MFWD 190	45,000	180	10	0.092	1.23	1.80	1.38	0.51	4.95	2.44	3.27	10.66
Disk & Incorporate	24'	MFWD 190	44,500	200	10	0.087	1.56	1.70	1.16	0.49	4.92	2.05	3.09	10.07
Disk & Incorporate	28'	MFWD 225	55,200	200	10	0.074	1.34	1.73	1.23	0.53	4.84	2.18	3.35	10.38
Disk & Incorporate	32'	MFWD 225	58,900	200	10	0.065	1.17	1.51	1.15	0.46	4.31	2.03	2.93	9.28
Disk Harrow	14'	2WD 130	24,100	180	10	0.140	1.88	1.87	0.93	0.42	5.11	1.98	2.54	9.64
Disk Harrow	20'	MFWD 190	39,600	180	10	0.098	1.31	1.92	1.08	0.55	4.86	2.28	3.47	10.63
Disk Harrow	24'	MFWD 190	44,500	180	10	0.081	1.09	1.60	1.01	0.46	4.16	2.13	2.89	9.20
Disk Harrow	28'	MFWD 225	49,800	180	10	0.070	0.94	1.62	0.97	0.49	4.03	2.05	3.14	9.23
Disk Harrow	32'	MFWD 225	53,500	180	10	0.061	0.82	1.42	0.91	0.43	3.59	1.92	2.75	8.27
Disk Harrow	42'	MFWD 225	98,500	180	10	0.046	0.62	1.08	1.27	0.33	3.32	2.70	2.09	8.12
Disk Harrow 40-100hp	14'	2WD 75	14,600	180	10	0.140	1.88	1.08	0.56	0.16	3.69	1.20	0.97	5.87
Disk Heavy	14'	MFWD 150	24,100	180	10	0.145	1.95	2.25	0.97	0.67	5.86	2.06	4.08	12.02
Disk Heavy	20'	MFWD 170	39,600	180	10	0.097	1.30	1.70	1.07	0.50	4.58	2.26	3.17	10.02
Disk Heavy	28'	MFWD 190	49,800	180	10	0.075	1.01	1.48	1.04	0.42	3.96	2.21	2.68	8.85
Disk Ripper	15'	MFWD 225	41,000	180	10	0.136	1.82	3.15	1.55	0.97	7.50	3.27	6.11	16.89
Ditcher		2WD 130	4,900	200	10	0.020	0.26	0.26	0.03	0.06	0.63	0.05	0.36	1.04
Ditcher (1m/160a)		2WD 130	4,900	200	10	0.009	0.12	0.12	0.01	0.02	0.29	0.02	0.16	0.49
Fert Appl (Liquid)	4R-38	MFWD 150	13,500	150	8	0.154	2.77	2.38	1.39	0.72	7.27	1.57	4.33	13.17
Fert Appl (Liquid)	6R-30	MFWD 170	11,200	150	8	0.130	2.34	2.29	0.97	0.67	6.29	1.10	4.27	11.67
Fert Appl (Liquid)	6R-38	MFWD 170	12,200	150	8	0.103	1.85	1.80	0.84	0.53	5.03	0.94	3.37	9.36
Fert Appl (Liquid)	8R-30	MFWD 190	12,200	150	8	0.098	1.76	1.92	0.79	0.55	5.03	0.90	3.47	9.41
Fert Appl (Liquid)	8R-38	MFWD 190	14,900	150	8	0.077	1.39	1.51	0.77	0.43	4.11	0.87	2.75	7.73
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,500	150	8	0.051	0.92	1.01	0.60	0.29	2.83	0.68	1.83	5.34
Fert Appl (Liquid)	12R-30	MFWD 225	17,900	150	8	0.078	1.40	1.81	0.93	0.55	4.72	1.05	3.52	9.30
Fert Appl (Liquid)	12R-38	MFWD 225	17,500	150	8	0.051	0.92	1.19	0.60	0.36	3.09	0.68	2.31	6.09
Field Cult & Inc	42'	MFWD 225	63,000	100	10	0.037	0.67	0.87	0.59	0.26	2.41	2.51	1.69	6.62
Field Cult & Inc	50'	MFWD 225	73,600	100	10	0.031	0.56	0.73	0.58	0.22	2.11	2.46	1.42	6.00
Field Cult & Inc Fld	24'	MFWD 170	32,100	100	10	0.066	1.18	1.15	0.53	0.34	3.21	2.24	2.15	7.61
Field Cult & Inc Fld	32'	MFWD 190	44,500	100	10	0.049	0.88	0.96	0.55	0.27	2.68	2.33	1.75	6.77
Field Cult & Inc Rdg	12'	2WD 150	17,500	100	10	0.132	2.37	2.04	0.57	0.44	5.43	2.44	2.68	10.56
Field Cultivate Fld	24'	MFWD 170	26,700	100	10	0.062	0.83	1.08	0.41	0.32	2.66	1.75	2.03	6.44
Field Cultivate Fld	32'	MFWD 190	39,100	100	10	0.046	0.62	0.91	0.45	0.26	2.25	1.92	1.65	5.83
Field Cultivate Fld	42'	MFWD 225	55,300	100	10	0.035	0.47	0.82	0.49	0.25	2.04	2.07	1.59	5.71
Field Cultivate Fld	50'	MFWD 225	64,300	100	10	0.029	0.40	0.69	0.48	0.21	1.78	2.02	1.33	5.15
Field Cultivate Rdg	12'	2WD 150	12,100	100	10	0.124	1.66	1.92	0.37	0.41	4.38	1.59	2.52	8.50
Grain Cart Corn	500 bu	MFWD 190	23,700	200	12	0.031	0.42	0.62	0.20	0.17	1.43	0.35	1.13	2.92
Grain Cart Corn	700 bu	MFWD 190	36,600	200	12	0.025	0.33	0.48	0.24	0.14	1.21	0.42	0.88	2.52
Grain Cart Corn	1000 bu	MFWD 225	48,600	200	12	0.025	0.33	0.57	0.32	0.17	1.42	0.57	1.12	3.11
Grain Cart Rice	500 bu	MFWD 190	23,700	200	12	0.062	0.83	1.22	0.40	0.35	2.81	0.69	2.21	5.72
Grain Cart Rice	700 bu	MFWD 190	36,600	200	12	0.055	0.73	1.07	0.54	0.30	2.66	0.94	1.94	5.56
Grain Cart Rice	1000 bu	MFWD 190	48,600	200	12	0.045	0.61	0.89	0.60	0.25	2.37	1.04	1.62	5.04
Grain Cart Soybean	500 bu	MFWD 190	23,700	200	12	0.025	0.34	0.49	0.16	0.14	1.14	0.28	0.90	2.33
Grain Cart Soybean	700 bu	MFWD 190	36,600	200	12	0.021	0.28	0.41	0.21	0.11	1.03	0.36	0.75	2.14
Grain Cart Soybean	1000 bu	MFWD 190	48,600	200	12	0.021	0.28	0.41	0.27	0.11	1.09	0.48	0.75	2.33
Grain Cart Wht/Sor	500 bu	MFWD 190	23,700	200	12	0.025	0.34	0.49	0.16	0.14	1.14	0.28	0.90	2.33
Grain Cart Wht/Sor	700 bu	MFWD 190	36,600	200	12	0.021	0.28	0.41	0.21	0.11	1.03	0.36	0.75	2.14
Grain Cart Wht/Sor	1000 bu	MFWD 190	48,600	200	12	0.021	0.28	0.41	0.27	0.11	1.09	0.48	0.75	2.33
Grain Drill	10'	2WD 130	26,500	150	8	0.188	4.23	2.52	1.87	0.56	9.20	3.58	3.41	16.19
Grain Drill	12'	2WD 130	23,500	150	8	0.157	3.52	2.10	1.38	0.47	7.49	2.64	2.84	12.98
Grain Drill	15'	MFWD 150	32,000	150	8	0.125	2.82	1.94	1.50	0.58	6.85	2.88	3.52	13.26
Grain Drill	20'	MFWD 170	38,600	150	8	0.094	2.11	1.65	1.36	0.48	5.62	2.61	3.08	11.31
Grain Drill	24'	MFWD 190	62,200	150	8	0.078	1.76	1.53	1.83	0.44	5.57	3.50	2.78	11.86
Grain Drill	30'	MFWD 225	70,300	150	8	0.062	1.41	1.45	1.65	0.44	4.97	3.16	2.82	10.96
Grain Drill	35'	MFWD 225	86,900	150	8	0.053	1.21	1.24	1.75	0.38	4.59	3.35	2.41	10.37
Grain Drill & Pre	10'	2WD 130	31,900	150	8	0.203	4.56	2.71	2.42	0.61	10.31	4.64	3.67	18.64
Grain Drill & Pre	12'	2WD 130	28,900	150	8	0.169	3.80	2.26	1.83	0.50	8.40	3.50	3.06	14.98
Grain Drill & Pre	15'	MFWD 150	37,400	150	8	0.135	3.04	2.09	1.89	0.63	7.66	3.63	3.79	15.08
Grain Drill & Pre	20'	MFWD 170	44,000	150	8	0.101	2.28	1.77	1.67	0.52	6.25	3.20	3.31	12.78
Grain Drill & Pre	24'	MFWD 190	67,600	150	8	0.084	1.90	1.65	2.14	0.47	6.17	4.10	2.99	13.27
Grain Drill & Pre	30'	MFWD 225	78,000	150	8	0.067	1.52	1.56	1.97	0.48	5.55	3.78	3.03	12.37
Grain Drill & Pre	35'	MFWD 225	94,600	150	8	0.058	1.30	1.34	2.05	0.41	5.11	3.93	2.60	11.65
Grain Drill & Pre T	8R-38	MFWD 225	45,000	150	8	0.062	1.41	1.45	1.06	0.44	4.37	2.02	2.82	9.22
Harrow - Rigid	21'	2WD 150	6,390	200	10	0.073	0.99	1.14	0.16	0.24	2.54	0.24	1.50	4.29
Harrow - Folding	24'	MFWD 190	12,400	200	10	0.064	0.86	1.26	0.28	0.36	2.77	0.42	2.29	5.49
Harrow - Folding	30'	MFWD 190	14,900	200	10	0.051	0.69	1.01	0.26	0.29	2.26	0.40	1.83	4.50
Harrow - Folding	40'	MFWD 190	17,000	200	10	0.038	0.52	0.75	0.23	0.21	1.72	0.34	1.37	3.45

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2016 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---	Total Imp. P.U.	Direct	--Fixed-- Imp. P.U.	Total Cost	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Harrow - Folding	48'	MFWD 225	22,600	200	10	0.032	0.43	0.74	0.25	0.23	1.66	0.38	1.45	3.50
Harrow - Rigid	13'	2WD 130	4,680	200	10	0.119	1.60	1.59	0.19	0.35	3.75	0.29	2.16	6.21
Header - Corn	6R-30	265 hp	45,500	300	8	0.170	2.28	4.64	1.93	5.58	14.45	2.91	22.04	39.41
Header - Corn	6R-38	265 hp	46,300	300	8	0.134	1.80	3.66	1.55	4.41	11.43	2.34	17.40	31.18
Header - Corn	8R-30	265 hp	58,100	300	8	0.127	1.71	3.48	1.85	4.19	11.24	2.79	16.53	30.56
Header - Corn	8R-38	325 hp	59,200	300	8	0.100	1.35	3.37	1.49	3.49	9.71	2.24	13.77	25.74
Header - Corn	12R-20	325 hp	77,300	300	8	0.127	1.71	4.27	2.46	4.41	12.86	3.71	17.42	34.00
Header - Corn	12R-30	325 hp	90,900	300	8	0.085	1.14	2.84	1.93	2.94	8.86	2.91	11.61	23.39
Header - Draper (CL)	25' Rigid	265 hp	57,700	300	8	0.203	2.72	5.54	2.68	6.66	17.61	4.20	26.29	48.10
Header - Draper (CL)	30' Rigid	325 hp	66,300	300	8	0.169	2.26	5.66	2.57	5.85	16.35	4.02	23.09	43.47
Header - Draper (CL)	36' Rigid	355 hp	70,400	300	8	0.141	1.88	5.15	2.27	4.87	14.19	3.56	19.24	37.00
Header - Draper (SL)	25' Rigid	325 hp	57,700	300	8	0.176	2.35	5.88	2.32	6.08	16.66	3.64	24.01	44.32
Header - Draper (SL)	30' Rigid	325 hp	66,300	300	8	0.146	1.96	4.90	2.22	5.07	14.17	3.48	20.01	37.67
Header - Draper (SL)	36' Rigid	355 hp	70,400	300	8	0.122	1.63	4.46	1.97	4.22	12.30	3.08	16.67	32.06
Header - Rice (CL)	25' Rigid	325 hp	64,400	300	8	0.253	3.40	8.49	4.08	8.77	24.76	6.14	34.63	65.54
Header - Rice (CL)	30' Rigid	325 hp	74,100	300	8	0.211	2.83	7.07	3.91	7.31	21.14	5.89	28.86	55.90
Header - Rice (SL)	25' Rigid	325 hp	64,400	300	8	0.220	2.94	7.36	3.54	7.60	21.45	5.32	30.02	56.80
Header - Rice (SL)	30' Rigid	325 hp	74,100	300	8	0.183	2.45	6.13	3.39	6.34	18.32	5.10	25.01	48.45
Header -RiceStrp (CL)	20'	265 hp	48,600	300	8	0.253	3.40	6.92	3.08	8.32	21.74	4.64	32.86	59.24
Header -RiceStrp (CL)	24'	325 hp	53,300	300	8	0.211	2.83	7.07	2.81	7.31	20.04	4.24	28.86	53.15
Header -RiceStrp (CL)	32'	325 hp	58,900	300	8	0.158	2.12	5.30	2.33	5.48	15.25	3.51	21.64	40.42
Header -RiceStrp (SL)	20'	265 hp	48,600	300	8	0.220	2.94	6.00	2.67	7.21	18.84	4.02	28.48	51.34
Header -RiceStrp (SL)	24'	325 hp	53,300	300	8	0.183	2.45	6.13	2.44	6.34	17.37	3.67	25.01	46.06
Header -RiceStrp (SL)	32'	325 hp	58,700	300	8	0.137	1.84	4.60	2.01	4.75	13.21	3.03	18.76	35.01
Header -Soybean	22' Flex	265 hp	31,300	300	8	0.116	1.55	3.16	0.90	3.80	9.44	1.36	15.03	25.83
Header -Soybean	25' Flex	325 hp	34,400	300	8	0.102	1.36	3.41	0.87	3.53	9.19	1.32	13.94	24.46
Header -Soybean	30' Flex	325 hp	30,200	300	8	0.085	1.14	2.84	0.64	2.94	7.57	0.96	11.61	20.16
Header -Soybean	35' Flex	355 hp	46,400	300	8	0.072	0.97	2.66	0.84	2.52	7.01	1.27	9.95	18.24
Header Wheat/Sorghum	22' Rigid	265 hp	18,200	300	8	0.116	1.55	3.16	0.52	3.80	9.06	0.79	15.03	24.88
Header Wheat/Sorghum	25' Rigid	325 hp	28,100	300	8	0.102	1.36	3.41	0.71	3.53	9.03	1.07	13.94	24.06
Header Wheat/Sorghum	30' Rigid	325 hp	31,000	300	8	0.085	1.14	2.84	0.65	2.94	7.59	0.99	11.61	20.20
Land Plane	50'x16'	MFWD 190	14,600	200	10	0.151	2.03	2.96	0.44	0.85	6.29	1.16	5.37	12.83
Levee Pull & Seed	8 Blade	MFWD 170	10,400	100	10	0.003	0.04	0.06	0.00	0.01	0.13	0.03	0.11	0.29
Levee Pull (1m/80a)	8 blade	MFWD 170	7,180	100	10	0.003	0.04	0.06	0.00	0.01	0.13	0.02	0.11	0.27
Levee Splitter (1/80)	32"	MFWD 150	7,180	100	10	0.004	0.05	0.06	0.00	0.01	0.14	0.03	0.11	0.29
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	5.78	5.04	2.23	1.45	14.51	4.54	9.13	28.19
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	5.78	5.04	2.23	1.45	14.51	4.54	9.13	28.19
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	3.87	3.37	1.49	0.96	9.70	3.03	6.10	18.84
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	4.90	4.26	1.89	1.22	12.29	3.85	7.73	23.87
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	3.87	3.37	1.49	0.96	9.70	3.03	6.10	18.84
NT Grain Drill	10'	2WD 130	34,200	150	8	0.235	5.29	3.15	3.02	0.70	12.18	5.78	4.26	22.23
NT Grain Drill	12'	2WD 130	41,600	150	8	0.163	3.67	2.19	2.55	0.49	8.91	4.88	2.96	16.76
NT Grain Drill	15'	MFWD 150	49,000	150	8	0.130	2.94	2.02	2.40	0.60	7.97	4.60	3.66	16.25
NT Grain Drill	20'	MFWD 170	65,200	150	8	0.098	2.20	1.71	2.40	0.50	6.83	4.59	3.20	14.63
NT Grain Drill	24'	MFWD 190	82,400	150	8	0.081	1.83	1.60	2.52	0.46	6.42	4.83	2.89	14.16
NT Grain Drill	30'	MFWD 225	94,200	150	8	0.065	1.47	1.51	2.31	0.46	5.76	4.42	2.93	13.12
NT Grain Drill & Pre	10'	2WD 130	39,600	150	8	0.211	4.75	2.83	3.14	0.63	11.36	6.00	3.83	21.20
NT Grain Drill & Pre	12'	2WD 130	47,000	150	8	0.176	3.95	2.35	3.10	0.53	9.95	5.94	3.19	19.09
NT Grain Drill & Pre	15'	MFWD 150	54,400	150	8	0.141	3.16	2.17	2.87	0.65	8.87	5.50	3.95	18.33
NT Grain Drill & Pre	20'	MFWD 170	70,600	150	8	0.105	2.37	1.85	2.80	0.54	7.57	5.35	3.45	16.38
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.97	1.72	2.90	0.49	7.10	5.55	3.12	15.77
NT Grain Drill & Pre	30'	MFWD 225	102,000	150	8	0.070	1.58	1.63	2.69	0.50	6.41	5.15	3.16	14.73
NT Plant&Pre-Folding	8R-38	MFWD 170	51,600	150	8	0.083	1.87	1.46	1.61	0.43	5.39	3.09	2.73	11.21
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	84,200	150	8	0.055	1.25	0.97	1.75	0.28	4.27	3.36	1.81	9.45
NT Plant&Pre-Folding	12R-20	MFWD 190	73,000	150	8	0.105	2.37	2.06	2.89	0.59	7.93	5.53	3.74	17.21
NT Plant&Pre-Folding	12R-30	MFWD 190	75,900	150	8	0.070	1.58	1.37	2.00	0.39	5.36	3.83	2.49	11.70
NT Plant&Pre-Folding	12R-38	MFWD 190	84,200	150	8	0.055	1.25	1.08	1.75	0.31	4.41	3.36	1.97	9.74
NT Plant&Pre-Folding	16R-30	MFWD 190	102,000	150	8	0.052	1.18	1.03	2.02	0.29	4.54	3.86	1.87	10.28
NT Plant&Pre-Folding	23R-15	MFWD 190	136,000	150	8	0.073	1.64	1.43	3.74	0.41	7.24	7.16	2.60	17.01
NT Plant&Pre-Folding	24R-15	MFWD 225	143,000	150	8	0.070	1.58	1.63	3.78	0.50	7.50	7.23	3.16	17.89
NT Plant&Pre-Folding	24R-20	MFWD 190	158,000	150	8	0.052	1.18	1.03	3.13	0.29	5.65	5.99	1.87	13.51
NT Plant&Pre-Folding	24R-30	MFWD 190	185,000	150	8	0.035	0.79	0.68	2.44	0.19	4.12	4.67	1.24	10.05
NT Plant&Pre-Folding	31R-15	MFWD 225	156,000	150	8	0.054	1.22	1.26	3.19	0.38	6.08	6.11	2.45	14.64
NT Plant&Pre-Folding	32R-15	MFWD 225	175,000	150	8	0.052	1.18	1.22	3.47	0.37	6.25	6.63	2.37	15.27
NT Plant&Pre-Rigid	4R-30	2WD 130	27,100	150	8	0.211	4.75	2.83	2.14	0.63	10.36	4.11	3.83	18.31
NT Plant&Pre-Rigid	4R-38	2WD 130	29,700	150	8	0.166	3.74	2.22	1.85	0.50	8.32	3.54	3.01	14.89
NT Plant&Pre-Rigid	6R-30	MFWD 150	38,200	150	8	0.141	3.16	2.17	2.02	0.65	8.02	3.86	3.95	15.83
NT Plant&Pre-Rigid	6R-38	MFWD 150	34,200	150	8	0.111	2.50	1.71	1.42	0.51	6.16	2.73	3.11	12.01
NT Plant&Pre-Rigid	8R-30	MFWD 170	43,600	150	8	0.105	2.37	1.85	1.72	0.54	6.50	3.30	3.45	13.26
NT Plant&Pre-Rigid	8R-38	MFWD 170	41,300	150	8	0.083	1.87	1.46	1.29	0.43	5.06	2.47	2.73	10.27
NT Plant&Pre-Rigid	10R-30	MFWD 190	49,000	150	8	0.084	1.90	1.65	1.55	0.47	5.58	2.97	2.99	11.55
NT Plant&Pre-Rigid	11R-15	MFWD 170	53,000	150	8	0.143	3.23	2.51	2.86	0.74	9.35	5.47	4.70	19.52
NT Plant&Pre-Rigid	11R-20	MFWD 170	48,400	150	8	0.115	2.59	2.02	2.09	0.59	7.31	4.01	3.77	15.10
NT Plant&Pre-Rigid	12R-20	MFWD 190	53,000	150	8	0.105	2.37	2.06	2.10	0.59	7.14	4.02	3.74	14.90
NT Plant&Pre-Rigid	12R-30	MFWD 190	69,300	150	8	0.070	1.58	1.37	1.83	0.39	5.19	3.50	2.49	11.19
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	59,300	150	8	0.097	2.18	2.25	2.16	0.69	7.30	4.14	4.37	15.82
NT Plant&Pre-Rigid	15R-15	MFWD 190	65,600	150	8	0.113	2.54	2.21	2.78	0.63	8.17	5.32	4.00	17.50
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	143,000	150	8	0.055	1.25	1.28	2.98	0.39	5.92	5.71	2.49	14.12

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2016 (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&Pre-TwinRow	8R-30/40	MFWD 225	123,000	150	8	0.083	1.87	1.93	3.85	0.59	8.26	7.37	3.75	19.39
NT Plant-Folding	8R-38	MFWD 170	42,600	150	8	0.077	1.74	1.35	1.24	0.40	4.74	2.37	2.53	9.65
NT Plant-Folding	8R-38 2x1	MFWD 170	71,100	150	8	0.051	1.16	0.90	1.37	0.26	3.71	2.63	1.68	8.03
NT Plant-Folding	12R-20	MFWD 190	62,200	150	8	0.098	2.20	1.92	2.29	0.55	6.96	4.38	3.47	14.83
NT Plant-Folding	12R-30	MFWD 190	62,800	150	8	0.065	1.47	1.28	1.54	0.36	4.66	2.94	2.31	9.93
NT Plant-Folding	12R-38	MFWD 190	71,100	150	8	0.051	1.16	1.01	1.37	0.29	3.84	2.63	1.83	8.30
NT Plant-Folding	16R-30	MFWD 190	87,400	150	8	0.049	1.10	0.96	1.60	0.27	3.94	3.07	1.73	8.76
NT Plant-Folding	23R-15	MFWD 190	118,000	150	8	0.068	1.53	1.33	3.01	0.38	6.26	5.77	2.41	14.45
NT Plant-Folding	24R-15	MFWD 225	124,000	150	8	0.065	1.47	1.51	3.04	0.46	6.49	5.82	2.93	15.26
NT Plant-Folding	24R-20	MFWD 190	140,000	150	8	0.049	1.10	0.96	2.57	0.27	4.91	4.93	1.73	11.58
NT Plant-Folding	24R-30	MFWD 190	165,000	150	8	0.032	0.73	0.64	2.02	0.18	3.58	3.87	1.15	8.62
NT Plant-Folding	31R-15	MFWD 225	135,000	150	8	0.050	1.14	1.17	2.56	0.36	5.24	4.91	2.27	12.44
NT Plant-Folding	32R-15	MFWD 225	152,000	150	8	0.049	1.10	1.13	2.79	0.34	5.38	5.35	2.20	12.94
NT Plant-Rigid	4R-30	2WD 130	21,700	150	8	0.196	4.41	2.62	1.59	0.59	9.23	3.05	3.55	15.84
NT Plant-Rigid	4R-38	2WD 130	22,500	150	8	0.154	3.47	2.06	1.30	0.46	7.31	2.49	2.80	12.61
NT Plant-Rigid	6R-30	MFWD 150	30,100	150	8	0.130	2.94	2.02	1.47	0.60	7.05	2.82	3.66	13.54
NT Plant-Rigid	6R-38	MFWD 150	26,200	150	8	0.103	2.32	1.59	1.01	0.48	5.41	1.94	2.89	10.25
NT Plant-Rigid	8R-30	MFWD 170	34,600	150	8	0.098	2.20	1.71	1.27	0.50	5.70	2.43	3.20	11.35
NT Plant-Rigid	8R-38	MFWD 170	32,300	150	8	0.077	1.74	1.35	0.94	0.40	4.44	1.79	2.53	8.78
NT Plant-Rigid	10R-30	MFWD 190	39,100	150	8	0.078	1.76	1.53	1.15	0.44	4.89	2.20	2.78	9.88
NT Plant-Rigid	11R-15	MFWD 170	42,600	150	8	0.133	3.00	2.33	2.13	0.69	8.16	4.08	4.36	16.61
NT Plant-Rigid	11R-20	MFWD 170	38,100	150	8	0.107	2.41	1.87	1.53	0.55	6.37	2.93	3.50	12.81
NT Plant-Rigid	12R-20	MFWD 190	42,200	150	8	0.098	2.20	1.92	1.55	0.55	6.23	2.97	3.47	12.68
NT Plant-Rigid	12R-30	MFWD 190	56,200	150	8	0.065	1.47	1.28	1.37	0.36	4.49	2.63	2.31	9.45
NT Plant-Rigid	13R-18/20	MFWD 225	48,100	150	8	0.090	2.04	2.10	1.64	0.64	6.43	3.13	4.08	13.65
NT Plant-Rigid	15R-15	MFWD 190	53,500	150	8	0.105	2.35	2.05	2.10	0.59	7.11	4.03	3.72	14.86
NT Plant-TwinRow	12R-30/40	MFWD 225	124,000	150	8	0.051	1.16	1.19	2.40	0.36	5.13	4.59	2.31	12.04
NT Plant-TwinRow	8R-30/40	MFWD 225	110,000	150	8	0.077	1.74	1.79	3.20	0.55	7.29	6.12	3.48	16.90
Peanut Cond.& Lifter	6-Row	MFWD 190	12,900	300	20	0.100	1.34	1.95	0.21	0.56	4.07	0.31	3.54	7.93
Peanut Conditioner	6-Row	MFWD 190	14,900	300	20	0.100	1.34	1.95	0.29	0.56	4.15	0.32	3.54	8.02
Peanut Dig/Invertor	4R-30	MFWD 190	28,900	300	15	0.235	3.16	4.61	1.69	1.32	10.79	2.03	8.35	21.18
Peanut Dig/Invertor	4R-38	MFWD 190	28,900	300	15	0.186	2.49	3.64	1.33	1.04	8.52	1.60	6.59	16.72
Peanut Dig/Invertor	6R-38	MFWD 190	42,100	300	15	0.124	1.66	2.42	0.91	0.69	5.70	1.55	4.39	11.65
Peanut Dump Cart	6-Row	MFWD 190	46,900	300	20	0.310	4.15	6.06	0.84	1.74	12.80	3.44	10.98	27.23
Peanut Harvester	4R-30	MFWD 225	130,000	300	20	0.849	11.38	19.68	6.26	6.05	43.39	23.98	38.13	105.51
Peanut Harvester	4R-38	MFWD 225	130,000	300	20	0.934	12.52	21.64	6.88	6.65	47.71	27.59	41.93	117.24
Peanut Harvester	6R-38	MFWD 225	143,000	300	20	0.625	8.37	14.47	4.31	4.45	31.62	20.30	28.04	79.96
Peanut Lifter	6-Row	MFWD 225	6,300	300	20	0.100	1.34	2.31	0.13	0.71	4.49	0.13	4.48	9.12
Peanut Plt&Pre Fold.	12R-38	MFWD 190	78,800	150	8	0.080	1.80	1.57	2.37	0.45	6.20	4.54	2.84	13.60
Peanut Plt&Pre Rigid	8R-30	MFWD 190	40,000	150	8	0.152	3.43	2.98	2.29	0.85	9.57	4.38	5.41	19.36
Peanut Plt&Pre Rigid	8R-38	MFWD 190	37,700	150	8	0.120	2.71	2.36	1.70	0.67	7.46	3.26	4.27	15.00
Pipe Spool 160ac	1/4m roll	2WD 130	3,640	15	12	0.003	0.09	0.04	0.00	0.00	0.15	0.07	0.05	0.28
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.18	0.05	0.00	0.01	0.24	0.00	0.06	0.32
Plant & Pre-Folding	8R-38	MFWD 170	48,000	150	8	0.080	1.80	1.40	1.44	0.41	5.06	2.76	2.62	10.45
Plant & Pre-Folding	8R-38 2x1	MFWD 170	78,800	150	8	0.053	1.20	0.93	1.57	0.27	3.99	3.02	1.74	8.75
Plant & Pre-Folding	12R-20	MFWD 190	67,600	150	8	0.101	2.28	1.98	2.57	0.57	7.41	4.92	3.59	15.93
Plant & Pre-Folding	12R-30	MFWD 190	70,500	150	8	0.067	1.52	1.32	1.78	0.38	5.01	3.42	2.39	10.83
Plant & Pre-Folding	12R-38	MFWD 190	78,800	150	8	0.053	1.20	1.04	1.57	0.30	4.12	3.02	1.89	9.03
Plant & Pre-Folding	16R-30	MFWD 190	95,100	150	8	0.050	1.14	0.99	1.81	0.28	4.22	3.46	1.79	9.49
Plant & Pre-Folding	23R-15	MFWD 190	126,000	150	8	0.070	1.58	1.37	3.33	0.39	6.69	6.37	2.49	15.56
Plant & Pre-Folding	24R-15	MFWD 225	132,000	150	8	0.067	1.52	1.56	3.35	0.48	6.92	6.40	3.03	16.36
Plant & Pre-Folding	24R-20	MFWD 190	147,000	150	8	0.050	1.14	0.99	2.79	0.28	5.21	5.35	1.79	12.36
Plant & Pre-Folding	24R-30	MFWD 190	175,000	150	8	0.033	0.76	0.66	2.22	0.19	3.83	4.24	1.19	9.28
Plant & Pre-Folding	31R-15	MFWD 225	142,000	150	8	0.052	1.17	1.21	2.79	0.37	5.56	5.34	2.35	13.26
Plant & Pre-Folding	32R-15	MFWD 225	160,000	150	8	0.050	1.14	1.17	3.04	0.36	5.72	5.82	2.27	13.82
Plant & Pre-Rigid	4R-30	2WD 130	25,300	150	8	0.203	4.56	2.71	1.92	0.61	9.81	3.68	3.67	17.18
Plant & Pre-Rigid	4R-38	2WD 130	27,900	150	8	0.159	3.59	2.13	1.67	0.48	7.88	3.20	2.89	13.98
Plant & Pre-Rigid	6R-30	MFWD 150	35,500	150	8	0.135	3.04	2.09	1.80	0.63	7.56	3.44	3.79	14.80
Plant & Pre-Rigid	6R-38	MFWD 150	31,500	150	8	0.106	2.40	1.65	1.26	0.49	5.81	2.41	2.99	11.22
Plant & Pre-Rigid	8R-30	MFWD 170	40,000	150	8	0.101	2.28	1.77	1.52	0.52	6.10	2.91	3.31	12.33
Plant & Pre-Rigid	8R-38	MFWD 170	37,700	150	8	0.080	1.80	1.40	1.13	0.41	4.75	2.17	2.62	9.55
Plant & Pre-Rigid	10R-30	MFWD 190	44,500	150	8	0.081	1.82	1.58	1.35	0.45	5.22	2.59	2.87	10.69
Plant & Pre-Rigid	11R-15	MFWD 170	48,000	150	8	0.148	3.32	2.59	2.66	0.76	9.36	5.10	4.84	19.30
Plant & Pre-Rigid	11R-20	MFWD 170	43,500	150	8	0.110	2.49	1.94	1.81	0.57	6.82	3.46	3.62	13.90
Plant & Pre-Rigid	12R-20	MFWD 190	47,600	150	8	0.101	2.28	1.98	1.81	0.57	6.65	3.46	3.59	13.71
Plant & Pre-Rigid	12R-30	MFWD 190	63,900	150	8	0.067	1.52	1.32	1.62	0.38	4.84	3.10	2.39	10.34
Plant & Pre-Rigid	13R-18/20	MFWD 225	53,500	150	8	0.093	2.10	2.16	1.87	0.66	6.81	3.59	4.19	14.60
Plant & Pre-Rigid	15R-15	MFWD 190	58,900	150	8	0.108	2.43	2.12	2.39	0.61	7.57	4.58	3.84	16.00
Plant & Pre-TwinRow	12R-30/40	MFWD 225	132,000	150	8	0.053	1.20	1.23	2.64	0.38	5.46	5.05	2.39	12.92
Plant & Pre-TwinRow	8R-30/40	MFWD 225	116,000	150	8	0.080	1.80	1.85	3.49	0.57	7.72	6.67	3.60	18.00
Plant - Folding	8R-38	MFWD 170	42,600	150	8	0.074	1.67	1.30	1.19	0.38	4.55	2.27	2.43	9.26
Plant - Folding	8R-38 2x1	MFWD 170	71,100	150	8	0.049	1.11	0.86	1.32	0.25	3.56	2.53	1.62	7.71
Plant - Folding	12R-20	MFWD 190	62,200	150	8	0.094	2.11	1.84	2.19	0.53	6.69	4.20	3.33	14.23
Plant - Folding	12R-30	MFWD 190	62,800	150	8	0.062	1.41	1.22	1.48	0.35	4.47	2.83	2.22	9.53
Plant - Folding	12R-38	MFWD 190	71,100	150	8	0.049	1.11	0.97	1.32	0.27	3.68	2.53	1.75	7.97
Plant - Folding	16R-30	MFWD 190	87,400	150	8	0.047	1.05	0.92	1.54	0.26	3.79	2.95	1.66	8.41
Plant - Folding	23R-15	MFWD 190	118,000	150	8	0.065	1.47	1.28	2.89	0.36	6.01	5.54	2.31	13.87
Plant - Folding	24R-15	MFWD 225	124,000	150	8	0.062	1.41	1.45	2.92	0.44	6.23	5.59	2.82	14.65

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2016 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/acre	-----\$/acre-----							
Plant - Folding	24R-20	MFWD 190	140,000	150	8	0.047	1.05	0.92	2.47	0.26	4.72	4.73	1.66	11.12
Plant - Folding	24R-30	MFWD 190	165,000	150	8	0.031	0.70	0.61	1.94	0.17	3.44	3.71	1.11	8.27
Plant - Folding	31R-15	MFWD 225	135,000	150	8	0.048	1.09	1.12	2.46	0.34	5.03	4.71	2.18	11.94
Plant - Folding	32R-15	MFWD 225	152,000	150	8	0.047	1.05	1.09	2.68	0.33	5.17	5.13	2.11	12.42
Plant - Rigid	4R-30	2WD 130	19,900	150	8	0.188	4.23	2.52	1.40	0.56	8.73	2.69	3.41	14.84
Plant - Rigid	4R-38	2WD 130	22,500	150	8	0.148	3.33	1.98	1.25	0.44	7.02	2.39	2.68	12.10
Plant - Rigid	6R-30	MFWD 150	30,100	150	8	0.125	2.82	1.94	1.41	0.58	6.76	2.71	3.52	13.00
Plant - Rigid	6R-38	MFWD 150	26,200	150	8	0.099	2.22	1.53	0.97	0.46	5.19	1.86	2.78	9.84
Plant - Rigid	8R-30	MFWD 170	34,600	150	8	0.094	2.11	1.65	1.22	0.48	5.48	2.34	3.08	10.90
Plant - Rigid	8R-38	MFWD 170	32,300	150	8	0.074	1.67	1.30	0.90	0.38	4.26	1.72	2.43	8.42
Plant - Rigid	10R-30	MFWD 190	39,100	150	8	0.075	1.69	1.47	1.10	0.42	4.69	2.11	2.67	9.48
Plant - Rigid	11R-15	MFWD 170	42,600	150	8	0.137	3.09	2.40	2.19	0.71	8.41	4.20	4.49	17.11
Plant - Rigid	11R-20	MFWD 170	38,100	150	8	0.103	2.31	1.80	1.47	0.53	6.12	2.81	3.36	12.30
Plant - Rigid	12R-20	MFWD 190	42,200	150	8	0.094	2.11	1.84	1.49	0.53	5.98	2.85	3.33	12.17
Plant - Rigid	12R-30	MFWD 190	56,200	150	8	0.062	1.41	1.22	1.32	0.35	4.31	2.53	2.22	9.08
Plant - Rigid	13R-18/20	MFWD 225	48,100	150	8	0.086	1.95	2.01	1.56	0.61	6.15	2.99	3.89	13.04
Plant - Rigid	15R-15	2WD 150	53,500	150	8	0.094	2.11	1.45	1.89	0.31	5.78	3.61	1.91	11.31
Plant - TwinRow	12R-30/40	MFWD 225	124,000	150	8	0.049	1.11	1.14	2.30	0.35	4.92	4.41	2.22	11.56
Plant - TwinRow	8R-30/40	MFWD 225	110,000	150	8	0.074	1.67	1.72	3.07	0.53	7.00	5.88	3.34	16.23
Roller/Cultipacker	12'	2WD 130	6,520	300	12	0.124	1.66	1.66	0.19	0.37	3.89	0.26	2.25	6.41
Roller/Cultipacker	20'	MFWD 150	17,000	300	12	0.074	1.00	1.15	0.29	0.34	2.80	0.41	2.09	5.30
Roller/Cultipacker	30'	MFWD 170	18,600	300	12	0.049	0.66	0.87	0.21	0.25	2.01	0.29	1.62	3.94
Roller/Cultipacker	38'	MFWD 225	19,700	300	12	0.039	0.52	0.91	0.18	0.28	1.89	0.25	1.76	3.91
Roller/Stubble	20'	2WD 50	13,500	300	12	0.074	1.00	0.38	0.23	0.04	1.66	0.32	0.25	2.25
Roller/Stubble	32'	MFWD 225	22,800	300	12	0.046	0.62	1.08	0.25	0.33	2.28	0.34	2.09	4.72
Rotary Cutter	7'	MFWD 130	4,100	185	10	0.168	2.25	2.25	0.55	0.61	5.67	0.39	3.67	9.74
Rotary Cutter	12'	2WD 150	12,000	185	10	0.098	1.31	1.51	0.95	0.33	4.11	0.67	1.99	6.78
Rotary Cutter-Flex	15'	MFWD 150	14,900	185	10	0.078	1.05	1.21	0.94	0.36	3.58	0.66	2.20	6.45
Rotary Cutter-Flex	20'	MFWD 150	19,300	185	10	0.058	0.78	0.90	0.92	0.27	2.89	0.64	1.65	5.19
Row Cond & Inc-Fold.	26'	MFWD 190	24,700	100	10	0.063	1.13	1.24	0.39	0.35	3.12	1.65	2.24	7.03
Row Cond & Inc-Fold.	38'	MFWD 225	32,200	100	10	0.043	0.77	1.00	0.34	0.30	2.44	1.47	1.94	5.86
Row Cond & Inc-Rigid	13'	2WD 130	13,100	100	10	0.126	2.27	1.69	0.41	0.38	4.77	1.75	2.29	8.82
Row Cond & Inc-Rigid	21'	2WD 170	16,500	100	10	0.078	1.40	1.37	0.32	0.29	3.40	1.36	1.83	6.60
Row Cond & Inc-Rigid	26'	MFWD 190	19,400	100	10	0.026	0.47	0.52	0.12	0.14	1.27	0.54	0.94	2.76
Row Cond Folding	26'	MFWD 225	19,300	100	10	0.059	0.80	1.38	0.28	0.42	2.89	1.21	2.67	6.79
Row Cond Folding	38'	MFWD 225	24,500	100	10	0.040	0.54	0.94	0.25	0.29	2.03	1.05	1.83	4.92
Row Cond Rigid	13'	2WD 130	7,700	100	10	0.119	1.60	1.59	0.22	0.35	3.78	0.97	2.16	6.92
Row Cond Rigid	21'	2WD 170	11,100	100	10	0.073	0.99	1.29	0.20	0.27	2.76	0.86	1.73	5.36
Row Cond Rigid	26'	MFWD 190	14,100	100	10	0.059	0.80	1.16	0.21	0.33	2.51	0.88	2.11	5.52
Row Cond./Roll-Fold.	26'	MFWD 190	28,200	160	10	0.072	0.96	1.41	0.50	0.40	3.29	1.34	2.55	7.18
Row Cond./Roll-Fold.	30'	MFWD 190	32,500	160	10	0.062	0.83	1.22	0.50	0.35	2.91	1.34	2.21	6.47
Row Cond./Roll-Fold.	40'	MFWD 225	33,800	160	10	0.046	0.62	1.08	0.39	0.33	2.44	1.04	2.10	5.59
Row Cond./Roll-Rigid	21'	MFWD 190	24,300	160	10	0.089	1.19	1.74	0.54	0.50	3.98	1.43	3.16	8.58
Row Cond./Roll-Rigid	26'	MFWD 190	25,100	160	10	0.072	0.96	1.41	0.45	0.40	3.23	1.19	2.55	6.98
Spin Spreader	5 ton	MFWD 190	12,200	200	8	0.042	0.94	0.82	0.28	0.23	2.29	0.57	1.49	4.36
Spray (ATV)	12'/17'	800 CC	2,210	200	8	0.112	2.02	0.17	0.11	0.17	2.49	0.14	0.68	3.32
Spray (ATV)	20'	800 CC	1,920	200	8	0.084	1.51	0.13	0.07	0.13	1.85	0.09	0.51	2.46
Spray (Band)	27' Fold	MFWD 170	5,390	200	8	0.062	1.12	1.09	0.15	0.32	2.70	0.19	2.04	4.94
Spray (Band)	40' Fold	MFWD 170	7,700	200	8	0.042	0.75	0.74	0.15	0.21	1.87	0.18	1.38	3.43
Spray (Band)	50' Fold	MFWD 170	6,800	200	8	0.033	0.60	0.59	0.10	0.17	1.48	0.12	1.10	2.71
Spray (Band)	53' Fold	MFWD 170	9,300	200	8	0.031	0.57	0.55	0.13	0.16	1.43	0.16	1.04	2.64
Spray (Band)	60' Fold	MFWD 170	18,400	200	8	0.028	0.50	0.49	0.24	0.14	1.38	0.29	0.92	2.60
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,380	200	8	0.130	2.33	2.01	0.32	0.60	5.27	0.39	3.64	9.32
Spray (Bcast/HB)	20' Rigid	MFWD 150	6,340	200	8	0.084	1.51	1.30	0.25	0.39	3.46	0.30	2.37	6.14
Spray (Bcast/HB)	27' Fold	MFWD 170	13,200	200	8	0.062	1.12	1.09	0.38	0.32	2.93	0.46	2.04	5.44
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,680	200	8	0.062	1.12	1.09	0.22	0.32	2.77	0.27	2.04	5.09
Spray (Bcast/HB)	30' Fold	MFWD 170	20,300	200	8	0.056	1.01	0.98	0.53	0.29	2.82	0.64	1.84	5.31
Spray (Bcast/HB)	40' Fold	MFWD 170	21,000	200	8	0.042	0.75	0.74	0.41	0.21	2.13	0.50	1.38	4.01
Spray (Broadcast)	27'	MFWD 170	5,390	200	8	0.062	1.12	1.09	0.15	0.32	2.70	0.19	2.04	4.94
Spray (Broadcast)	40'	MFWD 170	7,700	200	8	0.042	0.75	0.74	0.15	0.21	1.87	0.18	1.38	3.43
Spray (Broadcast)	50'	MFWD 170	6,800	200	8	0.033	0.60	0.59	0.10	0.17	1.48	0.12	1.10	2.71
Spray (Broadcast)	53'	MFWD 170	9,300	200	8	0.031	0.57	0.55	0.13	0.16	1.43	0.16	1.04	2.64
Spray (Broadcast)	60'	MFWD 170	18,400	200	8	0.028	0.50	0.49	0.24	0.14	1.38	0.29	0.92	2.60
Spray (Direct/Hood)	8R-30	MFWD 170	18,000	200	8	0.084	1.51	1.48	0.71	0.43	4.15	0.85	2.76	7.77
Spray (Direct/Hood)	8R-38	MFWD 170	24,900	200	8	0.066	1.19	1.17	0.78	0.34	3.49	0.93	2.18	6.62
Spray (Direct/Hood)	12R-30	MFWD 170	26,100	200	8	0.056	1.01	0.98	0.69	0.29	2.98	0.83	1.84	5.65
Spray (Direct/Hood)	12R-38	MFWD 170	26,600	200	8	0.044	0.79	0.77	0.55	0.23	2.36	0.66	1.45	4.48
Spray (Direct/Layby)	8R-30	MFWD 170	9,000	200	8	0.084	1.51	1.48	0.35	0.43	3.79	0.42	2.76	6.98
Spray (Direct/Layby)	8R-38	MFWD 170	9,000	200	8	0.066	1.19	1.17	0.28	0.34	2.99	0.33	2.18	5.52
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	12,400	200	8	0.044	0.79	0.77	0.25	0.23	2.06	0.31	1.45	3.83
Spray (Direct/Layby)	12R-30	MFWD 170	12,500	200	8	0.056	1.01	0.98	0.33	0.29	2.62	0.39	1.84	4.86
Spray (Direct/Layby)	12R-38	MFWD 170	12,400	200	8	0.044	0.79	0.77	0.25	0.23	2.06	0.31	1.45	3.83
Spray (Direct/Layby)	16R-20	2WD 50	10,000	200	8	0.062	1.12	0.32	0.29	0.03	1.77	0.35	0.21	2.34
Spray (Levee Leaper)	50'	MFWD 225	13,500	200	8	0.033	0.60	0.78	0.21	0.24	1.84	0.25	1.51	3.62
Spray (Pull Type)	60'	MFWD 225	36,400	200	8	0.028	0.50	0.65	0.48	0.20	1.84	0.57	1.26	3.68
Spray (Pull Type)	80'	MFWD 225	50,100	200	8	0.021	0.37	0.48	0.49	0.15	1.51	0.59	0.94	3.06
Spray (Pull Type)	90'	2WD 50	50,800	200	8	0.018	0.33	0.09	0.44	0.01	0.89	0.53	0.06	1.49

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2016 (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 (Pull Type)	120'	MFWD 225	75,800	200	8	0.014	0.25	0.32	0.50	0.10	1.18	0.60	0.63	2.41
Spray (Ropewick)	20'	MFWD 190	3,440	200	8	0.084	1.51	1.65	0.13	0.47	3.78	0.16	2.99	6.94
Spray (Spot)	27'	MFWD 170	5,390	200	8	0.062	1.12	1.09	0.15	0.32	2.70	0.19	2.04	4.94
Spray (Spot)	40'	MFWD 170	7,700	200	8	0.042	0.75	0.74	0.15	0.21	1.87	0.18	1.38	3.43
Spray (Spot)	50'	MFWD 170	6,800	200	8	0.033	0.60	0.59	0.10	0.17	1.48	0.12	1.10	2.71
Spray (Spot)	53'	MFWD 170	9,300	200	8	0.031	0.57	0.55	0.13	0.16	1.43	0.16	1.04	2.64
Spray (Spot)	60'	MFWD 225	18,400	200	8	0.028	0.50	0.65	0.24	0.20	1.60	0.29	1.26	3.16
Stalk Shredder	14'	MFWD 150	13,100	200	10	0.117	1.57	1.81	1.35	0.54	5.29	0.81	3.30	9.41
Stalk Shredder Flex	20'	MFWD 150	30,200	200	10	0.082	1.10	1.27	2.18	0.38	4.94	1.31	2.31	8.57
Stalk Shredder-Flail	12'	MFWD 150	15,100	200	10	0.137	1.84	2.12	1.81	0.64	6.42	1.09	3.85	11.37
Stalk Shredder-Flail	15'	MFWD 150	20,200	200	10	0.110	1.47	1.69	1.94	0.51	5.62	1.17	3.08	9.88
Stalk Shredder-Flail	18'	MFWD 150	25,800	200	10	0.091	1.22	1.41	2.06	0.42	5.14	1.24	2.56	8.95
Stalk Shredder-Flail	20'	MFWD 150	27,300	200	10	0.082	1.10	1.27	1.97	0.38	4.73	1.18	2.31	8.23
Stalk Shredder-Flail	25'	MFWD 150	38,700	200	10	0.066	0.88	1.01	2.23	0.30	4.44	1.34	1.84	7.64
Strip Till	8R-38	MFWD 225	27,200	150	10	0.061	0.82	1.42	0.72	0.43	3.41	1.18	2.76	7.36
Strip Till	12R-30	MFWD 225	47,500	150	10	0.061	0.82	1.42	1.26	0.43	3.96	2.06	2.76	8.78
Strip Till	12R-40	MFWD 225	58,500	150	10	0.046	0.61	1.07	1.17	0.32	3.19	1.90	2.07	7.16
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.73	3.99	0.24	1.14	8.12	0.59	7.23	15.96
Subsoiler	4 shank	MFWD 225	8,330	100	15	0.153	2.05	3.55	0.42	1.09	7.13	1.05	6.89	15.08
Subsoiler	5 shank	MFWD 225	13,800	100	15	0.122	1.63	2.83	0.56	0.87	5.90	1.39	5.48	12.79
Subsoiler low-till	4 shank	MFWD 225	12,000	100	15	0.153	2.05	3.55	0.61	1.09	7.32	1.51	6.89	15.73
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.36	2.36	0.56	0.72	5.02	1.39	4.58	11.01
Subsoiler low-till	8 shank	MFWD 225	22,200	100	15	0.076	1.02	1.77	0.56	0.54	3.90	1.40	3.43	8.74

## 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, 2016 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS					
Crop Oil Conc. (Pet.)	pt	3.86	Dithane F-45	qt	8.52
Crop Oil Conc. (Veg.)	pt	4.44	Dithane Rainshield	pt	3.96
Drift/Defoamer	pt	2.13	Enable 2F	oz	2.02
Dyne-A-Pak	pt	5.51	Headline EC	oz	3.79
MSO	pt	3.00	Headline SC	oz	3.69
Spreader Sticker	pt	3.54	Manzate 75 DF	lb	4.81
Surfactant	pt	5.35	Moncut 70 DF	lb	33.30
CLEANING					
Cleaning Peanuts	ton	18.00	Prevail	lb	28.50
CROP CONSULTANT					
Corn Consultant	acre	7.00	Propimax EC	pt	11.94
Cotton Consultant	acre	8.00	Prosaro	oz	2.77
Rice Consultant	acre	8.00	Provost	oz	2.34
Soybeans Consultant	acre	7.00	Quadris	oz	3.05
Wheat Consultant	acre	5.00	Quadris Top	oz	2.16
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.00	Quilt	pt	23.79
App Fert by Air (Mi)	appl	7.00	Quilt XCEL	pt	31.47
Custom Apply Fert	acre	7.00	Ridomil Gold	oz	6.41
CUSTOM LIME					
Lime (Spread)	ton	46.00	Ridomil Gold PC GR	lb	5.30
CUSTOM PLANT					
Custom Plant	acre	13.00	Rovral 4F	pt	11.14
Custom Plant Air	cwt	7.00	Stiletto	oz	0.58
CUSTOM SPRAY					
App by Air ( 2 gal)	appl	4.00	Stratego 250EC	pt	25.58
App by Air ( 3 gal)	appl	5.00	Stratego YLD	oz	5.04
App by Air ( 5 gal)	appl	6.50	Tilt 3.6 EC	oz	0.86
App by Air (10 gal)	appl	8.75	Tilt/ Bravo SE	oz	0.38
Custom Spray Ground	acre	7.50	Uniform	oz	4.89
Custom Spray Self Pr	acre	6.25	Vitavax RTU-Thiram	oz	0.40
Custom Spray Tractor	acre	7.75	GINNING		
DRYING					
Dry Corn	bu	0.19	Gin & Haul	lb	0.11
Dry Grain Sorghum	cwt	0.25	GROWTH REGULATORS		
Dry Peanuts	ton	24.00	Early Harvest PGR	oz	1.55
Dry Rice	bu	0.40	Mepex	oz	0.10
ERADICATION FEE					
Eradication	acre	1.00	Mepex Gin Out	oz	0.12
FERTILIZERS					
Amm Sulfate (21% N)	cwt	17.25	Mepichlor 4.2%	oz	0.11
Boron Plus	pt	4.24	Mepiquat	oz	0.11
Fert 10-34-0	cwt	32.50	Mepiquat Extra	oz	0.11
Fert 41-0-0-4	cwt	20.50	Pentia	pt	5.94
Lime	ton	36.00	Pix Plus	oz	0.19
NBPT	pt	9.88	Stance	oz	1.18
Phosphorus (46% P2O5)	cwt	25.00	HARVEST AIDS		
Potash (60% K2O)	cwt	21.27	Adios	oz	1.27
Sulfur 90%	lb	0.34	Aim 2EC	oz	5.46
Sulfur Plus	pt	2.62	Ammonium Sulfate	lb	0.24
SuperMax AMS	pt	2.67	CottonQuik	pt	5.01
UAN (32% N)	cwt	15.95	Def 6	pt	8.25
UAN + Sulfur (28%)	cwt	16.33	Def/Folex	pt	9.99
UAN 1%	pt	0.00	Defol 3	gal	3.45
Urea, Solid (46% N)	cwt	20.83	Defol 5	gal	6.55
Zinc Plus	pt	3.00	Dropp SC	oz	1.60
FUNGICIDES					
Abound	pt	32.53	ET	pt	23.98
Alfa Guard	lb	1.62	Ethephon 6E	pt	4.69
Allegiance Flowable	pt	55.70	Finish 6	pt	8.93
Apron Maxx RTA	oz	0.86	First Pick	pt	3.99
Apron Maxx RTA+Moly	pt	16.84	Flash	pt	4.68
Apron XL LS	oz	6.98	Folex 6EC	pt	9.92
Artisan	oz	1.02	Freefall SC	oz	1.30
Bravo Ultrex	lb	6.93	Ginstar EC	pt	30.60
Bravo Weather Stick	pt	5.27	Gramoxone SL	oz	0.31
Captan 50 WP	lb	4.03	Paraquat	oz	0.27
Cotton Seed Trt.	acre	20.00	Prep	pt	3.32
CruiserMaxx	oz	4.44	Sharpen	oz	6.23
			Sodium Chlorate 3L	gal	3.50
			Sodium Chlorate 5L	gal	5.57
			TDZ SC	oz	0.79
			Thidiazuron 4lb	oz	0.79
			Tribufos 6lb	pt	9.90
			Vacate	oz	1.17
			HAULING		
			Haul Corn	bu	0.23

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2016(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Haul Peanuts	ton	14.50	Guardsman Max	pt	7.22
Haul Rice	bu	0.35	Halex GT	pt	7.22
Haul Sorghum	bu	0.25	Halomax	oz	19.26
Haul Soybeans	bu	0.27	Harmony Extra SG TS	oz	29.95
Haul Wheat	bu	0.26	Harmony Extra TotSol	oz	13.51
HERBICIDES			Harness XTRA	pt	6.59
2,4-D Amine 4	pt	2.44	Ignite 280	pt	8.93
2,4-D Weedar 64	pt	2.44	Impact	oz	23.92
AAtrex 4L	pt	2.46	Karmex XP	lb	6.05
AAtrex NINE-O	lb	3.60	Lariat	qt	7.58
Accent Q	oz	32.40	Laudis	oz	5.74
Aim 2EC	oz	5.46	Layby Pro	qt	14.18
Assure II	oz	0.75	Leadoff	oz	5.73
Atrazine 4L	pt	2.03	Lexar	pt	7.56
Atrazine 90DF	lb	3.60	Liberty 280	oz	0.68
Axial XL	oz	1.10	Linex 4L	pt	10.56
Axiom 68DF	oz	0.23	Londax 60DF	oz	17.13
Banvel	pt	11.98	Lorox 50DF	lb	23.52
Basagran	pt	12.90	Metribuzin 75	lb	13.38
Basis	oz	12.93	MSMA 6.6	pt	3.38
Beyond	oz	4.43	MSMA6 Plus	pt	3.23
Bicep II Magnum	qt	10.37	Newpath 2SL	oz	3.68
Bicep Lite Magnum	pt	6.88	Osprey	oz	3.47
Blazer Ultra	pt	9.79	Outlook	pt	16.80
Bolero 8EC	pt	7.67	Paraquat	oz	0.31
Boundary 6.5 EC	pt	10.18	Parazone 3SL	oz	0.28
Bullet	pt	3.79	Parrot 4L	pt	2.74
Butyrac 175 (2,4-D)	pt	3.11	Peak Accu Pak	oz	15.75
Butyrac 200 (2,4-DB)	pt	4.05	Permit 75 DF	oz	20.73
Cadre	oz	4.21	Poast 1.53	pt	12.41
Callisto 4SC	oz	6.02	Poast Plus	pt	8.60
Canopy 75%	oz	2.70	PowerFlex HL	lb	115.78
Canopy EX	oz	7.97	Prefix	pt	5.81
Caparol 4L	pt	4.02	Prowl 3.3 EC	pt	5.62
Capreno	oz	6.73	Prowl H20	pt	5.95
Clarity	pt	12.89	Pursuit 2S	oz	3.40
Classic	oz	16.85	Python WDG	oz	13.56
Clearpath	lb	55.90	Quinstar	lb	49.16
Clincher SF	oz	2.34	Raptor	oz	4.37
Cobra 2EC	oz	1.68	RealmQ	oz	5.00
Command 3ME	pt	19.38	Reflex 2LC	pt	6.30
Corvus	oz	6.82	Regiment 80WP	oz	43.75
Cotoran 4L	pt	5.99	Remedy Ultra	pt	9.10
Cotton Pro	pt	3.53	Resolve SG	oz	8.58
Credit Extra	pt	2.07	Resource .86EC	pt	29.40
Dicamba	pt	10.83	Ricebeaux	pt	5.53
Direx 4L	pt	4.41	RicePro	pt	4.87
Diuron 4L	pt	4.15	Riceshot	pt	4.14
Diuron 80 DF	lb	6.20	Ricestar HT	pt	23.54
Diuron 80%	lb	6.20	Roundup Power Max	oz	0.19
Dual II Magnum	pt	13.99	Roundup PowerMax	pt	2.99
Dual Magnum	pt	13.49	Roundup WeatherMax	oz	0.27
Duet	pt	5.09	Roundup WeatherMax	pt	4.33
Envoke	oz	96.59	Salvo	pt	5.13
Evik DF 80W	lb	11.22	Scepter 70 DG	oz	4.52
Expert	pt	4.19	Select Max	pt	12.35
Facet L	pt	14.60	Sequence	pt	5.87
Finesse	oz	15.66	Sharpen	oz	6.07
First Rate	oz	41.50	Simazine 4L	pt	3.17
Flexstar	pt	8.30	Stalwart	pt	6.39
Fultime	pt	5.25	Stam 80 EDF	lb	9.50
Fusilade DX	oz	1.08	Stam M4	qt	7.78
Fusion	pt	26.89	Staple LX	oz	8.83
Glyphos	pt	1.80	Steadfast	oz	12.32
Glyphos Xtra	pt	2.25	Storm	pt	11.88
Glyphosate 3lbs a.e	pt	2.26	Strada WG	oz	6.91
Glyphosate 3lbs a.e	oz	0.14	Strongarm	oz	51.19
Glystar Plus	pt	2.45	Superwham	qt	9.18
Goal 2XL	pt	9.83	Suprend	lb	13.49
Gramoxone SL 2.0	oz	0.31	Surpass EC	qt	28.06
Grandstand R	qt	29.47			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2016 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Synchrony XP	oz	12.49	Montana	oz	1.00
Touchdown Total	qt	7.13	Mustang Max	oz	1.45
Treflan 4D	pt	3.40	Nuprid 4F	oz	0.51
Tricor DF	lb	15.55	Oberon 4 SC	pt	59.84
Trifluralin 4EC	pt	3.60	Orthene 97S	lb	9.10
Valor SX	oz	7.10	PennCap-M	pt	6.71
Valor XLT	oz	5.11	Pounce 25WP	lb	15.16
Verdict	oz	1.77	Prevathon	oz	1.25
Zorial Rapid 80DF	lb	14.10	Prolex	oz	2.62
INOCULANT			Provoke	oz	1.75
Optimize LIFT	oz	0.54	Radiant	oz	6.73
Vault	oz	1.73	Respect .8EC	pt	34.00
INSECTICIDES			Sevin 4F	pt	5.89
Abamectin .15EC	oz	0.72	Sevin 80S	lb	7.40
Acephate 90%	lb	7.45	Sevin XLR Plus	qt	12.50
Acephate 90SP	lb	7.45	Sivanto	oz	2.40
Acramite-4SC	oz	1.88	Steward	pt	36.33
Admire Pro	oz	2.95	Thimet 20-G Lock N L	lb	3.65
Asana .66 XL	oz	0.57	Thionex 3 EC	pt	4.17
Aztec 2.1% G	lb	3.77	Thionex 50W	lb	10.45
Baythroid XL	oz	2.55	Tracer 4SC	oz	9.73
Bidrin 8WM	oz	1.09	Transform WG	oz	7.74
Bidrin XP	oz	1.05	Vydate C-LV	oz	0.93
Bifenthrin	oz	0.89	Zeal Miticid I	oz	15.89
Bifenture 2EC	pt	16.10	Zephyr	oz	0.85
Brigade EC	pt	16.12	IRRIGATION SUPPLIES		
Brigade WSB	lb	22.47	Roll-Out Pipe	ft	0.26
Capture LFR	oz	2.53	SEED/PLANTS		
Carbaryl 4L	pt	5.28	Corn Seed B2RR	thous	3.27
Carbine 50WG	oz	5.93	Corn Seed Conv.	thous	2.61
Centric 40WG	oz	4.95	Corn Seed LLRRBT	thous	3.64
Comite 1l	pt	8.98	Corn Seed RR2	thous	3.02
Confirm 2F	oz	2.11	Corn Seed VT3	thous	3.52
Counter 15G	lb	4.51	Corn Seed VT3Pro	thous	3.52
Cruiser Maxx Rice	lbseed	0.13	Cotton Seed B2RF	thous	0.72
Curacron 8E	pt	10.75	Cotton Seed LLB2	thous	1.25
Cypermethrin	oz	0.55	Cotton Seed W	thous	0.74
Denim 0.16 EC	pt	32.63	Cotton Seed WRF	thous	0.86
Diamond .83EC	pt	21.28	Peanut Seed	lb	0.70
Diamond .83EC	oz	1.33	Rice Clearfield	lb	1.05
Dimethoate 4E	pt	6.51	Rice Clearfield Hyb	lb	5.82
Dimilin 2L	oz	2.22	Rice Conv. Hybrid	lb	5.91
Dipel DF	lb	15.09	Rice Seed (Levees)	lb	0.43
Dipel ES	pt	5.42	Rice Seed CF (Levees)	lb	1.05
Discipline 2 EC	oz	0.98	Rice Seed CFH (Levee)	lb	5.82
Endigo ZC	pt	27.76	Rice Seed Conv.	lb	0.43
Epi-Mek	pt	15.41	Sorghum Concept	lb	2.29
Fanfare 2EC	oz	0.93	Sorghum Concept+ Po	lb	3.60
Force 3G	lb	6.90	Soybean Seed LL	lb	1.15
Gaucho 600	oz	5.26	Soybean Seed RR2	lb	1.13
Hero	pt	25.34	Wheat Seed Private	lb	0.38
Imidan 70 WSB	oz	0.75	SOIL TEST		
Incidental Pest Trt	acre	12.00	Soil Test	acre	10.00
Incidental Pest Trt	acre	8.00	SURVEY & MARK LEVEES		
Intrepid 2F	oz	2.01	Survey & Mark Levees	acre	4.50
Intruder 70WSP	oz	9.83	TECHNOLOGY FEE		
Karate Z	oz	2.80	B2 Cot Tech Fee	thous	0.76
Kelthane MF 4EC	pt	5.00	B2 Cot Tech Fee	cap/ac	31.91
Lambda	oz	1.13	B2EF Cot Tech Fee	thous	1.63
Lannate LV	pt	11.08	B2EF Cot Tech Fee	cap/ac	68.62
Lannate SP	oz	2.13	B2RF Cot Tech Fee	thous	1.49
Larvin 3.2	oz	0.63	B2RF Cot Tech Fee	cap/ac	62.69
Leverage 2.7	oz	2.12	LLB2 Cot Tech Fee	thous	0.76
Lorsban 15G	lb	2.35	RF Cot Tech Fee	thous	1.04
Lorsban 4E	pt	6.02	RF Cot Tech Fee	cap/ac	43.66
Macho	oz	1.03	WRF Cot Tech Fee	thous	1.45
Malathion 5E	pt	4.54	WS Cot Tech Fee	thous	0.41
Malathion 8E	pt	5.33	WS Cotton Tech Fee	cap/ac	24.00
Monitor 4	pt	16.50			

Appendix Table 5. Estimated fuel prices  
and interest rates, Mississippi, 2016

ITEM NAME	UNIT	PRICE
		dollars
Diesel Fuel (DI) Price . . . . .	(\$/gal):	2.00
Gasoline (GA) Price. . . . .	(\$/gal):	2.25
LP Gas (LP) Price. . . . .	(\$/gal):	1.70
Short-term Interest Rate . . . . .	(%):	4.50
Intermediate-term Interest Rate. . . . .	(%):	5.00

Appendix Table 6. Labor types, wage rates and unallocated labor  
multipliers for crop enterprises, Mississippi, 2016

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	13.40
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, 2016

Crop	uni	Futures Contract Month	Futures Contract Price <sup>a</sup>	Basis <sup>b</sup>	Forward Contract Price	Loan Rate <sup>d</sup>	Budget Price <sup>e</sup>
Corn	bu	Dec '16	4.15	-0.27	3.88	2.10	3.88
Cotton Lint	lb	Dec '16	0.6198	-0.0233	0.596 <sup>f</sup>	0.52	0.60
Cottonseed	lb						0.114 <sup>f</sup>
Grain Sorghum	bu				3.69	2.02	3.69
Peanuts	ton				375.00	355.00	375.00
Soybeans	bu	Nov '16	8.91	+0.07	8.98	5.21	8.98
Rice	bu	Nov '16	5.94	-0.54	5.40	2.98	5.40
Wheat	bu	Jul '16	5.31	-0.20	5.11	2.72	5.11

<sup>a</sup> Average of the daily closing futures contract prices during first six trading days in October 2015 for the stated contract months.

<sup>b</sup> Basis is the Greenville, MS cash price minus the futures contract price for the stated contract. The reported basis is a daily average from 2009 to 2015. All basis values are composed of the typical harvest timeframe for each crop according to USDA, progress reports.

Sources: Arkansas Farm Bureau Commodity Report and Daily Grain Report, Mississippi Department of Ag-USDA Market News.

<sup>c</sup> The forward contract price for cotton, soybeans, corn, wheat, and rice is the futures contract price. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The price for peanuts is estimated from a poll of industry peanut buyers.

<sup>d</sup> Average Mississippi loan rate for the 2015 crop year for soybeans, corn, grain sorghum, and wheat. Loan rate for cotton. 2015 Mississippi farm stored loan rate for long grain rice. 2015 national average loan rate for peanuts.

<sup>e</sup> Price used in the 2016 MAFES Planning Budgets.

<sup>f</sup> Cottonseed price is the marketing year average price averaged over the years 2011-2015.

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, 2016

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'		0.74	0.32	0.51			0.01	1.58	1.63	3.21
Set Up Engine											
IRRIGATE LABOR	hour				0.23			0.01	0.24		0.24
Ditcher (1m/160a)			0.13	0.05	0.13			0.01	0.32	0.19	0.51
Roll-Out Pipe	ft	8.58						0.16	8.74		8.74
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.17	0.07	0.40			0.01	0.65	0.52	1.17
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		0.25	0.10	0.59			0.01	0.95	0.77	1.72
Land Forming (\$390)	each									31.93	31.93
Well & Pump, Furrow	each			2.44				0.05	2.49	7.21	9.70
Main Line Pipe	each									4.98	4.98
Engine, RPF, 75	each									8.38	8.38
June Irrigation	ac-in		5.70	1.30				0.13	7.13		7.13
July Irrigation	ac-in		5.70	1.30				0.11	7.11		7.11
August Irrigation	ac-in		5.70	1.30				0.08	7.08		7.08
TOTALS		8.58	18.39	6.88	4.36	0.00		0.61	38.82	55.61	94.43

Note: Cost of production estimates are based on 2015 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, 2016

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				0.27		0.01	0.28	0.28
Maintenance									
IRRIGATE LABOR	hour				1.07		0.02	1.09	1.09
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			11.23			0.21	11.44	45.07
Well & Pump, 1/4 CP	each			2.89			0.05	2.94	8.54
Engine, 1/4 CP, 65	each								9.93
June Irr. 3app@.75"	ac-in		6.72	1.39			0.15	8.26	8.26
July Irr. 4app@.75"	ac-in		8.96	1.86			0.16	10.98	10.98
Aug Irr. 3app@.75"	ac-in		6.72	1.39			0.09	8.20	8.20
TOTALS		0.00	22.40	18.76	1.84	0.00	0.69	43.69	63.54

Note: Cost of production estimates are based on 2015 input prices.

## Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968."
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2015 Planning Budgets." Budget Report No. 2014-03, Department of Agricultural Economics, Mississippi State University, October 2014.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
10. "Cotton 2015 Planning Budgets." Budget Report No. 2014-01, Department of Agricultural Economics, Mississippi State University, October 2014.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2012 Planning Budgets." Budget Report No. 2012-01, Department of Agricultural Economics, Mississippi State University, May 2012.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Mississippi Agricultural Statistics." Mississippi Department of Agriculture and Commerce and Department of Agriculture, Mississippi Agriculture Statistical Service, Jackson, Mississippi.
16. "Rice 2015 Planning Budgets." Budget Report No. 2014-04, Department of Agricultural Economics, Mississippi State University, October 2014.
17. "Soybeans 2015 Planning Budgets." Budget Report No. 2014-02, Department of Agricultural Economics, Mississippi State University, October 2014.
18. "Vegetables 2015 Planning Budgets." Budget Report No. 2014-08, Department of Agricultural Economics, Mississippi State University December 2014.
19. "Peanuts 2015 Planning Budgets." Budget Report No. 2014-07, Department of Agricultural Economics, Mississippi State University, October 2014.







**MISSISSIPPI STATE**  
**UNIVERSITY™**

**Mark E. Keenum, President**

**Division of Agriculture, Forestry, and Veterinary Medicine**  
**Gregory Bohach, Vice President**

**Department of Agricultural Economics**  
**Steven C. Turner, Head**

We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status or any other characteristic protected by law.