

COTTON 2019 PLANNING BUDGETS

**Mississippi State University
Department of Agricultural Economics
Budget Report 2018-01**

October 2018

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 2019 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

Acknowledgments

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

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Table of Contents

	Page
Foreword.....	i
Acknowledgments.....	i
2019 Budget Committees.....	ii
2019 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, 12R-38", solid, conservation tillage B3XF/W3RE/GLTP variety, Delta Area.....	6
2 Cotton, 12R-38", solid, conservation tillage, furrow irr., B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area.....	12
3 Cotton, 12R-38", solid, cons. tillage, pivot irr., B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area.....	18
4 Cotton, 12R-38", solid, no-till B3XF/W3RE/GLTP variety, Delta Area	24
5 Cotton, 12R-38", 2x1 full-skip, (8 rows planted) Cons. till., B3XF/W3RE/GLTP variety, Delta Area.....	30
6 Cotton, 8R-38", solid, conservation tillage B3XF/W3RE/GLTP variety, Non-Delta Area	36
7 Cotton, 8R-38", solid, no-till B3XF/W3RE/GLTP variety, Non-Delta Area	42
8 Cotton, 12R-38", solid, conservation tillage B3XF/W3RE/GLTP variety, Non-Delta Area	48
9 Cotton, 12R-38", solid, no-till B3XF/W3RE/GLTP variety, Non-Delta Area	54
10 Cotton, 12R-38", solid, conservation tillage B3XF/W3RE/GLTP, pivot irrigated, 7.5 ac-in., Non-Delta Area	60

Appendix
Table

1	Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed costs per hour	68
2	Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed costs per acre.....	69
3	Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed costs per acre	70
4	Operating inputs: estimated prices	75
5	Estimated fuel prices and interest rates	78
6	Labor types, wage rates and unallocated labor multipliers for crop enterprises.....	78
7	Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets	79
8	Cotton irrigated with roll-out pipe 160-acre roll-out pipe system, 10.5 ac-in., Delta Area.....	80
9	Cotton irrigated with center pivot 135-acre ¼-mile pivot system, 7.5 ac-in., Delta Area.....	81
	Literature Cited	83

2019 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 2018. (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 2018 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 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, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	34.3582	42.60	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	4.5000	24.17	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	2.0000	2.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$30	acre	30.00	1.0000	30.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3993	5.69	_____
Self-Propelled	hour	14.23	0.2310	3.29	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	14.21	0.5043	7.17	_____
DIESEL FUEL					
Tractors	gal	2.60	4.6248	12.02	_____
Self-Propelled	gal	2.60	5.0512	13.13	_____
REPAIR & MAINTENANCE					
Implements	acre	7.09	1.0000	7.09	_____
Tractors	acre	2.39	1.0000	2.39	_____
Self-Propelled	acre	21.68	1.0000	21.68	_____
INTEREST ON OP. CAP.	acre	17.56	1.0000	17.56	_____
TOTAL DIRECT EXPENSES				734.96	_____
FIXED EXPENSES					
Implements	acre	11.14	1.0000	11.14	_____
Tractors	acre	16.47	1.0000	16.47	_____
Self-Propelled	acre	95.43	1.0000	95.43	_____
TOTAL FIXED EXPENSES				123.04	_____
TOTAL SPECIFIED EXPENSES				858.00	_____

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 1.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1200.0000	889.68	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				1051.68	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	72.60	1.0000	72.60	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	113.95	1.0000	113.95	_____
INSECTICIDES	acre	93.38	1.0000	93.38	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
OPERATOR LABOR	hour	14.23	0.6304	8.98	_____
UNALLOCATED LABOR	hour	14.21	0.5043	7.17	_____
DIESEL FUEL	gal	2.60	9.6761	25.15	_____
REPAIR & MAINTENANCE	acre	31.16	1.0000	31.16	_____
INTEREST ON OP. CAP.	acre	17.56	1.0000	17.56	_____

TOTAL DIRECT EXPENSES				734.96	_____
RETURNS ABOVE DIRECT EXPENSES				316.72	_____

TOTAL FIXED EXPENSES				123.04	_____

TOTAL SPECIFIED EXPENSES				858.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				193.68	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 1.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
CSeed B3XF/W3RE/GLTP	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	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt\$30	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				
Centric 40WG	oz					2.5000				
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
TOTALS							0.63	0.39	0.95	0.50

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 1.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	12R-38		1.62	1.66	1.38			0.28	4.94	4.83 9.77
Bed/Disk (Hipper)	12R-38		0.74	0.33	0.63			0.10	1.80	1.55 3.35
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Select Max	pt	12.71						0.51	13.22	13.22
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.14	4.26	2.98 7.24
UAN (32%)	gal	21.30						0.75	22.05	22.05
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91 5.77
Plant - Folding	12R-38		1.49	1.83	1.72			0.15	5.19	5.31 10.50
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68	105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60	20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41 2.58
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.03	0.95	1.30 2.25
Dual Magnum	pt	13.81						0.41	14.22	14.22
Liberty 280	oz	17.11						0.51	17.62	17.62
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41 2.58
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.02	0.94	1.30 2.24
Centric 40WG	oz	10.74						0.27	11.01	11.01
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98 7.20
UAN (32%)	gal	21.30						0.53	21.83	21.83
App by Air (3 gal)	appl	5.00						0.13	5.13	5.13
Diamond .83EC	oz	8.40						0.21	8.61	8.61
Imidacloprid 4F	oz	2.00						0.05	2.05	2.05
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.07	3.33	2.25 5.58
Diuron	pt	4.64						0.09	4.73	4.73
Liberty 280	oz	17.11						0.34	17.45	17.45
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
Acephate 90%	lb	6.53						0.13	6.66	6.66
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Bifenthrin	oz	4.86						0.10	4.96	4.96
App by Air (3 gal)	appl	1.25						0.03	1.28	1.28
Lambda	oz	1.09						0.02	1.11	1.11
Bidrin 8EC	oz	2.52						0.05	2.57	2.57
Incidental Pest										
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
IncidentalPestTrt\$30	acre	30.00						0.60	30.60	30.60
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	6.53						0.10	6.63	6.63
Bifenthrin	oz	4.86						0.07	4.93	4.93
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Centric 40WG	oz	13.43						0.20	13.63	13.63
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
App by Air (5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01 128.62
Gin & Haul	lb	132.00						0.66	132.66	132.66
Stalk Shredder-Flail	20'		2.48	2.58	2.11			0.04	7.21	4.80 12.01
TOTALS		642.01	25.15	31.16	19.08	0.00	17.56	734.96	123.04	858.00

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 1.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	1051.68
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	30.00	0.00	0.00	0.00	0.00	21.30	0.00	21.30	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	22.95	0.00	69.25	0.00	21.75	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	21.14	45.00	24.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.01	0.00	0.00	0.00	0.00	1.56	4.18	1.91	1.34	0.00	0.00	8.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.36	0.00	0.00	0.00	0.00	1.56	3.93	1.95	1.34	0.00	0.00	14.01
REPAIR & MAINTENANCE	1.99	0.00	0.00	0.00	0.00	1.00	2.91	1.18	0.58	0.00	0.00	23.50
INTEREST ON OP. CAP.	4.35	0.00	0.00	0.00	1.21	0.89	6.44	1.34	1.66	0.53	0.25	0.89
TOTAL DIRECT EXPENSES	76.85	0.00	0.00	0.00	31.38	26.31	221.45	55.10	84.20	35.35	25.84	178.48
NET INCOME	-76.85	0.00	0.00	0.00	-31.38	-26.31	-221.45	-55.10	-84.20	-35.35	-25.84	873.20
NET INCOME TO DATE	-76.85	-76.85	-76.85	-76.85	-108.23	-134.54	-355.99	-411.09	-495.29	-530.64	-556.48	316.72

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-173 -296	-150 -273	-128 -251	-106 -229	-84 -207	-61 -184	-39 -162	-17 -140	4 -118	27 -95	49 -73
60	720.00	lb	-119 -242	-92 -215	-66 -189	-39 -162	-12 -135	13 -109	40 -82	67 -55	93 -29	120 -2	147 24
70	840.00	lb	-66 -189	-34 -157	-3 -126	27 -95	58 -64	89 -33	120 -2	151 28	183 59	214 91	245 122
80	960.00	lb	-12 -135	22 -100	58 -64	94 -28	129 6	165 42	200 77	236 113	272 149	307 184	343 220
90	1080.00	lb	40 -82	80 -42	120 -2	160 37	200 77	241 117	281 158	321 198	361 238	401 278	441 318
100	1200.00	lb	94 -28	138 15	183 60	227 104	272 149	316 193	361 238	405 282	450 327	494 371	539 416
110	1320.00	lb	147 24	196 73	245 122	294 171	343 220	392 269	441 318	490 367	539 416	588 465	637 514
120	1440.00	lb	201 78	254 131	307 184	361 238	414 291	468 345	521 398	574 451	628 505	681 558	735 611
130	1560.00	lb	254 131	312 189	370 247	428 305	485 362	543 420	601 478	659 536	717 594	775 652	832 709
140	1680.00	lb	308 185	370 247	432 309	494 371	557 434	619 496	681 558	744 621	806 683	868 745	930 807
150	1800.00	lb	361 238	428 305	495 372	561 438	628 505	695 572	761 638	828 705	895 772	962 839	1028 905

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 2018 input prices.

Table 2.A Estimated costs per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

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	5.7500	28.75	
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	
Ethephon 6E	pt	3.53	2.3125	8.16	
Tribufos 6lb	pt	10.90	0.5000	5.45	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	
UAN (32%)	gal	1.24	34.3582	42.60	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	
Select Max	pt	12.71	1.0000	12.71	
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	
Cotoran	pt	6.42	2.0000	12.84	
Dual Magnum	pt	13.81	2.0000	27.62	
Liberty 280	oz	0.59	58.0000	34.22	
Diuron	pt	2.90	1.6000	4.64	
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	
Bidrin 8EC	oz	1.26	2.2000	2.77	
Centric 40WG	oz	5.37	4.5000	24.17	
Diamond .83EC	oz	1.40	6.0000	8.40	
Imidacloprid 4F	oz	1.00	2.0000	2.00	
Bifenthrin	oz	0.76	12.8000	9.73	
Lambda	oz	1.09	1.0000	1.09	
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.25	33.0000	8.25	
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	48.0000	3.84	
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	14.23	0.5025	7.16	
Self-Propelled	hour	14.23	0.2310	3.29	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	
Implements	hour	9.06	0.0625	0.57	
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.2016	1.82	
UNALLOCATED LABOR					
	hour	14.21	0.5240	7.45	
DIESEL FUEL					
Tractors	gal	2.60	5.6368	14.65	
Self-Propelled	gal	2.60	5.0512	13.13	
Roll-Out Pipe Irr.	gal	2.60	8.5535	22.23	
REPAIR & MAINTENANCE					
Implements	acre	7.47	1.0000	7.47	
Tractors	acre	2.93	1.0000	2.93	
Self-Propelled	acre	21.68	1.0000	21.68	
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	
INTEREST ON OP. CAP.	acre	18.68	1.0000	18.68	
TOTAL DIRECT EXPENSES				811.33	
FIXED EXPENSES					
Implements	acre	12.80	1.0000	12.80	
Tractors	acre	20.21	1.0000	20.21	
Self-Propelled	acre	95.43	1.0000	95.43	
Roll-Out Pipe Irr.	acre	61.50	1.0000	61.50	
TOTAL FIXED EXPENSES				189.94	
TOTAL SPECIFIED EXPENSES				1001.27	

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 2.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1500.0000	1112.10	_____
Cotton Seed	lb	0.10	2025.0000	202.50	_____

TOTAL INCOME				1314.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.00	1.0000	45.00	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	72.60	1.0000	72.60	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	113.95	1.0000	113.95	_____
INSECTICIDES	acre	85.88	1.0000	85.88	_____
IRRIGATION SUPPLIES	acre	8.25	1.0000	8.25	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	3.84	1.0000	3.84	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.23	0.7336	10.45	_____
UNALLOCATED LABOR	hour	14.21	0.5240	7.45	_____
DIESEL FUEL	gal	2.60	19.2417	50.01	_____
REPAIR & MAINTENANCE	acre	38.97	1.0000	38.97	_____
INTEREST ON OP. CAP.	acre	18.68	1.0000	18.68	_____

TOTAL DIRECT EXPENSES				811.33	_____
RETURNS ABOVE DIRECT EXPENSES				503.27	_____

TOTAL FIXED EXPENSES				189.94	_____

TOTAL SPECIFIED EXPENSES				1001.27	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				313.33	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 2.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	1.00	Nov		0.04	0.04	0.04	0.03
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
CSeed B3XF/W3RE/GLTP	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	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air (3 gal)	appl					1.5000				
IncidentalPestTrt\$15	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				
Centric 40WG	oz					2.5000				
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	1500.0000				
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	0.06
TOTALS							0.73	0.50	1.42	0.52

Note: Cost of production estimates are based on 2018 input prices.

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

Table 2.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80		31.80
Bed-Paratill Fold	12R-38		1.62	1.66	1.38			0.28	4.94	4.83	9.77
Bed/Disk (Hipper)	12R-38		1.49	0.65	1.26			0.20	3.60	3.08	6.68
App by Air (5 gal)	appl	6.50						0.26	6.76		6.76
Clarity	pt	5.76						0.23	5.99		5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
Select Max	pt	12.71						0.51	13.22		13.22
Surfactant	pt	0.72						0.03	0.75		0.75
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.14	4.26	2.98	7.24
UAN (32%)	gal	21.30						0.75	22.05		22.05
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91	5.77
Plant - Folding	12R-38		1.49	1.83	1.72			0.15	5.19	5.31	10.50
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68		105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60		20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Cotoran	pt	12.84						0.39	13.23		13.23
Surfactant	pt	0.72						0.02	0.74		0.74
Cotton Consultant	acre	8.00						0.24	8.24		8.24
Eradication	acre	1.00						0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.03	0.95	1.30	2.25
Dual Magnum	pt	13.81						0.41	14.22		14.22
Liberty 280	oz	17.11						0.51	17.62		17.62
Acephate 90%	lb	2.17						0.07	2.24		2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Dual Magnum	pt	13.81						0.41	14.22		14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Bidrin 8EC	oz	0.25						0.01	0.26		0.26
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.02	0.94	1.30	2.24
Centric 40WG	oz	10.74						0.27	11.01		11.01
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98	7.20
UAN (32%)	gal	21.30						0.53	21.83		21.83
App by Air (3 gal)	appl	5.00						0.13	5.13		5.13
Diamond .83EC	oz	8.40						0.21	8.61		8.61
Imidacloprid 4F	oz	2.00						0.05	2.05		2.05
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.07	3.33	2.25	5.58
Diuron	pt	4.64						0.09	4.73		4.73
Liberty 280	oz	17.11						0.34	17.45		17.45
App by Air (3 gal)	appl	5.00						0.10	5.10		5.10
Acephate 90%	lb	6.53						0.13	6.66		6.66
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Bifenthrin	oz	4.86						0.10	4.96		4.96
App by Air (3 gal)	appl	1.25						0.03	1.28		1.28
Lambda	oz	1.09						0.02	1.11		1.11
Bidrin 8EC	oz	2.52						0.05	2.57		2.57
Incidental Pest											
App by Air (3 gal)	appl	7.50						0.15	7.65		7.65
IncidentalPestTrt\$15	acre	22.50						0.45	22.95		22.95
App by Air (3 gal)	appl	5.00						0.08	5.08		5.08
Acephate 90%	lb	6.53						0.10	6.63		6.63
Bifenthrin	oz	4.86						0.07	4.93		4.93
App by Air (3 gal)	appl	5.00						0.08	5.08		5.08
Centric 40WG	oz	13.43						0.20	13.63		13.63
App by Air (5 gal)	appl	6.50						0.07	6.57		6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25		2.25
Ethephon 6E	pt	7.06						0.07	7.13		7.13
App by Air (5 gal)	appl	3.25						0.03	3.28		3.28
Tribufos 6lb	pt	5.45						0.05	5.50		5.50
Ethephon 6E	pt	1.10						0.01	1.11		1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01	128.62
Gin & Haul	lb	165.00						0.83	165.83		165.83
Stalk Shredder-Flail	20'		2.48	2.58	2.11			0.04	7.21	4.80	12.01
Roll-Out Pipe Irr.	acre	8.25	24.11	7.49	4.42			0.92	45.19	65.37	110.56
TOTALS		679.54	50.01	38.97	24.13	0.00	18.68	811.33	189.94	1001.27	

Note: Cost of production estimates are based on 2018 input prices.

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

Table 2.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

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	1314.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	13.75	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	165.00
FERTILIZERS	30.00	0.00	0.00	0.00	0.00	21.30	0.00	21.30	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	22.95	0.00	69.25	0.00	21.75	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	21.14	37.50	24.82	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	2.56	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.64	0.00	0.00	0.00	0.00	1.56	4.41	4.49	1.57	0.23	0.61	8.62
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.11	0.00	0.00	0.00	0.00	1.56	3.93	9.85	8.75	7.41	0.43	14.97
REPAIR & MAINTENANCE	2.31	0.00	0.00	0.00	0.00	1.00	2.91	5.60	1.89	1.31	0.13	23.82
INTEREST ON OP. CAP.	4.45	0.00	0.00	0.00	1.21	0.89	6.45	1.96	1.73	0.66	0.26	1.07
TOTAL DIRECT EXPENSES	78.65	0.00	0.00	0.00	31.38	26.31	221.69	80.15	88.22	44.43	27.02	213.48
NET INCOME	-78.65	0.00	0.00	0.00	-31.38	-26.31	-221.69	-80.15	-88.22	-44.43	-27.02	1101.12
NET INCOME TO DATE	-78.65	-78.65	-78.65	-78.65	-110.03	-136.34	-358.03	-438.18	-526.40	-570.83	-597.85	503.27

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3RE/GLTP variety, 10.5 ac-in., Delta Area, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-108 -298	-81 -271	-53 -243	-25 -215	2 -187	30 -159	57 -132	85 -104	113 -76	141 -48	169 -20
60	900.00	lb	-42 -231	-8 -198	24 -165	58 -131	91 -98	124 -65	158 -31	191 1	224 34	258 68	291 101
70	1050.00	lb	24 -165	63 -126	102 -87	141 -48	180 -9	219 29	258 68	297 107	336 146	375 185	414 224
80	1200.00	lb	91 -98	136 -53	180 -9	225 35	269 79	314 124	358 168	402 213	447 257	491 302	536 346
90	1350.00	lb	158 -31	208 18	258 68	308 118	358 168	408 218	458 268	508 318	558 368	608 418	658 468
100	1500.00	lb	225 35	280 90	336 146	392 202	447 257	503 313	558 368	614 424	670 480	725 535	781 591
110	1650.00	lb	292 102	353 163	414 224	475 285	536 346	597 407	659 469	720 530	781 591	842 652	903 713
120	1800.00	lb	358 168	425 235	492 302	559 369	625 435	692 502	759 569	825 636	892 702	959 769	1026 836
130	1950.00	lb	425 235	498 308	570 380	642 452	714 524	787 597	859 669	931 741	1004 814	1076 886	1148 958
140	2100.00	lb	492 302	570 380	648 458	726 536	803 613	881 691	959 769	1037 847	1115 925	1193 1003	1271 1081
150	2250.00	lb	559 369	642 452	726 536	809 619	892 703	976 786	1059 869	1143 953	1226 1036	1310 1120	1393 1203

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 2018 input prices.

Table 3.A Estimated costs per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

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	3.7500	18.75	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	34.3582	42.60	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	4.5000	24.17	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	2.0000	2.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	48.0000	3.84	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.3993	5.69	_____
Self-Propelled	hour	14.23	0.2310	3.29	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	14.21	0.5043	7.17	_____
DIESEL FUEL					
Tractors	gal	2.60	4.6248	12.02	_____
Self-Propelled	gal	2.60	5.0512	13.13	_____
1/4-mi. Pivot Irr.	gal	2.60	11.2011	29.13	_____
REPAIR & MAINTENANCE					
Implements	acre	7.09	1.0000	7.09	_____
Tractors	acre	2.39	1.0000	2.39	_____
Self-Propelled	acre	21.68	1.0000	21.68	_____
1/4-mi. Pivot Irr.	acre	21.65	1.0000	21.65	_____
INTEREST ON OP. CAP.	acre	18.85	1.0000	18.85	_____
TOTAL DIRECT EXPENSES				821.15	_____
FIXED EXPENSES					
Implements	acre	11.14	1.0000	11.14	_____
Tractors	acre	16.47	1.0000	16.47	_____
Self-Propelled	acre	95.43	1.0000	95.43	_____
1/4-mi. Pivot Irr.	acre	84.43	1.0000	84.43	_____
TOTAL FIXED EXPENSES				207.47	_____
TOTAL SPECIFIED EXPENSES				1028.62	_____

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 3.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1500.0000	1112.10	_____
Cotton Seed	lb	0.10	2025.0000	202.50	_____

TOTAL INCOME				1314.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	48.00	1.0000	48.00	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	72.60	1.0000	72.60	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	113.95	1.0000	113.95	_____
INSECTICIDES	acre	85.88	1.0000	85.88	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	3.84	1.0000	3.84	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3252	2.93	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	14.23	0.6304	8.98	_____
UNALLOCATED LABOR	hour	14.21	0.5043	7.17	_____
DIESEL FUEL	gal	2.60	20.8772	54.28	_____
REPAIR & MAINTENANCE	acre	52.81	1.0000	52.81	_____
INTEREST ON OP. CAP.	acre	18.85	1.0000	18.85	_____

TOTAL DIRECT EXPENSES				821.15	_____
RETURNS ABOVE DIRECT EXPENSES				493.45	_____
TOTAL FIXED EXPENSES					
				207.47	_____

TOTAL SPECIFIED EXPENSES				1028.62	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				285.98	_____

Note: Cost of production estimates are based on 2018 input prices

Table 3.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	12R-38	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
CSeed B3XF/W3RE/GLTP	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	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
App by Air (5 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air (3 gal)	appl					1.5000				
IncidentalPestTrt\$15	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				
Centric 40WG	oz					2.5000				
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	1500.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct		0.08	0.08	0.08	0.06
1/4-mi. Pivot Irr.	acre				Jan	1.0000			0.20	
TOTALS							0.63	0.39	1.15	0.50

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 3.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	12R-38		1.62	1.66	1.38			0.28	4.94	4.83
Bed/Disk (Hipper)	12R-38		0.74	0.33	0.63			0.10	1.80	1.55
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Select Max	pt	12.71						0.51	13.22	13.22
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.14	4.26	2.98
UAN (32%)	gal	21.30						0.75	22.05	22.05
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91
Plant - Folding	12R-38		1.49	1.83	1.72			0.15	5.19	5.31
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68	105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60	20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.03	0.95	1.30
Dual Magnum	pt	13.81						0.41	14.22	14.22
Liberty 280	oz	17.11						0.51	17.62	17.62
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.02	0.94	1.30
Centric 40WG	oz	10.74						0.27	11.01	11.01
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98
UAN (32%)	gal	21.30						0.53	21.83	21.83
App by Air (5 gal)	appl	6.50						0.16	6.66	6.66
Diamond .83EC	oz	8.40						0.21	8.61	8.61
Imidacloprid 4F	oz	2.00						0.05	2.05	2.05
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.07	3.33	2.25
Diuron	pt	4.64						0.09	4.73	4.73
Liberty 280	oz	17.11						0.34	17.45	17.45
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
Acephate 90%	lb	6.53						0.13	6.66	6.66
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Bifenthrin	oz	4.86						0.10	4.96	4.96
App by Air (3 gal)	appl	1.25						0.03	1.28	1.28
Lambda	oz	1.09						0.02	1.11	1.11
Bidrin 8EC	oz	2.52						0.05	2.57	2.57
Incidental Pest										
App by Air (3 gal)	appl	7.50						0.15	7.65	7.65
IncidentalPestTrt\$15	acre	22.50						0.45	22.95	22.95
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	6.53						0.10	6.63	6.63
Bifenthrin	oz	4.86						0.07	4.93	4.93
App by Air (5 gal)	appl	6.50						0.10	6.60	6.60
Centric 40WG	oz	13.43						0.20	13.63	13.63
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
App by Air (5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01
Gin & Haul	lb	165.00						0.83	165.83	165.83
Stalk Shredder-Flail	20'		2.48	2.58	2.11			0.04	7.21	4.80
1/4-mi. Pivot Irr.	acre		29.13	21.65	1.84			1.14	53.76	84.43
TOTALS		674.29	54.28	52.81	20.92	0.00	18.85	821.15	207.47	1028.62

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 3.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

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	1314.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	6.50	13.75	11.50	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	165.00
FERTILIZERS	30.00	0.00	0.00	0.00	0.00	21.30	0.00	21.30	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	22.95	0.00	69.25	0.00	21.75	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	21.14	37.50	24.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	2.56	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.01	0.00	0.00	0.00	0.00	1.56	5.52	2.06	1.54	0.15	0.00	8.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.36	0.00	0.00	0.00	0.00	1.56	3.93	10.69	12.99	8.74	0.00	14.01
REPAIR & MAINTENANCE	1.99	0.00	0.00	0.00	0.00	1.00	2.91	19.56	2.45	1.40	0.00	23.50
INTEREST ON OP. CAP.	4.35	0.00	0.00	0.00	1.21	0.89	6.48	2.08	1.83	0.70	0.25	1.06
TOTAL DIRECT EXPENSES	76.85	0.00	0.00	0.00	31.38	26.31	222.83	85.89	93.09	47.31	25.84	211.65
NET INCOME	-76.85	0.00	0.00	0.00	-31.38	-26.31	-222.83	-85.89	-93.09	-47.31	-25.84	1102.95
NET INCOME TO DATE	-76.85	-76.85	-76.85	-76.85	-108.23	-134.54	-357.37	-443.26	-536.35	-583.66	-609.50	493.45

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,
 B3XF/W3RE/GLTP variety, 7.5 ac.-in., Delta Area, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92		
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-118	-90	-63	-35	-7	20	48	75	103	131	159
			-326	-298	-270	-242	-214	-187	-159	-131	-103	-75	-48
60	900.00	lb	-51	-18	14	48	81	114	148	181	215	248	281
			-259	-225	-192	-159	-125	-92	-59	-25	7	40	74
70	1050.00	lb	14	53	92	131	170	209	248	287	326	365	404
			-192	-153	-114	-75	-36	2	41	79	118	157	196
80	1200.00	lb	81	126	170	215	259	304	348	393	437	482	526
			-125	-81	-36	7	52	96	141	185	230	274	319
90	1350.00	lb	148	198	248	298	348	398	448	498	548	599	649
			-58	-8	41	91	141	191	241	291	341	391	441
100	1500.00	lb	215	271	326	382	437	493	549	604	660	715	771
			7	63	119	174	230	285	341	397	452	508	564
110	1650.00	lb	282	343	404	465	526	588	649	710	771	832	893
			74	135	197	258	319	380	441	502	564	625	686
120	1800.00	lb	349	415	482	549	615	682	749	816	882	949	1016
			141	208	275	341	408	475	541	608	675	742	808
130	1950.00	lb	415	488	560	632	705	777	849	921	994	1066	1138
			208	280	353	425	497	569	642	714	786	859	931
140	2100.00	lb	482	560	638	716	794	871	949	1027	1105	1183	1261
			275	353	430	508	586	664	742	820	898	975	1053
150	2250.00	lb	549	632	716	799	883	966	1049	1133	1216	1300	1383
			342	425	508	592	675	759	842	925	1009	1092	1176

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 2018 input prices.

Table 4.A Estimated costs per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	25.4000	31.50	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	4.5000	24.17	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	4.0000	4.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.2712	3.86	_____
Self-Propelled	hour	14.23	0.2310	3.29	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.2016	1.82	_____
UNALLOCATED LABOR					
	hour	14.23	0.4018	5.72	_____
DIESEL FUEL					
Tractors	gal	2.60	3.1417	8.17	_____
Self-Propelled	gal	2.60	5.0512	13.13	_____
REPAIR & MAINTENANCE					
Implements	acre	5.15	1.0000	5.15	_____
Tractors	acre	1.62	1.0000	1.62	_____
Self-Propelled	acre	21.68	1.0000	21.68	_____
INTEREST ON OP. CAP.	acre	16.44	1.0000	16.44	_____
TOTAL DIRECT EXPENSES				699.69	_____
FIXED EXPENSES					
Implements	acre	7.72	1.0000	7.72	_____
Tractors	acre	11.18	1.0000	11.18	_____
Self-Propelled	acre	95.43	1.0000	95.43	_____
TOTAL FIXED EXPENSES				114.33	_____
TOTAL SPECIFIED EXPENSES				814.02	_____

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 4.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1200.0000	889.68	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				1051.68	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	61.50	1.0000	61.50	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	113.95	1.0000	113.95	_____
INSECTICIDES	acre	80.38	1.0000	80.38	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3014	2.72	_____
OPERATOR LABOR	hour	14.23	0.5023	7.15	_____
UNALLOCATED LABOR	hour	14.23	0.4018	5.72	_____
DIESEL FUEL	gal	2.60	8.1930	21.30	_____
REPAIR & MAINTENANCE	acre	28.45	1.0000	28.45	_____
INTEREST ON OP. CAP.	acre	16.44	1.0000	16.44	_____

TOTAL DIRECT EXPENSES				699.69	_____
RETURNS ABOVE DIRECT EXPENSES				351.99	_____

TOTAL FIXED EXPENSES				114.33	_____

TOTAL SPECIFIED EXPENSES				814.02	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				237.66	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.10	0.04
CSeed B3XF/W3RE/GLTP	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	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					25.4000				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					4.0000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt\$15	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				
Centric 40WG	oz					2.5000				
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
TOTALS							0.50	0.27	0.80	0.40

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 4.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Select Max	pt	12.71						0.51	13.22	13.22
Surfactant	pt	0.72						0.03	0.75	0.75
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91
NT Plant-Folding	12R-38		1.56	2.11	1.80			0.16	5.63	5.96
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68	105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60	20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.03	0.95	1.30
Dual Magnum	pt	13.81						0.41	14.22	14.22
Liberty 280	oz	17.11						0.51	17.62	17.62
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Sprayer 600-825gal	90' 250hp		0.39	0.18	0.35			0.02	0.94	1.30
Centric 40WG	oz	10.74						0.27	11.01	11.01
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98
UAN (32%)	gal	31.50						0.79	32.29	32.29
App by Air (3 gal)	appl	5.00						0.13	5.13	5.13
Diamond .83EC	oz	8.40						0.21	8.61	8.61
Imidacloprid 4F	oz	4.00						0.10	4.10	4.10
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.08	3.34	2.25
Diuron	pt	4.64						0.12	4.76	4.76
Liberty 280	oz	17.11						0.43	17.54	17.54
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
Acephate 90%	lb	6.53						0.13	6.66	6.66
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Bifenthrin	oz	4.86						0.10	4.96	4.96
App by Air (3 gal)	appl	1.25						0.03	1.28	1.28
Lambda	oz	1.09						0.02	1.11	1.11
Bidrin 8EC	oz	2.52						0.05	2.57	2.57
Incidental Pest										
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
IncidentalPestTrt\$15	acre	15.00						0.30	15.30	15.30
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	6.53						0.10	6.63	6.63
Bifenthrin	oz	4.86						0.07	4.93	4.93
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Centric 40WG	oz	13.43						0.20	13.63	13.63
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
App by Air (5 gal)	appl	3.25						0.03	3.28	3.28
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01
Gin & Haul	lb	132.00						0.66	132.66	132.66
Stalk Shredder-Flail	20'		2.48	2.58	2.11			0.04	7.21	4.80
TOTALS		617.91	21.30	28.45	15.59	0.00	16.44	699.69	114.33	814.02

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	1051.68
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	30.00	0.00	0.00	0.00	0.00	0.00	0.00	31.50	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	22.95	0.00	69.25	21.75	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	23.14	30.00	24.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	4.26	3.25	0.00	0.00	0.00	8.08
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	4.00	3.29	0.00	0.00	0.00	14.01
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.19	1.76	0.00	0.00	0.00	23.50
INTEREST ON OP. CAP.	3.97	0.00	0.00	0.00	1.21	0.00	6.45	2.28	0.86	0.53	0.25	0.89
TOTAL DIRECT EXPENSES	70.11	0.00	0.00	0.00	31.38	0.00	221.89	93.25	43.39	35.35	25.84	178.48
NET INCOME	-70.11	0.00	0.00	0.00	-31.38	0.00	-221.89	-93.25	-43.39	-35.35	-25.84	873.20
NET INCOME TO DATE	-70.11	-70.11	-70.11	-70.11	-101.49	-101.49	-323.38	-416.63	-460.02	-495.37	-521.21	351.99

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd 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, no-till
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-137 -252	-115 -229	-93 -207	-71 -185	-48 -163	-26 -140	-4 -118	17 -96	40 -74	62 -51	84 -29
60	720.00	lb	-84 -198	-57 -171	-30 -145	-4 -118	22 -91	49 -65	75 -38	102 -11	129 14	155 41	182 68
70	840.00	lb	-30 -145	0 -114	31 -82	62 -51	93 -20	124 10	156 41	187 72	218 103	249 135	280 166
80	960.00	lb	22 -91	58 -56	93 -20	129 15	164 50	200 86	236 121	271 157	307 193	342 228	378 264
90	1080.00	lb	76 -38	116 1	156 41	196 81	236 121	276 161	316 201	356 242	396 282	436 322	476 362
100	1200.00	lb	129 15	174 59	218 104	263 148	307 193	351 237	396 282	440 326	485 371	529 415	574 460
110	1320.00	lb	183 68	231 117	280 166	329 215	378 264	427 313	476 362	525 411	574 460	623 509	672 558
120	1440.00	lb	236 122	289 175	343 228	396 282	450 335	503 389	556 442	610 495	663 549	716 602	770 655
130	1560.00	lb	289 175	347 233	405 291	463 349	521 406	579 464	636 522	694 580	752 638	810 696	868 753
140	1680.00	lb	343 229	405 291	467 353	530 415	592 478	654 540	717 602	779 665	841 727	903 789	966 851
150	1800.00	lb	396 282	463 349	530 415	597 482	663 549	730 616	797 682	863 749	930 816	997 883	1064 949

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 2018 input prices.

Table 5.A Estimated costs per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	32.5498	40.36	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	64.0000	8.96	_____
Select Max	pt	12.71	1.0000	12.71	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	1.6700	23.06	_____
Liberty 280	oz	0.59	58.0000	34.22	_____
Diuron	pt	2.90	1.1000	3.19	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	2.2000	2.77	_____
Centric 40WG	oz	5.37	3.8400	20.62	_____
Diamond .83EC	oz	1.40	6.0000	8.40	_____
Imidacloprid 4F	oz	1.00	2.0000	2.00	_____
Bifenthrin	oz	0.76	12.8000	9.73	_____
Lambda	oz	1.09	1.0000	1.09	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	30.0000	68.40	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	26.7200	2.14	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.8605	12.25	_____
Self-Propelled	hour	14.23	0.2075	2.95	_____
HAND LABOR					
Implements	hour	9.06	0.3404	3.07	_____
Self-Propelled	hour	9.06	0.1899	1.72	_____
UNALLOCATED LABOR	hour	14.23	0.8544	12.16	_____
DIESEL FUEL					
Tractors	gal	2.60	9.9659	25.91	_____
Self-Propelled	gal	2.60	3.4215	8.89	_____
REPAIR & MAINTENANCE					
Implements	acre	10.55	1.0000	10.55	_____
Tractors	acre	5.16	1.0000	5.16	_____
Self-Propelled	acre	10.01	1.0000	10.01	_____
INTEREST ON OP. CAP.	acre	15.68	1.0000	15.68	_____
TOTAL DIRECT EXPENSES				639.56	_____
FIXED EXPENSES					
Implements	acre	18.36	1.0000	18.36	_____
Tractors	acre	35.48	1.0000	35.48	_____
Self-Propelled	acre	44.18	1.0000	44.18	_____
TOTAL FIXED EXPENSES				98.02	_____
TOTAL SPECIFIED EXPENSES				737.58	_____

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 5.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	811.0000	601.28	_____
Cotton Seed	lb	0.10	1095.0000	109.50	_____

TOTAL INCOME				710.78	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	42.50	1.0000	42.50	_____
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	70.36	1.0000	70.36	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	107.94	1.0000	107.94	_____
INSECTICIDES	acre	74.84	1.0000	74.84	_____
SEED/PLANTS	acre	68.40	1.0000	68.40	_____
GROWTH REGULATORS	acre	2.14	1.0000	2.14	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5303	4.79	_____
OPERATOR LABOR	hour	14.23	1.0680	15.20	_____
UNALLOCATED LABOR	hour	14.23	0.8544	12.16	_____
DIESEL FUEL	gal	2.60	13.3875	34.80	_____
REPAIR & MAINTENANCE	acre	25.72	1.0000	25.72	_____
INTEREST ON OP. CAP.	acre	15.68	1.0000	15.68	_____

TOTAL DIRECT EXPENSES				639.56	_____
RETURNS ABOVE DIRECT EXPENSES				71.22	_____
TOTAL FIXED EXPENSES					
				98.02	_____

TOTAL SPECIFIED EXPENSES				737.58	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-26.80	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 5.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Paratill Fold	8R-38 2x1	MFWD 225	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	8R-38 2x1	MFWD 225	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	8R-38 2x1	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
CSeed B3XF/W3RE/GLTP	thous					30.0000				
Cotton Seed Trt.	acre					0.6700				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	May		0.04	0.04	0.06	0.03
Dual Magnum	pt					0.6700				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Centric 40WG	oz					1.3400				
Mepiquat Chloride	oz					10.7200				
Fert Appl (Liquid)	8R-38 2x1	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.1000				
Liberty 280	oz					29.0000				
App by Air (3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air (3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air (3 gal)	appl					1.0000				
IncidentalPestTrt\$15	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				
Centric 40WG	oz					2.5000				
App by Air (5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air (5 gal)	appl			0.50	Sep	0.5000				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R2x1 (350)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	4R2x1 (350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1 (350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	811.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.06	0.86	1.59	0.85

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 5.D Estimated costs for field operations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	8R-38 2x1		1.62	1.66	1.38			0.28	4.94	4.83
Bed/Disk (Hipper)	8R-38 2x1		0.74	0.33	0.63			0.10	1.80	1.55
App by Air (5 gal)	appl	6.50						0.26	6.76	6.76
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Select Max	pt	12.71						0.51	13.22	13.22
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	8R-38 2x1		1.56	1.01	1.56			0.14	4.27	3.00
UAN (32%)	gal	20.18						0.71	20.89	20.89
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91
Plant - Folding	8R-38 2x1		1.49	1.83	1.72			0.15	5.19	5.31
CSeed B3XF/W3RE/GLTP	thous	68.40						2.05	70.45	70.45
Cotton Seed Trt.	acre	13.40						0.40	13.80	13.80
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Spray (Direct/Layby)	8R-38 2x1		1.34	0.58	1.34			0.10	3.36	2.25
Dual Magnum	pt	9.25						0.28	9.53	9.53
Liberty 280	oz	17.11						0.51	17.62	17.62
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Spray (Direct/Layby)	8R-38 2x1		1.34	0.58	1.34			0.08	3.34	2.25
Centric 40WG	oz	7.20						0.18	7.38	7.38
Mepiquat Chloride	oz	0.86						0.02	0.88	0.88
Fert Appl (Liquid)	8R-38 2x1		1.56	1.01	1.56			0.10	4.23	3.00
UAN (32%)	gal	20.18						0.50	20.68	20.68
App by Air (3 gal)	appl	5.00						0.13	5.13	5.13
Diamond .83EC	oz	8.40						0.21	8.61	8.61
Imidacloprid 4F	oz	2.00						0.05	2.05	2.05
Spray (Direct/Layby)	8R-38 2x1		1.34	0.58	1.34			0.07	3.33	2.25
Diuron	pt	3.19						0.06	3.25	3.25
Liberty 280	oz	17.11						0.34	17.45	17.45
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
Acephate 90%	lb	6.53						0.13	6.66	6.66
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Bifenthrin	oz	4.86						0.10	4.96	4.96
App by Air (3 gal)	appl	1.25						0.03	1.28	1.28
Lambda	oz	1.09						0.02	1.11	1.11
Bidrin 8EC	oz	2.52						0.05	2.57	2.57
Incidental Pest										
App by Air (3 gal)	appl	5.00						0.10	5.10	5.10
IncidentalPestTrt\$15	acre	15.00						0.30	15.30	15.30
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Acephate 90%	lb	6.53						0.10	6.63	6.63
Bifenthrin	oz	4.86						0.07	4.93	4.93
App by Air (3 gal)	appl	5.00						0.08	5.08	5.08
Centric 40WG	oz	13.43						0.20	13.63	13.63
App by Air (5 gal)	appl	6.50						0.07	6.57	6.57
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
App by Air (5 gal)	appl	3.25						0.03	3.28	3.28
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Cotton Picker	4R2x1(350)		8.07	9.61	5.97			0.12	23.77	41.36
Boll Buggy	4R2x1(350)		5.19	2.34	4.41			0.06	12.00	10.07
Module Builder	4R2x1(350)		5.19	2.52	5.97			0.07	13.75	10.48
Gin & Haul	lb	89.21						0.45	89.66	89.66
Stalk Shredder-Flail	15'		3.31	2.77	2.82			0.04	8.94	5.94
TOTALS		531.21	34.80	25.72	32.15	0.00	15.68	639.56	98.02	737.58

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 5.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

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	710.78
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	6.50	0.00	0.00	5.00	11.25	10.00	9.75	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	30.00	0.00	0.00	0.00	0.00	20.18	0.00	20.18	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	22.95	0.00	64.69	0.00	20.30	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	17.60	30.00	24.82	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	68.40	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	0.86	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.01	0.00	0.00	0.00	0.00	1.56	5.17	2.90	1.34	0.00	0.00	19.17
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	2.36	0.00	0.00	0.00	0.00	1.56	4.88	2.90	1.34	0.00	0.00	21.76
REPAIR & MAINTENANCE	1.99	0.00	0.00	0.00	0.00	1.01	3.31	1.59	0.58	0.00	0.00	17.24
INTEREST ON OP. CAP.	4.35	0.00	0.00	0.00	1.21	0.85	5.15	1.27	1.33	0.53	0.25	0.74
TOTAL DIRECT EXPENSES	76.85	0.00	0.00	0.00	31.38	25.16	177.14	52.30	67.42	35.35	25.84	148.12
NET INCOME	-76.85	0.00	0.00	0.00	-31.38	-25.16	-177.14	-52.30	-67.42	-35.35	-25.84	562.66
NET INCOME TO DATE	-76.85	-76.85	-76.85	-76.85	-108.23	-133.39	-310.53	-362.83	-430.25	-465.60	-491.44	71.22

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92		
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-259 -357	-244 -342	-229 -327	-214 -312	-199 -297	-184 -282	-169 -267	-154 -252	-139 -237	-124 -222	-109 -207
60	486.60	lb	-223 -321	-205 -303	-187 -285	-169 -267	-151 -249	-133 -231	-115 -213	-97 -195	-79 -177	-61 -159	-43 -141
70	567.70	lb	-187 -285	-166 -264	-145 -243	-124 -222	-103 -201	-82 -180	-61 -159	-40 -138	-19 -117	1 -96	22 -75
80	648.80	lb	-151 -249	-127 -225	-103 -201	-79 -177	-55 -153	-31 -129	-7 -105	16 -81	41 -56	65 -32	89 -8
90	729.90	lb	-115 -213	-88 -186	-61 -159	-34 -132	-6 -105	20 -77	47 -50	74 -23	101 3	128 30	155 57
100	811.00	lb	-79 -177	-49 -147	-18 -116	11 -86	41 -56	71 -26	101 3	131 33	161 63	191 93	221 123
110	892.10	lb	-42 -140	-9 -107	23 -74	56 -41	89 -8	122 24	155 57	188 90	221 123	254 156	287 189
120	973.20	lb	-6 -104	29 -68	65 -32	101 3	137 39	173 75	209 111	245 147	281 183	317 219	353 255
130	1054.30	lb	29 -68	68 -29	107 9	146 48	185 87	224 126	263 165	302 204	341 243	381 283	420 322
140	1135.40	lb	65 -32	107 9	149 51	191 93	233 135	275 177	317 219	360 262	402 304	444 346	486 388
150	1216.50	lb	101 3	146 48	191 93	236 138	281 183	327 229	372 274	417 319	462 364	507 409	552 454

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 2018 input prices.

Table 6.A Estimated costs per acre
 Cotton, 8R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	28.9332	35.88	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	0.2000	0.25	_____
Centric 40WG	oz	5.37	2.0000	10.74	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.9288	13.21	_____
Self-Propelled	hour	14.23	0.3397	4.83	_____
HAND LABOR					
Implements	hour	9.06	0.3579	3.24	_____
Self-Propelled	hour	9.06	0.2560	2.32	_____
UNALLOCATED LABOR					
	hour	14.20	1.0149	14.42	_____
DIESEL FUEL					
Tractors	gal	2.60	9.0841	23.61	_____
Self-Propelled	gal	2.60	4.6559	12.09	_____
REPAIR & MAINTENANCE					
Implements	acre	10.63	1.0000	10.63	_____
Tractors	acre	5.07	1.0000	5.07	_____
Self-Propelled	acre	14.42	1.0000	14.42	_____
INTEREST ON OP. CAP.	acre	14.75	1.0000	14.75	_____
TOTAL DIRECT EXPENSES				599.25	_____
FIXED EXPENSES					
Implements	acre	18.39	1.0000	18.39	_____
Tractors	acre	35.09	1.0000	35.09	_____
Self-Propelled	acre	67.26	1.0000	67.26	_____
TOTAL FIXED EXPENSES				120.74	_____
TOTAL SPECIFIED EXPENSES				719.99	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 6.B Summary of estimated costs and returns per acre
 Cotton, 8R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1000.0000	741.40	_____
Cotton Seed	lb	0.10	1350.0000	135.00	_____

TOTAL INCOME				876.40	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	65.88	1.0000	65.88	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	75.98	1.0000	75.98	_____
INSECTICIDES	acre	41.22	1.0000	41.22	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.6139	5.56	_____
OPERATOR LABOR	hour	14.23	1.2686	18.04	_____
UNALLOCATED LABOR	hour	14.20	1.0149	14.42	_____
DIESEL FUEL	gal	2.60	13.7400	35.70	_____
REPAIR & MAINTENANCE	acre	30.12	1.0000	30.12	_____
INTEREST ON OP. CAP.	acre	14.75	1.0000	14.75	_____

TOTAL DIRECT EXPENSES				599.25	_____
RETURNS ABOVE DIRECT EXPENSES				277.15	_____

TOTAL FIXED EXPENSES				120.74	_____

TOTAL SPECIFIED EXPENSES				719.99	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				156.41	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 6.C Estimated resource use for field operations, per acre
 Cotton, 8R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
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				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr		0.07	0.07	0.11	0.06
UAN (32%)	gal					14.4666				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	May		0.05	0.05	0.05	0.04
Plant - Folding	8R-38	MFWD 190	0.074	1.00	May		0.07	0.07	0.14	0.05
CSeed B3XF/W3RE/GLTP	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	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					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
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%)	gal					14.4666				
Spray (Direct/Layby)	8R-38	MFWD 190	0.066	1.00	Jul		0.06	0.06	0.10	0.05
Diuron	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
IncidentalPestTrt\$15	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	6R-38(355)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	6R-38(355)	MFWD 190	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38(355)	MFWD 190	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	1b			1.00	Oct	1000.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.26	0.92	1.88	1.01

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 6.D Estimated costs for field operations, per acre
 Cotton, 8R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	8R-38		2.05	2.03	2.07			0.37	6.52	6.13
Bed/Disk (Hipper)Rd	8R-38		0.94	0.37	0.95			0.14	2.40	1.90
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.05	1.19	1.41
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	8R-38		1.97	1.40	2.33			0.20	5.90	4.15
UAN (32%)	gal	17.94						0.63	18.57	18.57
Row Cond Rigid	26'		1.52	0.57	1.53			0.11	3.73	3.39
Plant - Folding	8R-38		1.90	1.82	2.59			0.19	6.50	5.83
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68	105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60	20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Centric 40WG	oz	10.74						0.27	11.01	11.01
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Fert Appl (Liquid)	8R-38		1.97	1.40	2.33			0.14	5.84	4.15
UAN (32%)	gal	17.94						0.45	18.39	18.39
Spray (Direct/Layby)	8R-38		1.70	0.72	2.01			0.09	4.52	3.00
Diuron	pt	4.64						0.09	4.73	4.73
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Acephate 90%	lb	6.53						0.13	6.66	6.66
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
IncidentalPestTrt\$15	acre	15.00						0.30	15.30	15.30
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
Acephate 90%	lb	6.53						0.10	6.63	6.63
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
Sprayer 600-750gal	60' 175hp		0.21	0.10	0.27			0.01	0.59	0.70
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Cotton Picker	6R-38(355)		8.19	12.52	5.97			0.13	26.81	53.87
Boll Buggy	6R-38(355)		4.38	2.25	4.41			0.06	11.10	9.48
Module Builder	6R-38(355)		4.38	2.43	5.97			0.06	12.84	9.89
Gin & Haul	lb	110.00						0.55	110.55	110.55
Stalk Shredder-Flail	15'		2.80	2.71	2.82			0.04	8.37	5.56
TOTALS		480.66	35.70	30.12	38.02	0.00	14.75	599.25	120.74	719.99

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 6.E Estimated monthly income and expense flows per acre
 Cotton, 8R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

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	876.40
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	110.00
FERTILIZERS	30.00	0.00	0.00	0.00	0.00	17.94	0.00	17.94	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	10.24	0.00	56.62	0.00	9.12	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	10.74	21.53	6.53	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.02	0.00	0.00	0.00	0.53	2.33	5.71	2.86	3.07	0.53	0.80	19.17
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	2.99	0.00	0.00	0.00	0.41	1.97	4.65	2.38	2.52	0.41	0.62	19.75
REPAIR & MAINTENANCE	2.40	0.00	0.00	0.00	0.20	1.40	2.99	1.60	1.12	0.20	0.30	19.91
INTEREST ON OP. CAP.	4.48	0.00	0.00	0.00	0.49	0.83	6.13	0.92	0.77	0.12	0.17	0.84
TOTAL DIRECT EXPENSES	79.03	0.00	0.00	0.00	12.59	24.47	210.84	37.72	39.41	7.79	17.73	169.67
NET INCOME	-79.03	0.00	0.00	0.00	-12.59	-24.47	-210.84	-37.72	-39.41	-7.79	-17.73	706.73
NET INCOME TO DATE	-79.03	-79.03	-79.03	-79.03	-91.62	-116.09	-326.93	-364.65	-404.06	-411.85	-429.58	277.15

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
 Cotton, 8R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92		
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-130 -251	-112 -233	-93 -214	-75 -196	-56 -177	-38 -159	-19 -140	-1 -121	17 -103	35 -84	54 -66
60	600.00	lb	-86 -207	-64 -184	-41 -162	-19 -140	2 -118	24 -95	47 -73	69 -51	91 -29	113 -6	136 15
70	700.00	lb	-41 -162	-15 -136	10 -110	35 -84	61 -58	87 -32	113 -6	139 19	165 45	191 70	217 96
80	800.00	lb	2 -118	32 -88	62 -58	91 -29	121 0	150 30	180 59	210 89	239 119	269 148	299 178
90	900.00	lb	47 -73	80 -40	113 -6	147 26	180 59	214 93	247 126	280 160	314 193	347 226	380 260
100	1000.00	lb	91 -28	128 8	165 45	203 82	240 119	277 156	314 193	351 230	388 267	425 304	462 341
110	1100.00	lb	136 15	177 56	217 97	258 137	299 178	340 219	381 260	421 301	462 341	503 382	544 423
120	1200.00	lb	180 60	225 104	269 149	314 193	358 238	403 282	447 327	492 371	536 416	581 460	625 505
130	1300.00	lb	225 104	273 152	321 201	370 249	418 297	466 345	514 393	562 442	610 490	659 538	707 586
140	1400.00	lb	270 149	321 201	373 253	425 304	477 356	529 408	581 460	633 512	685 564	737 616	788 668
150	1500.00	lb	314 193	370 249	425 305	481 360	536 416	592 471	648 527	703 583	759 638	814 694	870 749

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 2018 input prices.

Table 7.A Estimated costs per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	18.4000	22.82	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	0.2000	0.25	_____
Centric 40WG	oz	5.37	2.0000	10.74	_____
IncidentalPestTrt\$22	acre	22.00	1.0000	22.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.7365	10.47	_____
Self-Propelled	hour	14.23	0.3397	4.83	_____
HAND LABOR					
Implements	hour	9.06	0.3222	2.91	_____
Self-Propelled	hour	9.06	0.2560	2.32	_____
UNALLOCATED LABOR					
	hour	14.20	0.8610	12.23	_____
DIESEL FUEL					
Tractors	gal	2.60	7.2030	18.72	_____
Self-Propelled	gal	2.60	4.6559	12.09	_____
REPAIR & MAINTENANCE					
Implements	acre	8.16	1.0000	8.16	_____
Tractors	acre	4.02	1.0000	4.02	_____
Self-Propelled	acre	14.42	1.0000	14.42	_____
INTEREST ON OP. CAP.	acre	13.69	1.0000	13.69	_____
TOTAL DIRECT EXPENSES				567.46	_____
FIXED EXPENSES					
Implements	acre	14.16	1.0000	14.16	_____
Tractors	acre	27.82	1.0000	27.82	_____
Self-Propelled	acre	67.26	1.0000	67.26	_____
TOTAL FIXED EXPENSES				109.24	_____
TOTAL SPECIFIED EXPENSES				676.70	_____

Note: Cost of production estimates are based on 2018 input prices.

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

Table 7.B Summary of estimated costs and returns per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	900.0000	667.26	_____
Cotton Seed	lb	0.10	1215.0000	121.50	_____

TOTAL INCOME				788.76	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	52.82	1.0000	52.82	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	75.98	1.0000	75.98	_____
INSECTICIDES	acre	48.22	1.0000	48.22	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5782	5.23	_____
OPERATOR LABOR	hour	14.23	1.0763	15.30	_____
UNALLOCATED LABOR	hour	14.20	0.8610	12.23	_____
DIESEL FUEL	gal	2.60	11.8590	30.81	_____
REPAIR & MAINTENANCE	acre	26.60	1.0000	26.60	_____
INTEREST ON OP. CAP.	acre	13.69	1.0000	13.69	_____

TOTAL DIRECT EXPENSES				567.46	_____
RETURNS ABOVE DIRECT EXPENSES				221.30	_____

TOTAL FIXED EXPENSES				109.24	_____

TOTAL SPECIFIED EXPENSES				676.70	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				112.06	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 7.C Estimated resource use for field operations, per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
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				
Surfactant	pt					0.2000				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	May		0.05	0.05	0.05	0.04
NT Plant-Folding	8R-38	MFWD 190	0.077	1.00	May		0.07	0.07	0.15	0.06
CSeed B3XF/W3RE/GLTP	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	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					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
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%)	gal					18.4000				
Spray (Direct/Layby)	8R-38	MFWD 190	0.066	1.00	Jun		0.06	0.06	0.10	0.05
Diuron	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
IncidentalPestTrt\$22	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	6R-38(355)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	6R-38(355)	MFWD 190	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38(355)	MFWD 190	0.172	1.00	Oct		0.17	0.17	0.34	0.13
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							1.07	0.73	1.65	0.86

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 7.D Estimated costs for field operations, per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80		31.80
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.05	1.19	1.41	2.60
Clarity	pt	5.76						0.23	5.99		5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
Surfactant	pt	0.72						0.03	0.75		0.75
Row Cond Rigid	26'		1.52	0.57	1.53			0.11	3.73	3.39	7.12
NT Plant-Folding	8R-38		1.97	2.10	2.68			0.20	6.95	6.51	13.46
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68		105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60		20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Cotoran	pt	12.84						0.39	13.23		13.23
Surfactant	pt	0.72						0.02	0.74		0.74
Cotton Consultant	acre	8.00						0.24	8.24		8.24
Eradication	acre	1.00						0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Dual Magnum	pt	13.81						0.41	14.22		14.22
Acephate 90%	lb	2.17						0.07	2.24		2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Dual Magnum	pt	13.81						0.41	14.22		14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Bidrin 8EC	oz	0.25						0.01	0.26		0.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Centric 40WG	oz	10.74						0.27	11.01		11.01
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Fert Appl (Liquid)	8R-38		1.97	1.40	2.33			0.14	5.84	4.15	9.99
UAN (32%)	gal	22.82						0.57	23.39		23.39
Spray (Direct/Layby)	8R-38		1.70	0.72	2.01			0.11	4.54	3.00	7.54
Diuron	pt	4.64						0.12	4.76		4.76
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Acephate 90%	lb	6.53						0.13	6.66		6.66
Incidental Pest											
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
IncidentalPestTrt\$22	acre	22.00						0.44	22.44		22.44
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Acephate 90%	lb	6.53						0.10	6.63		6.63
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Thidiazuron 4lb	oz	2.23						0.02	2.25		2.25
Ethephon 6E	pt	7.06						0.07	7.13		7.13
Sprayer 600-750gal	60' 175hp		0.21	0.10	0.27			0.01	0.59	0.70	1.29
Tribufos 6lb	pt	5.45						0.05	5.50		5.50
Ethephon 6E	pt	1.10						0.01	1.11		1.11
Cotton Picker	6R-38(355)		8.19	12.52	5.97			0.13	26.81	53.87	80.68
Boll Buggy	6R-38(355)		4.38	2.25	4.41			0.06	11.10	9.48	20.58
Module Builder	6R-38(355)		4.38	2.43	5.97			0.06	12.84	9.89	22.73
Gin & Haul	lb	99.00						0.49	99.49		99.49
Stalk Shredder-Flail	15'		2.80	2.71	2.82			0.04	8.37	5.56	13.93
TOTALS		463.60	30.81	26.60	32.76	0.00	13.69	567.46	109.24	676.70	

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 7.E Estimated monthly income and expense flows per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

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	788.76
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	30.00	0.00	0.00	0.00	0.00	0.00	0.00	22.82	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	10.24	0.00	56.62	9.12	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	10.74	28.53	6.53	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	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	0.53	0.00	5.80	4.87	1.06	0.53	0.80	19.17
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	0.41	0.00	4.72	4.08	0.82	0.41	0.62	19.75
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.27	2.32	0.40	0.20	0.30	19.91
INTEREST ON OP. CAP.	3.97	0.00	0.00	0.00	0.49	0.00	6.14	1.38	0.64	0.12	0.17	0.78
TOTAL DIRECT EXPENSES	70.11	0.00	0.00	0.00	12.59	0.00	211.29	56.61	32.73	7.79	17.73	158.61
NET INCOME	-70.11	0.00	0.00	0.00	-12.59	0.00	-211.29	-56.61	-32.73	-7.79	-17.73	630.15
NET INCOME TO DATE	-70.11	-70.11	-70.11	-70.11	-82.70	-82.70	-293.99	-350.60	-383.33	-391.12	-408.85	221.30

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

PRODUCT	PERCENT													
	75	80	85	90	95	100	105	110	115	120	125			
Cotton Lint	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92			
PERCENT	YIELD	UNIT	dollars											
50	450.00	lb	-145 -255	-129 -238	-112 -221	-95 -205	-79 -188	-62 -171	-45 -155	-29 -138	-12 -121	4 -105	20 -88	
60	540.00	lb	-105 -215	-85 -195	-65 -175	-45 -155	-25 -135	-5 -115	14 -95	34 -75	54 -54	74 -34	94 -14	
70	630.00	lb	-65 -175	-42 -151	-19 -128	4 -104	27 -81	50 -58	74 -34	97 -11	121 11	144 35	167 58	
80	720.00	lb	-25 -134	0 -108	27 -81	54 -54	81 -28	107 -1	134 25	161 51	187 78	214 105	241 131	
90	810.00	lb	14 -94	44 -64	74 -34	104 -4	134 25	164 55	194 85	224 115	254 145	284 175	314 205	
100	900.00	lb	54 -54	87 -21	121 11	154 45	187 78	221 112	254 145	288 178	321 212	354 245	388 278	
110	990.00	lb	94 -14	131 22	167 58	204 95	241 132	278 168	314 205	351 242	388 278	424 315	461 352	
120	1080.00	lb	134 25	174 65	214 105	254 145	294 185	334 225	374 265	414 305	454 345	494 385	535 425	
130	1170.00	lb	174 65	218 108	261 152	304 195	348 239	391 282	435 325	478 369	521 412	565 455	608 499	
140	1260.00	lb	214 105	261 152	308 199	354 245	401 292	448 339	495 385	541 432	588 479	635 526	681 572	
150	1350.00	lb	254 145	305 195	355 245	405 295	455 345	505 395	555 445	605 496	655 546	705 596	755 646	

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 2018 input prices.

Table 8.A Estimated costs per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	28.9332	35.88	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	0.2000	0.25	_____
Centric 40WG	oz	5.37	2.0000	10.74	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4268	6.09	_____
Self-Propelled	hour	14.23	0.3397	4.83	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2560	2.32	_____
UNALLOCATED LABOR					
	hour	14.21	0.6133	8.72	_____
DIESEL FUEL					
Tractors	gal	2.60	4.7451	12.34	_____
Self-Propelled	gal	2.60	5.9419	15.43	_____
REPAIR & MAINTENANCE					
Implements	acre	7.11	1.0000	7.11	_____
Tractors	acre	2.50	1.0000	2.50	_____
Self-Propelled	acre	22.82	1.0000	22.82	_____
INTEREST ON OP. CAP.	acre	14.37	1.0000	14.37	_____
TOTAL DIRECT EXPENSES				578.30	_____
FIXED EXPENSES					
Implements	acre	11.15	1.0000	11.15	_____
Tractors	acre	17.22	1.0000	17.22	_____
Self-Propelled	acre	103.40	1.0000	103.40	_____
TOTAL FIXED EXPENSES				131.77	_____
TOTAL SPECIFIED EXPENSES				710.07	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 8.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1000.0000	741.40	_____
Cotton Seed	lb	0.10	1350.0000	135.00	_____

TOTAL INCOME				876.40	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	65.88	1.0000	65.88	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	75.98	1.0000	75.98	_____
INSECTICIDES	acre	41.22	1.0000	41.22	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3796	3.43	_____
OPERATOR LABOR	hour	14.23	0.7666	10.92	_____
UNALLOCATED LABOR	hour	14.21	0.6133	8.72	_____
DIESEL FUEL	gal	2.60	10.6871	27.77	_____
REPAIR & MAINTENANCE	acre	32.43	1.0000	32.43	_____
INTEREST ON OP. CAP.	acre	14.37	1.0000	14.37	_____

TOTAL DIRECT EXPENSES				578.30	_____
RETURNS ABOVE DIRECT EXPENSES				298.10	_____

TOTAL FIXED EXPENSES				131.77	_____

TOTAL SPECIFIED EXPENSES				710.07	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				166.33	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 8.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
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
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				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					14.4666				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
CSeed B3XF/W3RE/GLTP	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	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					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
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)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					14.4666				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
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
IncidentalPestTrt\$15	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/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1000.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							0.76	0.42	1.14	0.61

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 8.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	12R-38		1.62	1.66	1.38			0.28	4.94	4.83
Bed/Disk (Hipper)	12R-38		0.74	0.33	0.63			0.10	1.80	1.55
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.05	1.19	1.41
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.14	4.26	2.98
UAN (32%)	gal	17.94						0.63	18.57	18.57
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91
Plant - Folding	12R-38		1.49	1.83	1.72			0.15	5.19	5.31
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68	105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60	20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Centric 40WG	oz	10.74						0.27	11.01	11.01
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98
UAN (32%)	gal	17.94						0.45	18.39	18.39
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.07	3.33	2.25
Diuron	pt	4.64						0.09	4.73	4.73
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Acephate 90%	lb	6.53						0.13	6.66	6.66
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
IncidentalPestTrt\$15	acre	15.00						0.30	15.30	15.30
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
Acephate 90%	lb	6.53						0.10	6.63	6.63
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
Sprayer 600-750gal	60' 175hp		0.21	0.10	0.27			0.01	0.59	0.70
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01
Gin & Haul	lb	110.00						0.55	110.55	110.55
Stalk Shredder-Flail	15'		2.80	2.71	2.82			0.04	8.37	5.56
TOTALS		480.66	27.77	32.43	23.07	0.00	14.37	578.30	131.77	710.07

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 8.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

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	876.40
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	110.00
FERTILIZERS	30.00	0.00	0.00	0.00	0.00	17.94	0.00	17.94	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	10.24	0.00	56.62	0.00	9.12	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	10.74	21.53	6.53	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.01	0.00	0.00	0.00	0.53	1.56	4.36	2.09	2.40	0.53	0.80	8.79
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	2.36	0.00	0.00	0.00	0.41	1.56	3.95	1.97	2.16	0.41	0.62	14.33
REPAIR & MAINTENANCE	1.99	0.00	0.00	0.00	0.20	1.00	2.93	1.20	0.98	0.20	0.30	23.63
INTEREST ON OP. CAP.	4.35	0.00	0.00	0.00	0.49	0.77	6.06	0.88	0.75	0.12	0.17	0.78
TOTAL DIRECT EXPENSES	76.85	0.00	0.00	0.00	12.59	22.83	208.66	36.10	38.22	7.79	17.73	157.53
NET INCOME	-76.85	0.00	0.00	0.00	-12.59	-22.83	-208.66	-36.10	-38.22	-7.79	-17.73	718.87
NET INCOME TO DATE	-76.85	-76.85	-76.85	-76.85	-89.44	-112.27	-320.93	-357.03	-395.25	-403.04	-420.77	298.10

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-110 -241	-91 -223	-72 -204	-54 -186	-35 -167	-17 -149	1 -130	19 -112	38 -93	56 -74	75 -56
60	600.00	lb	-65 -197	-43 -174	-20 -152	1 -130	23 -108	45 -86	68 -63	90 -41	112 -19	134 2	156 25
70	700.00	lb	-20 -152	5 -126	30 -100	56 -74	82 -48	108 -22	134 3	160 28	186 54	212 80	238 106
80	800.00	lb	23 -108	53 -78	82 -48	112 -19	142 10	171 40	201 69	231 99	260 129	290 158	320 188
90	900.00	lb	68 -63	101 -30	134 3	168 36	201 69	235 103	268 136	301 169	335 203	368 236	401 270
100	1000.00	lb	112 -19	149 18	186 55	223 92	261 129	298 166	335 203	372 240	409 277	446 314	483 351
110	1100.00	lb	157 25	198 66	238 107	279 147	320 188	361 229	401 270	442 310	483 351	524 392	565 433
120	1200.00	lb	201 70	246 114	290 159	335 203	379 248	424 292	468 336	513 381	557 425	602 470	646 514
130	1300.00	lb	246 114	294 162	342 211	390 259	439 307	487 355	535 403	583 451	631 500	680 548	728 596
140	1400.00	lb	290 159	342 211	394 262	446 314	498 366	550 418	602 470	654 522	706 574	758 626	809 678
150	1500.00	lb	335 203	391 259	446 314	502 370	557 426	613 481	669 537	724 592	780 648	835 704	891 759

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 2018 input prices.

Table 9.A Estimated costs per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	18.4000	22.82	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	0.2000	0.25	_____
Centric 40WG	oz	5.37	2.0000	10.74	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.2987	4.26	_____
Self-Propelled	hour	14.23	0.3397	4.83	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.2560	2.32	_____
UNALLOCATED LABOR					
	hour	14.23	0.5108	7.27	_____
DIESEL FUEL					
Tractors	gal	2.60	3.2620	8.49	_____
Self-Propelled	gal	2.60	5.9419	15.43	_____
REPAIR & MAINTENANCE					
Implements	acre	5.17	1.0000	5.17	_____
Tractors	acre	1.73	1.0000	1.73	_____
Self-Propelled	acre	22.82	1.0000	22.82	_____
INTEREST ON OP. CAP.	acre	13.35	1.0000	13.35	_____
TOTAL DIRECT EXPENSES				543.17	_____
FIXED EXPENSES					
Implements	acre	7.73	1.0000	7.73	_____
Tractors	acre	11.93	1.0000	11.93	_____
Self-Propelled	acre	103.40	1.0000	103.40	_____
TOTAL FIXED EXPENSES				123.06	_____
TOTAL SPECIFIED EXPENSES				666.23	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 9.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	900.0000	667.26	_____
Cotton Seed	lb	0.10	1215.0000	121.50	_____

TOTAL INCOME				788.76	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	52.82	1.0000	52.82	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	75.98	1.0000	75.98	_____
INSECTICIDES	acre	41.22	1.0000	41.22	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3558	3.22	_____
OPERATOR LABOR	hour	14.23	0.6385	9.09	_____
UNALLOCATED LABOR	hour	14.23	0.5108	7.27	_____
DIESEL FUEL	gal	2.60	9.2040	23.92	_____
REPAIR & MAINTENANCE	acre	29.72	1.0000	29.72	_____
INTEREST ON OP. CAP.	acre	13.35	1.0000	13.35	_____

TOTAL DIRECT EXPENSES				543.17	_____
RETURNS ABOVE DIRECT EXPENSES				245.59	_____
TOTAL FIXED EXPENSES					
				123.06	_____

TOTAL SPECIFIED EXPENSES				666.23	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				122.53	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 9.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
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				
Surfactant	pt					0.2000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.10	0.04
CSeed B3XF/W3RE/GLTP	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	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					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
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)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					18.4000				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
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
IncidentalPestTrt\$15	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/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb					900.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							0.63	0.29	0.99	0.51

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 9.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33						0.20	3.53		3.53
Lime (Spread)	ton	25.31						1.52	26.83		26.83
Custom Apply Fert	acre	7.50						0.45	7.95		7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80		31.80
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.05	1.19	1.41	2.60
Clarity	pt	5.76						0.23	5.99		5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66		4.66
Surfactant	pt	0.72						0.03	0.75		0.75
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91	5.77
NT Plant-Folding	12R-38		1.56	2.11	1.80			0.16	5.63	5.96	11.59
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68		105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60		20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Gramoxone SL 2.0	oz	7.20						0.22	7.42		7.42
Cotoran	pt	12.84						0.39	13.23		13.23
Surfactant	pt	0.72						0.02	0.74		0.74
Cotton Consultant	acre	8.00						0.24	8.24		8.24
Eradication	acre	1.00						0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Dual Magnum	pt	13.81						0.41	14.22		14.22
Acephate 90%	lb	2.17						0.07	2.24		2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Dual Magnum	pt	13.81						0.41	14.22		14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61		4.61
Bidrin 8EC	oz	0.25						0.01	0.26		0.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41	2.58
Centric 40WG	oz	10.74						0.27	11.01		11.01
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98	7.20
UAN (32%)	gal	22.82						0.57	23.39		23.39
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.08	3.34	2.25	5.59
Diuron	pt	4.64						0.12	4.76		4.76
Glyphosate 3lbs a.e	oz	4.48						0.11	4.59		4.59
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Mepiquat Chloride	oz	1.28						0.03	1.31		1.31
Acephate 90%	lb	6.53						0.13	6.66		6.66
Incidental Pest											
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
IncidentalPestTrt\$15	acre	15.00						0.30	15.30		15.30
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41	2.57
Acephate 90%	lb	6.53						0.10	6.63		6.63
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41	2.56
Thidiazuron 4lb	oz	2.23						0.02	2.25		2.25
Ethephon 6E	pt	7.06						0.07	7.13		7.13
Sprayer 600-750gal	60' 175hp		0.21	0.10	0.27			0.01	0.59	0.70	1.29
Tribufos 6lb	pt	5.45						0.05	5.50		5.50
Ethephon 6E	pt	1.10						0.01	1.11		1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01	128.62
Gin & Haul	lb	99.00						0.49	99.49		99.49
Stalk Shredder-Flail	15'		2.80	2.71	2.82			0.04	8.37	5.56	13.93
TOTALS		456.60	23.92	29.72	19.58	0.00	13.35	543.17	123.06	666.23	

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 9.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

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	788.76
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	30.00	0.00	0.00	0.00	0.00	0.00	0.00	22.82	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	10.24	0.00	56.62	9.12	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	10.74	21.53	6.53	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	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	0.53	0.00	4.44	3.43	1.06	0.53	0.80	8.79
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	0.41	0.00	4.02	3.31	0.82	0.41	0.62	14.33
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.21	1.78	0.40	0.20	0.30	23.63
INTEREST ON OP. CAP.	3.97	0.00	0.00	0.00	0.49	0.00	6.07	1.31	0.50	0.12	0.17	0.72
TOTAL DIRECT EXPENSES	70.11	0.00	0.00	0.00	12.59	0.00	209.10	53.79	25.59	7.79	17.73	146.47
NET INCOME	-70.11	0.00	0.00	0.00	-12.59	0.00	-209.10	-53.79	-25.59	-7.79	-17.73	642.29
NET INCOME TO DATE	-70.11	-70.11	-70.11	-70.11	-82.70	-82.70	-291.80	-345.59	-371.18	-378.97	-396.70	245.59

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3RE/GLTP variety, Non-Delta Area, Mississippi, 2019

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Cotton Lint	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92		
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-121 -244	-105 -228	-88 -211	-71 -194	-54 -178	-38 -161	-21 -144	-4 -127	11 -111	28 -94	45 -77
60	540.00	lb	-81 -204	-61 -184	-41 -164	-21 -144	-1 -124	18 -104	38 -84	58 -64	78 -44	98 -24	118 -4
70	630.00	lb	-41 -164	-18 -141	5 -117	28 -94	51 -71	75 -47	98 -24	121 -1	145 22	168 45	192 68
80	720.00	lb	-1 -124	25 -97	51 -71	78 -44	105 -17	132 8	158 35	185 62	212 89	238 115	265 142
90	810.00	lb	38 -84	68 -54	98 -24	128 5	158 35	188 65	218 95	248 125	278 155	308 185	338 215
100	900.00	lb	78 -44	112 -10	145 22	178 55	212 89	245 122	278 155	312 189	345 222	379 255	412 289
110	990.00	lb	118 -4	155 32	192 69	228 105	265 142	302 179	339 216	375 252	412 289	449 326	485 362
120	1080.00	lb	158 35	199 75	239 115	279 156	319 196	359 236	399 276	439 316	479 356	519 396	559 436
130	1170.00	lb	199 76	242 119	285 162	329 206	372 249	415 292	459 336	502 379	546 422	589 466	632 509
140	1260.00	lb	239 116	285 162	332 209	379 256	425 302	472 349	519 396	566 443	612 489	659 536	706 583
150	1350.00	lb	279 156	329 206	379 256	429 306	479 356	529 406	579 456	629 506	679 556	729 606	779 656

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 2018 input prices.

Table 10.A Estimated costs per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP, pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	0.97	2.3000	2.23	_____
Ethephon 6E	pt	3.53	2.3125	8.16	_____
Tribufos 6lb	pt	10.90	0.5000	5.45	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	20.00	1.5000	30.00	_____
UAN (32%)	gal	1.24	28.9332	35.88	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	11.51	0.5000	5.76	_____
Glyphosate 3lbs a.e	oz	0.14	128.0000	17.92	_____
Gramoxone SL 2.0	oz	0.15	48.0000	7.20	_____
Cotoran	pt	6.42	2.0000	12.84	_____
Dual Magnum	pt	13.81	2.0000	27.62	_____
Diuron	pt	2.90	1.6000	4.64	_____
INSECTICIDES					
Acephate 90%	lb	8.70	1.7500	15.22	_____
Bidrin 8EC	oz	1.26	0.2000	0.25	_____
Centric 40WG	oz	5.37	2.0000	10.74	_____
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
CSeed B3XF/W3RE/GLTP	thous	2.28	45.0000	102.60	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.08	32.0000	2.56	_____
ADJUVANTS					
Surfactant	pt	3.59	0.4000	1.44	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.6660	25.31	_____
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	14.23	0.4268	6.09	_____
Self-Propelled	hour	14.23	0.3397	4.83	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2560	2.32	_____
UNALLOCATED LABOR	hour	14.21	0.6133	8.72	_____
DIESEL FUEL					
Tractors	gal	2.60	4.7451	12.34	_____
Self-Propelled	gal	2.60	5.9419	15.43	_____
1/4-mi. Pivot Irr.	gal	2.60	11.2011	29.13	_____
REPAIR & MAINTENANCE					
Implements	acre	7.11	1.0000	7.11	_____
Tractors	acre	2.50	1.0000	2.50	_____
Self-Propelled	acre	22.82	1.0000	22.82	_____
1/4-mi. Pivot Irr.	acre	21.65	1.0000	21.65	_____
INTEREST ON OP. CAP.	acre	15.62	1.0000	15.62	_____
TOTAL DIRECT EXPENSES				654.17	_____
FIXED EXPENSES					
Implements	acre	11.15	1.0000	11.15	_____
Tractors	acre	17.22	1.0000	17.22	_____
Self-Propelled	acre	103.40	1.0000	103.40	_____
1/4-mi. Pivot Irr.	acre	84.43	1.0000	84.43	_____
TOTAL FIXED EXPENSES				216.20	_____
TOTAL SPECIFIED EXPENSES				870.37	_____

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 10.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP, pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2019

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.74	1200.0000	889.68	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				1051.68	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	15.84	1.0000	15.84	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	65.88	1.0000	65.88	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	75.98	1.0000	75.98	_____
INSECTICIDES	acre	41.22	1.0000	41.22	_____
SEED/PLANTS	acre	102.60	1.0000	102.60	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.44	1.0000	1.44	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	25.31	1.0000	25.31	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3796	3.43	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	14.23	0.7666	10.92	_____
UNALLOCATED LABOR	hour	14.21	0.6133	8.72	_____
DIESEL FUEL	gal	2.60	21.8882	56.90	_____
REPAIR & MAINTENANCE	acre	54.08	1.0000	54.08	_____
INTEREST ON OP. CAP.	acre	15.62	1.0000	15.62	_____

TOTAL DIRECT EXPENSES				654.17	_____
RETURNS ABOVE DIRECT EXPENSES				397.51	_____
TOTAL FIXED EXPENSES					
				216.20	_____

TOTAL SPECIFIED EXPENSES				870.37	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				181.31	_____

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 10.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP, pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2019

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	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
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
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				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					14.4666				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
CSeed B3XF/W3RE/GLTP	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	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					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Bidrin 8EC	oz					0.2000				
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)	12R-38	MFWD 225	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					14.4666				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Diuron	pt					1.6000				
Glyphosate 3lbs a.e	oz					32.0000				
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
IncidentalPestTrt\$15	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/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	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
1/4-mi. Pivot Irr.	acre				Jan	1.0000			0.20	
TOTALS							0.76	0.42	1.34	0.61

Note: Cost of production estimates are based on 2018 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 10.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP, pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33						0.20	3.53	3.53
Lime (Spread)	ton	25.31						1.52	26.83	26.83
Custom Apply Fert	acre	7.50						0.45	7.95	7.95
Potash (60% K2O)	cwt	30.00						1.80	31.80	31.80
Bed-Paratill Fold	12R-38		1.62	1.66	1.38			0.28	4.94	4.83
Bed/Disk (Hipper)	12R-38		0.74	0.33	0.63			0.10	1.80	1.55
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.05	1.19	1.41
Clarity	pt	5.76						0.23	5.99	5.99
Glyphosate 3lbs a.e	oz	4.48						0.18	4.66	4.66
Surfactant	pt	0.72						0.03	0.75	0.75
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.14	4.26	2.98
UAN (32%)	gal	17.94						0.63	18.57	18.57
Row Cond Folding	38'		1.23	0.50	1.05			0.08	2.86	2.91
Plant - Folding	12R-38		1.49	1.83	1.72			0.15	5.19	5.31
CSeed B3XF/W3RE/GLTP	thous	102.60						3.08	105.68	105.68
Cotton Seed Trt.	acre	20.00						0.60	20.60	20.60
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Gramoxone SL 2.0	oz	7.20						0.22	7.42	7.42
Cotoran	pt	12.84						0.39	13.23	13.23
Surfactant	pt	0.72						0.02	0.74	0.74
Cotton Consultant	acre	8.00						0.24	8.24	8.24
Eradication	acre	1.00						0.03	1.03	1.03
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Acephate 90%	lb	2.17						0.07	2.24	2.24
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Dual Magnum	pt	13.81						0.41	14.22	14.22
Glyphosate 3lbs a.e	oz	4.48						0.13	4.61	4.61
Bidrin 8EC	oz	0.25						0.01	0.26	0.26
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.03	1.17	1.41
Centric 40WG	oz	10.74						0.27	11.01	11.01
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Fert Appl (Liquid)	12R-38		1.56	1.00	1.56			0.10	4.22	2.98
UAN (32%)	gal	17.94						0.45	18.39	18.39
Spray (Direct/Layby)	12R-38		1.34	0.58	1.34			0.07	3.33	2.25
Diuron	pt	4.64						0.09	4.73	4.73
Glyphosate 3lbs a.e	oz	4.48						0.09	4.57	4.57
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
Mepiquat Chloride	oz	1.28						0.03	1.31	1.31
Acephate 90%	lb	6.53						0.13	6.66	6.66
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
IncidentalPestTrt\$15	acre	15.00						0.30	15.30	15.30
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.02	1.16	1.41
Acephate 90%	lb	6.53						0.10	6.63	6.63
Sprayer 600-750gal	60' 175hp		0.41	0.20	0.53			0.01	1.15	1.41
Thidiazuron 4lb	oz	2.23						0.02	2.25	2.25
Ethephon 6E	pt	7.06						0.07	7.13	7.13
Sprayer 600-750gal	60' 175hp		0.21	0.10	0.27			0.01	0.59	0.70
Tribufos 6lb	pt	5.45						0.05	5.50	5.50
Ethephon 6E	pt	1.10						0.01	1.11	1.11
Cotton Picker/Module	6R-38(500)		11.53	20.92	5.97			0.19	38.61	90.01
Gin & Haul	lb	132.00						0.66	132.66	132.66
Stalk Shredder-Flail	15'		2.80	2.71	2.82			0.04	8.37	5.56
1/4-mi. Pivot Irr.	acre		29.13	21.65	1.84			1.14	53.76	84.43
TOTALS		502.66	56.90	54.08	24.91	0.00	15.62	654.17	216.20	870.37

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 10.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP, pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2019

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	1051.68
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.84	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	30.00	0.00	0.00	0.00	0.00	17.94	0.00	17.94	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	10.24	0.00	56.62	0.00	9.12	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	2.42	10.74	21.53	6.53	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	102.60	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	1.28	1.28	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	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	25.31	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	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.01	0.00	0.00	0.00	0.53	1.56	5.70	2.24	2.60	0.68	0.80	8.79
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	2.36	0.00	0.00	0.00	0.41	1.56	3.95	10.71	13.81	9.15	0.62	14.33
REPAIR & MAINTENANCE	1.99	0.00	0.00	0.00	0.20	1.00	2.93	19.58	2.85	1.60	0.30	23.63
INTEREST ON OP. CAP.	4.35	0.00	0.00	0.00	0.49	0.77	6.10	1.56	1.02	0.27	0.17	0.89
TOTAL DIRECT EXPENSES	76.85	0.00	0.00	0.00	12.59	22.83	210.04	64.05	52.21	18.23	17.73	179.64
NET INCOME	-76.85	0.00	0.00	0.00	-12.59	-22.83	-210.04	-64.05	-52.21	-18.23	-17.73	872.04
NET INCOME TO DATE	-76.85	-76.85	-76.85	-76.85	-89.44	-112.27	-322.31	-386.36	-438.57	-456.80	-474.53	397.51

Note: Cost of production estimates are based on 2018 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 10.F Estimated returns for various price/yield combinations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3RE/GLTP, pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2019

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-92 -308	-69 -286	-47 -263	-25 -241	-3 -219	19 -197	41 -174	63 -152	85 -130	107 -108	130 -85
60	720.00	lb	-38 -254	-12 -228	14 -201	41 -174	68 -148	94 -121	121 -94	148 -68	174 -41	201 -14	228 11
70	840.00	lb	14 -201	45 -170	76 -139	108 -108	139 -76	170 -45	201 -14	232 16	263 47	294 78	326 109
80	960.00	lb	68 -148	103 -112	139 -76	174 -41	210 -5	246 29	281 65	317 101	352 136	388 172	424 207
90	1080.00	lb	121 -94	161 -54	201 -14	241 25	281 65	321 105	361 145	401 185	441 225	481 265	521 305
100	1200.00	lb	175 -41	219 3	264 47	308 92	353 136	397 181	441 225	486 270	530 314	575 359	619 403
110	1320.00	lb	228 12	277 61	326 110	375 159	424 208	473 257	522 305	571 354	620 403	668 452	717 501
120	1440.00	lb	282 65	335 119	388 172	442 225	495 279	548 332	602 386	655 439	709 492	762 546	815 599
130	1560.00	lb	335 119	393 177	451 234	508 292	566 350	624 408	682 466	740 524	798 581	855 639	913 697
140	1680.00	lb	388 172	451 235	513 297	575 359	638 421	700 484	762 546	824 608	887 670	949 733	1011 795
150	1800.00	lb	442 226	509 292	575 359	642 426	709 493	776 559	842 626	909 693	976 759	1042 826	1109 893

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 2018 input prices.

APPENDIX

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

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

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2019

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

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost			
			dollars	hours	years	hr/ac	-----\$/acre-----								
Bed-Paratill	Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.09	2.43	1.58	0.48	5.59	3.08	3.32	12.00
Bed-Paratill	Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.72	1.61	1.34	0.32	4.00	2.60	2.21	8.83
Bed-Paratill	Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.72	1.61	1.34	0.32	4.00	2.60	2.21	8.83
Bed-Paratill	Rigid	4R-30	MFWD 225	12,300	150	12	0.204	2.76	6.15	0.90	1.21	11.04	1.76	8.42	21.22
Bed-Paratill	Rigid	4R-38	MFWD 225	12,300	150	12	0.160	2.17	4.84	0.71	0.96	8.69	1.38	6.63	16.71
Bed-Paratill	Rigid	6R-30	MFWD 225	17,300	150	12	0.136	1.84	4.10	0.85	0.81	7.60	1.65	5.61	14.87
Bed-Paratill	Rigid	6R-38	MFWD 225	17,200	150	12	0.107	1.45	3.23	0.66	0.64	6.00	1.29	4.43	11.73
Bed-Paratill	Rigid	8R-30	MFWD 225	22,600	150	12	0.102	1.38	3.07	0.83	0.60	5.90	1.62	4.21	11.73
Bed-Paratill	Rigid	8R-38	MFWD 225	22,600	150	12	0.080	1.09	2.43	0.65	0.48	4.66	1.28	3.32	9.27
Bed-Rip/Disk	Fold.	8R-38	MFWD 190	36,900	300	20	0.073	0.98	1.85	0.13	0.39	3.37	0.74	2.76	6.88
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	56,600	300	20	0.061	0.83	1.85	0.17	0.36	3.23	0.96	2.54	6.73
Bed-Rip/Disk	Fold.	12R-38	MFWD 225	56,600	300	20	0.046	0.62	1.39	0.13	0.27	2.42	0.72	1.90	5.05
Bed-Rip/Disk	Rigid	4R-30	MFWD 190	17,300	300	20	0.184	2.49	4.70	0.15	1.01	8.36	0.88	6.98	16.23
Bed-Rip/Disk	Rigid	4R-38	MFWD 190	17,300	300	20	0.146	1.98	3.73	0.12	0.80	6.64	0.70	5.54	12.88
Bed-Rip/Disk	Rigid	6R-38	MFWD 190	23,900	300	20	0.097	1.31	2.47	0.11	0.53	4.43	0.64	3.67	8.75
Bed-Rip/Disk	Rigid	8R-30	MFWD 190	31,300	300	20	0.139	1.87	3.53	0.21	0.76	6.39	1.20	5.25	12.84
Bed-Rip/Disk	Rigid	8R-38	MFWD 190	31,300	300	20	0.073	0.98	1.85	0.11	0.39	3.35	0.63	2.76	6.75
Bed-Rip/Disk	Rigid	6R-30	MFWD 190	23,900	300	20	0.123	1.66	3.13	0.14	0.67	5.62	0.81	4.65	11.09
Bed-Rip/Disk/Cond.		6-Row	MFWD 225	24,600	150	12	0.107	1.45	3.23	0.95	0.64	6.28	1.85	4.43	12.57
Bed-Rip/Disk/Cond.		8-Row	MFWD 225	32,700	150	12	0.080	1.09	2.43	0.95	0.48	4.95	1.85	3.32	10.14
Bed/Disk (Hipper)		4R-38	MFWD 150	9,200	160	10	0.147	1.99	2.96	0.33	0.59	5.89	0.99	3.98	10.87
Bed/Disk (Hipper)		6R-38	MFWD 170	13,000	160	10	0.098	1.33	2.24	0.32	0.45	4.35	0.93	3.15	8.44
Bed/Disk (Hipper)		8R-30	MFWD 190	17,800	160	10	0.093	1.26	2.38	0.41	0.51	4.58	1.21	3.54	9.34
Bed/Disk (Hipper)		8R-38 2x1	MFWD 190	29,200	160	10	0.049	0.66	1.25	0.36	0.26	2.55	1.05	1.86	5.46
Bed/Disk (Hipper)		12R-30	MFWD 225	31,000	160	10	0.062	0.84	1.88	0.48	0.37	3.58	1.41	2.57	7.57
Bed/Disk (Hipper)		12R-38	MFWD 225	29,200	160	10	0.049	0.66	1.48	0.36	0.29	2.80	1.05	2.03	5.89
Bed/Disk (Hipper)Fl		8R-38	MFWD 190	2,000	160	10	0.074	1.00	1.88	0.03	0.40	3.32	0.10	2.79	6.23
Bed/Disk (Hipper)Rd		8R-38	MFWD 190	18,400	160	10	0.074	1.00	1.88	0.34	0.40	3.63	0.99	2.79	7.42
Bed/Disk w/roller		8R-30	MFWD 190	26,600	160	10	0.093	1.26	2.38	0.62	0.51	4.78	1.82	3.54	10.14
Bed/Disk w/roller		8R-38	MFWD 190	26,600	160	10	0.074	1.00	1.88	0.49	0.40	3.78	1.43	2.79	8.02
Bed/Disk w/roller		12R-30/40	MFWD 225	47,000	160	10	0.062	0.84	1.88	0.73	0.37	3.83	2.14	2.57	8.55
Bed/Lister		4R-38	MFWD 150	18,200	160	8	0.228	3.08	4.58	0.97	0.92	9.57	3.36	6.16	19.09
Bed/Lister		6R-38	MFWD 150	19,100	160	8	0.120	1.62	2.41	0.53	0.48	5.06	1.85	3.24	10.16
Bed/Lister		8R-30	MFWD 190	23,100	160	8	0.114	1.54	2.90	0.61	0.62	5.68	2.13	4.31	12.13
Bed/Lister		8R-38	MFWD 190	23,400	160	8	0.090	1.21	2.29	0.49	0.49	4.50	1.70	3.40	9.62
Bed/Lister		8R-38 2x1	MFWD 190	46,700	160	8	0.060	0.81	1.52	0.65	0.32	3.32	2.27	2.27	7.86
Bed/Lister		12R-38	MFWD 225	46,700	160	8	0.060	0.81	1.80	0.65	0.35	3.63	2.27	2.47	8.38
Bed/Lister		16R-30	MFWD 225	58,100	160	8	0.035	0.47	1.05	0.47	0.20	2.22	1.65	1.44	5.32
Bed/Lister		16R40	MFWD 300	60,900	160	8	0.043	0.58	1.73	0.61	0.37	3.30	2.12	2.58	8.01
Bed/Lister-Roll-Fold		8R-38	MFWD 190	24,300	160	10	0.074	1.00	1.88	0.45	0.40	3.74	1.31	2.79	7.85
Bed/Lister-Roll-Fold		12R-30	MFWD 225	29,200	160	10	0.062	0.84	1.88	0.45	0.37	3.55	1.33	2.57	7.46
Bed/Lister-Roll-Fold		12R-38	MFWD 225	33,700	160	10	0.049	0.66	1.48	0.41	0.29	2.86	1.21	2.03	6.11
Bed/Lister-Roll-Fold		16R-30	MFWD 225	34,800	160	10	0.046	0.63	1.41	0.40	0.27	2.73	1.19	1.93	5.85
Bed/Lister-Roll-Rig.		8R-38	MFWD 190	20,300	160	10	0.074	1.00	1.88	0.37	0.40	3.66	1.09	2.79	7.56
Blade-Box		6'-7'	MFWD 105	1,221	200	20	0.020	0.27	0.28	0.01	0.04	0.60	0.01	0.28	0.89
Blade-Box		8'-10'	MFWD 105	3,700	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	1,213	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	3,550	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	3.48	6.55	1.96	1.40	13.41	4.44	9.73	27.59
Boll Buggy		4R-38 (350)	MFWD 190	30,500	200	10	0.257	3.48	6.55	1.96	1.40	13.41	4.44	9.73	27.59
Boll Buggy		4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.32	4.38	1.31	0.94	8.96	2.97	6.50	18.44
Boll Buggy		6R-30 (355)	MFWD 190	30,500	200	10	0.218	2.94	5.54	1.66	1.19	11.35	3.76	8.24	23.36
Boll Buggy		6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.32	4.38	1.31	0.94	8.96	2.97	6.50	18.44
Chisel Plow-Folding		24'	MFWD 190	39,900	150	12	0.076	1.03	1.94	1.10	0.41	4.49	2.14	2.88	9.52
Chisel Plow-Folding		32'	MFWD 225	51,900	150	12	0.057	0.78	1.73	1.08	0.34	3.94	2.10	2.38	8.43
Chisel Plow-Folding		42'	MFWD 225	62,500	150	12	0.044	0.59	1.32	0.99	0.26	3.17	1.93	1.81	6.92
Chisel Plow-Folding		50'	MFWD 225	81,900	150	10	0.036	0.49	1.11	1.31	0.22	3.14	2.35	1.52	7.02
Chisel Plow-Folding		61'	MFWD 225	92,400	150	12	0.030	0.40	0.91	1.01	0.18	2.51	1.96	1.24	5.72
Chisel Plow-Rigid		10'	MFWD 170	7,090	150	12	0.184	2.49	4.20	0.47	0.85	8.03	0.92	5.90	14.85
Chisel Plow-Rigid		15'	2WD 130	11,800	150	12	0.123	1.66	2.14	0.52	0.39	4.73	1.02	2.63	8.38
Chisel Plow-Rigid		20'	MFWD 225	11,300	150	12	0.102	1.38	3.09	0.41	0.61	5.51	0.81	4.23	10.56
Chisel Plow-Rigid		24'	MFWD 190	11,700	150	12	0.077	1.04	1.95	0.32	0.42	3.74	0.63	2.90	7.28
Cultivate		4R-30	2WD 105	12,100	150	10	0.206	2.78	2.89	0.66	0.44	6.79	1.94	2.96	11.70
Cultivate		4R-38	2WD 105	12,200	150	10	0.162	2.19	2.28	0.52	0.31	5.31	1.54	2.06	8.92
Cultivate		6R-30	MFWD 150	16,300	150	10	0.137	1.85	2.76	0.59	0.55	5.77	1.74	3.71	11.23
Cultivate		6R-38	MFWD 150	17,200	150	10	0.108	1.46	2.17	0.49	0.44	4.58	1.45	2.92	8.96
Cultivate		8R-30	MFWD 190	21,400	150	10	0.103	1.39	2.62	0.58	0.56	5.16	1.71	3.89	10.78
Cultivate		8R-38	MFWD 190	22,600	150	10	0.073	0.99	1.87	0.44	0.40	3.71	1.29	2.78	7.79
Cultivate		8R-38 2x1	MFWD 190	35,400	150	10	0.054	0.73	1.38	0.51	0.29	2.92	1.49	2.05	6.47
Cultivate		12R-30	MFWD 225	39,900	150	10	0.068	0.92	2.07	0.73	0.41	4.14	2.13	2.83	9.11
Cultivate		12R-38	MFWD 225	39,100	150	10	0.054	0.73	1.63	0.56	0.32	3.25	1.65	2.23	7.14
Cultivate		16R-30	MFWD 225	47,800	150	10	0.051	0.69	1.55	0.65	0.30	3.21	1.92	2.12	7.25
Cultivate & Post		4R-30	2WD 105	19,400	150	10	0.220	3.96	3.09	1.13	0.42	8.61	3.32	2.79	14.73
Cultivate & Post		4R-38	2WD 105	19,500	150	10	0.173	3.12	2.43	0.90	0.33	6.79	2.63	2.20	11.62
Cultivate & Post		6R-30	MFWD 150	23,600	150	10	0.146	2.64	2.94	0.92	0.59	7.10	2.69	3.95	13.76
Cultivate & Post		6R-38	MFWD 150	24,500	150	10	0.115	2.08	2.32	0.75	0.47	5.64	2.21	3.12	10.97
Cultivate & Post		8R-30	MFWD 190	28,700	150	10	0.110	1.98	2.79	0.84	0.60	6.22	2.45	4.15	12.83
Cultivate & Post		8R-38	MFWD 190	29,800	150	10	0.086	1.56	2.21	0.69	0.47	4.94	2.01	3.28	10.25
Cultivate & Post		8R-38 2x1	MFWD 190	47,800	150	10	0.057	1.04	1.47	0.73	0.31	3.57	2.15	2.18	7.91

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019 (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 & Post	12R-30	MFWD 225	47,200	150	10	0.073	1.32	2.20	0.92	0.43	4.89	2.69	3.02	10.61
Cultivate & Post	12R-38	MFWD 225	47,800	150	10	0.057	1.04	1.74	0.73	0.34	3.87	2.15	2.38	8.41
Cultivate & Post	16R-30	MFWD 225	56,500	150	10	0.055	0.99	1.65	0.82	0.32	3.80	2.42	2.26	8.49
Disk & Incorporate	14'	2WD 130	31,900	200	10	0.149	2.69	2.60	1.43	0.48	7.21	2.78	3.19	13.20
Disk & Incorporate	20'	MFWD 190	44,500	180	10	0.092	1.24	2.35	1.37	0.50	5.47	2.67	3.49	11.63
Disk & Incorporate	24'	MFWD 190	50,000	200	10	0.087	1.57	2.21	1.30	0.47	5.58	2.55	3.29	11.42
Disk & Incorporate	28'	MFWD 225	59,200	200	10	0.074	1.34	2.25	1.32	0.44	5.37	2.58	3.08	11.05
Disk & Incorporate	32'	MFWD 225	66,000	200	10	0.065	1.18	1.97	1.29	0.39	4.84	2.52	2.69	10.06
Disk Harrow	14'	2WD 130	24,600	180	10	0.140	1.89	2.44	0.95	0.45	5.74	2.24	2.99	10.98
Disk Harrow	20'	MFWD 190	39,200	180	10	0.098	1.32	2.49	1.06	0.53	5.43	2.49	3.70	11.63
Disk Harrow	24'	MFWD 190	42,700	180	10	0.081	1.10	2.08	0.97	0.44	4.60	2.26	3.09	9.96
Disk Harrow	28'	MFWD 225	52,000	180	10	0.070	0.94	2.11	1.01	0.41	4.49	2.36	2.89	9.75
Disk Harrow	32'	MFWD 225	58,700	180	10	0.061	0.82	1.84	1.00	0.36	4.04	2.33	2.53	8.91
Disk Harrow	42'	MFWD 225	104,000	180	10	0.046	0.63	1.40	1.35	0.27	3.67	3.15	1.92	8.75
Disk Harrow 40-100hp	14'	2WD 75	15,000	180	10	0.140	1.89	1.40	0.58	0.16	4.05	1.36	1.12	6.54
Disk Heavy	14'	MFWD 150	31,900	180	10	0.145	1.97	2.92	1.29	0.59	6.78	3.02	3.93	13.74
Disk Heavy	20'	MFWD 190	39,200	180	10	0.097	1.31	2.47	1.05	0.53	5.38	2.47	3.67	11.53
Disk Heavy	28'	MFWD 225	52,000	180	10	0.075	1.02	2.27	1.09	0.45	4.84	2.55	3.11	10.52
Disk Ripper	15'	MFWD 225	45,200	180	10	0.136	1.84	4.10	1.71	0.81	8.46	3.99	5.61	18.07
Ditcher		2WD 130	5,700	200	10	0.020	0.27	0.34	0.04	0.06	0.72	0.06	0.42	1.22
Ditcher (1m/160a)		2WD 130	5,700	200	10	0.009	0.12	0.16	0.02	0.03	0.34	0.03	0.20	0.57
Fert Appl (Liquid)	4R-38	MFWD 150	12,900	150	8	0.154	2.79	3.10	1.33	0.62	7.85	1.65	4.17	13.68
Fert Appl (Liquid)	6R-30	MFWD 170	16,700	150	8	0.130	2.36	2.97	1.45	0.60	7.40	1.81	4.18	13.40
Fert Appl (Liquid)	6R-38	MFWD 170	16,100	150	8	0.103	1.86	2.35	1.10	0.47	5.80	1.38	3.30	10.48
Fert Appl (Liquid)	8R-30	MFWD 190	16,900	150	8	0.098	1.77	2.49	1.10	0.53	5.91	1.37	3.70	11.00
Fert Appl (Liquid)	8R-38	MFWD 190	19,000	150	8	0.077	1.40	1.97	0.98	0.42	4.78	1.22	2.93	8.94
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	20,300	150	8	0.051	0.93	1.31	0.69	0.28	3.22	0.87	1.95	6.05
Fert Appl (Liquid)	12R-30	MFWD 225	22,600	150	8	0.078	1.41	2.36	1.18	0.46	5.43	1.47	3.23	10.14
Fert Appl (Liquid)	12R-38	MFWD 225	19,900	150	8	0.051	0.93	1.55	0.68	0.30	3.48	0.85	2.13	6.46
Field Cult & Inc	42'	MFWD 225	69,400	100	10	0.037	0.68	1.13	0.65	0.22	2.69	3.06	1.55	7.32
Field Cult & Inc	50'	MFWD 225	81,500	100	10	0.031	0.57	0.95	0.64	0.18	2.36	3.02	1.30	6.69
Field Cult & Inc Fld	24'	MFWD 170	34,000	100	10	0.066	1.19	1.50	0.56	0.30	3.56	2.62	2.11	8.30
Field Cult & Inc Fld	32'	MFWD 190	48,700	100	10	0.049	0.89	1.26	0.60	0.27	3.02	2.82	1.87	7.72
Field Cult & Inc Rdg	12'	2WD 150	15,800	100	10	0.132	2.38	2.65	0.52	0.45	6.01	2.44	2.99	11.44
Field Cultivate Fld	24'	MFWD 170	28,600	100	10	0.062	0.84	1.41	0.44	0.28	2.98	2.07	1.98	7.05
Field Cultivate Fld	32'	MFWD 190	43,300	100	10	0.046	0.63	1.18	0.50	0.25	2.57	2.36	1.76	6.70
Field Cultivate Fld	42'	MFWD 225	60,700	100	10	0.035	0.48	1.07	0.53	0.21	2.30	2.52	1.46	6.28
Field Cultivate Fld	50'	MFWD 225	65,900	100	10	0.029	0.40	0.89	0.49	0.17	1.97	2.29	1.23	5.50
Field Cultivate Rdg	12'	2WD 150	10,400	100	10	0.124	1.68	2.49	0.32	0.42	4.92	1.51	2.81	9.25
Grain Cart Corn	500 bu	MFWD 190	25,700	200	12	0.025	0.34	0.64	0.17	0.13	1.29	0.34	0.95	2.59
Grain Cart Corn	700 bu	MFWD 190	37,300	200	12	0.025	0.34	0.64	0.25	0.13	1.37	0.49	0.95	2.83
Grain Cart Corn	1000 bu	MFWD 225	46,900	200	12	0.025	0.34	0.76	0.32	0.15	1.57	0.62	1.04	3.24
Grain Cart Rice	500 bu	MFWD 190	25,700	200	12	0.062	0.84	1.58	0.43	0.34	3.21	0.84	2.36	6.41
Grain Cart Rice	700 bu	MFWD 190	37,300	200	12	0.055	0.74	1.39	0.55	0.30	2.99	1.08	2.07	6.15
Grain Cart Rice	1000 bu	MFWD 190	46,900	200	12	0.045	0.61	1.16	0.58	0.25	2.61	1.13	1.73	5.48
Grain Cart Soybean	500 bu	MFWD 190	25,700	200	12	0.025	0.34	0.64	0.17	0.13	1.30	0.34	0.96	2.61
Grain Cart Soybean	700 bu	MFWD 190	37,300	200	12	0.021	0.28	0.54	0.21	0.11	1.15	0.41	0.80	2.37
Grain Cart Soybean	1000 bu	MFWD 190	46,900	200	12	0.021	0.28	0.54	0.26	0.11	1.21	0.52	0.80	2.54
Grain Cart Wht/Sor	500 bu	MFWD 190	25,700	200	12	0.025	0.34	0.64	0.17	0.13	1.30	0.34	0.96	2.61
Grain Cart Wht/Sor	700 bu	MFWD 190	37,300	200	12	0.021	0.28	0.54	0.21	0.11	1.15	0.41	0.80	2.37
Grain Cart Wht/Sor	1000 bu	MFWD 190	46,900	200	12	0.021	0.28	0.54	0.26	0.11	1.21	0.52	0.80	2.54
Grain Drill	10'	2WD 130	26,700	150	8	0.188	4.25	3.28	1.88	0.60	10.03	4.01	4.03	18.07
Grain Drill	12'	2WD 130	26,800	150	8	0.157	3.54	2.73	1.57	0.50	8.36	3.35	3.35	15.08
Grain Drill	15'	MFWD 150	32,600	150	8	0.125	2.83	2.52	1.53	0.51	7.40	3.26	3.39	14.06
Grain Drill	20'	MFWD 170	38,800	150	8	0.094	2.12	2.14	1.37	0.43	6.08	2.91	3.01	12.00
Grain Drill	24'	MFWD 190	65,600	150	8	0.078	1.77	1.99	1.93	0.42	6.13	4.10	2.96	13.21
Grain Drill	30'	MFWD 225	63,800	150	8	0.062	1.41	1.89	1.50	0.37	5.19	3.19	2.59	10.97
Grain Drill	35'	MFWD 225	91,000	150	8	0.053	1.21	1.62	1.83	0.32	4.99	3.90	2.22	11.12
Grain Drill & Pre	10'	2WD 130	33,900	150	8	0.203	4.58	3.53	2.58	0.65	11.35	5.48	4.34	21.18
Grain Drill & Pre	12'	2WD 130	34,100	150	8	0.169	3.81	2.94	2.16	0.54	9.47	4.60	3.61	17.69
Grain Drill & Pre	15'	MFWD 150	39,900	150	8	0.135	3.05	2.71	2.02	0.54	8.34	4.30	3.65	16.30
Grain Drill & Pre	20'	MFWD 170	46,000	150	8	0.101	2.29	2.31	1.75	0.46	6.82	3.72	3.24	13.79
Grain Drill & Pre	24'	MFWD 190	71,000	150	8	0.084	1.90	2.15	2.25	0.46	6.77	4.78	3.19	14.76
Grain Drill & Pre	30'	MFWD 225	71,000	150	8	0.067	1.52	2.03	1.80	0.40	5.77	3.83	2.79	12.39
Grain Drill & Pre	35'	MFWD 225	98,200	150	8	0.058	1.30	1.74	2.13	0.34	5.53	4.54	2.39	12.47
Grain Drill & Pre T	8R-38	MFWD 225	51,800	150	8	0.062	1.41	1.89	1.22	0.37	4.90	2.59	2.59	10.09
Harrow - Rigid	21'	2WD 150	6,750	200	10	0.073	0.99	1.48	0.17	0.25	2.91	0.29	1.67	4.87
Harrow - Folding	24'	MFWD 190	15,800	200	10	0.064	0.87	1.64	0.35	0.35	3.23	0.59	2.44	6.27
Harrow - Folding	30'	MFWD 190	17,700	200	10	0.051	0.69	1.31	0.32	0.28	2.61	0.53	1.95	5.10
Harrow - Folding	40'	MFWD 190	20,200	200	10	0.038	0.52	0.98	0.27	0.21	1.99	0.45	1.46	3.92
Harrow - Folding	48'	MFWD 225	23,700	200	10	0.032	0.43	0.97	0.26	0.19	1.87	0.44	1.33	3.65
Harrow - Rigid	13'	2WD 130	4,950	200	10	0.119	1.61	2.07	0.20	0.38	4.28	0.34	2.55	7.18
Header - Corn	6R-30	265 hp	48,500	300	8	0.170	2.30	6.03	2.06	6.01	16.41	3.42	25.87	45.71
Header - Corn	6R-38	265 hp	48,800	300	8	0.134	1.81	4.76	1.64	4.74	12.97	2.72	20.42	36.12
Header - Corn	8R-30	265 hp	62,300	300	8	0.127	1.72	4.52	1.98	4.50	12.75	3.30	19.40	35.46
Header - Corn	8R-38	325 hp	63,000	300	8	0.100	1.36	4.39	1.59	3.80	11.15	2.64	16.38	30.17
Header - Corn	12R-20	325 hp	95,600	300	8	0.127	1.72	5.55	3.05	4.81	15.14	5.06	20.72	40.93

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---	Total Direct	--Fixed--	Total Cost
			dollars	hours	years	hr/ac			Imp. P.U.	\$/acre	Imp. P.U.	
Header - Corn	12R-30	325 hp	98,200	300	8	0.085	1.15	3.70	2.09	3.21	10.15	3.47 13.81 27.43
Header - Draper (CL)	25' Rigid	265 hp	60,300	300	8	0.203	2.74	7.20	2.80	7.17	19.92	4.88 30.85 55.66
Header - Draper (CL)	30' Rigid	325 hp	70,600	300	8	0.169	2.28	7.36	2.73	6.38	18.76	4.76 27.45 50.98
Header - Draper (CL)	36' Rigid	355 hp	74,100	300	8	0.141	1.90	6.69	2.39	5.74	16.74	4.16 24.71 45.62
Header - Draper (CL)	40' Rigid	425 hp	79,500	30	8	0.126	1.71	7.21	23.12	5.44	37.50	40.21 23.43 101.16
Header - Draper (SL)	25' Rigid	325 hp	60,300	300	8	0.176	2.37	7.65	2.43	6.63	19.11	4.23 28.55 51.88
Header - Draper (SL)	30' Rigid	325 hp	70,600	300	8	0.146	1.98	6.37	2.37	5.53	16.26	4.12 23.79 44.19
Header - Draper (SL)	36' Rigid	355 hp	74,100	300	8	0.122	1.65	5.80	2.07	4.97	14.51	3.60 21.41 39.53
Header - Draper	40' Rigid	425 hp	79,500	30	8	0.110	1.48	6.25	20.04	4.72	32.50	34.85 20.31 87.67
Header -RiceStrp(CL)	20'	265 hp	50,000	300	8	0.253	3.42	9.00	3.17	8.96	24.56	5.26 38.57 68.41
Header -RiceStrp(CL)	24'	325 hp	55,400	300	8	0.211	2.85	9.20	2.92	7.97	22.96	4.86 34.32 62.15
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.14	6.90	2.41	5.98	17.43	4.00 25.74 47.18
Header -RiceStrp(SL)	20'	265 hp	50,000	300	8	0.220	2.97	7.80	2.75	7.76	21.29	4.56 33.42 59.28
Header -RiceStrp(SL)	24'	325 hp	55,400	300	8	0.183	2.47	7.97	2.53	6.91	19.90	4.21 29.74 53.86
Header -RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	1.85	5.98	2.09	5.18	15.11	3.47 22.31 40.89
Header -Soybean	22' Flex	265 hp	32,600	300	8	0.116	1.56	4.11	0.94	4.09	10.73	1.57 17.64 29.94
Header -Soybean	25' Flex	325 hp	35,000	300	8	0.102	1.38	4.44	0.89	3.85	10.57	1.48 16.57 28.63
Header -Soybean	30' Flex	325 hp	40,900	300	8	0.085	1.15	3.70	0.87	3.21	8.93	1.44 13.81 24.19
Header -Soybean	35' Flex	355 hp	47,000	300	8	0.072	0.98	3.46	0.85	2.97	8.28	1.42 12.79 22.49
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.56	4.11	0.57	4.09	10.36	0.95 17.64 28.95
Header Wheat/Sorghum	25' Rigid	325 hp	21,000	300	8	0.102	1.38	4.44	0.53	3.85	10.21	0.89 16.57 27.68
Header Wheat/Sorghum	30' Rigid	325 hp	25,700	300	8	0.085	1.15	3.70	0.54	3.21	8.61	0.90 13.81 23.33
Land Plane	50'x16'	MFWD 190	14,300	200	10	0.151	2.04	3.85	0.43	0.82	7.16	1.26 5.72 14.16
Levee Pull & Seed	8 Blade	MFWD 170	10,400	100	10	0.003	0.04	0.08	0.00	0.01	0.15	0.04 0.11 0.31
Levee Pull (1m/80a)	8 blade	MFWD 170	7,180	100	10	0.003	0.04	0.08	0.00	0.01	0.15	0.02 0.11 0.29
Levee Splitter (1/80)	32"	MFWD 150	7,180	100	10	0.004	0.05	0.08	0.00	0.01	0.16	0.03 0.11 0.31
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	5.81	6.55	2.23	1.40	16.01	5.06 9.73 30.81
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	5.81	6.55	2.23	1.40	16.01	5.06 9.73 30.81
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	3.88	4.38	1.49	0.94	10.70	3.38 6.50 20.59
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	4.92	5.54	1.89	1.19	13.56	4.28 8.24 26.09
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	3.88	4.38	1.49	0.94	10.70	3.38 6.50 20.59
NT Grain Drill	10'	2WD 130	34,100	150	8	0.235	5.31	4.10	3.01	0.75	13.19	6.40 5.03 24.64
NT Grain Drill	12'	2WD 130	47,900	150	8	0.163	3.69	2.84	2.94	0.52	10.00	6.25 3.49 19.75
NT Grain Drill	15'	MFWD 150	55,200	150	8	0.130	2.95	2.62	2.71	0.53	8.82	5.76 3.53 18.12
NT Grain Drill	20'	MFWD 170	71,200	150	8	0.098	2.21	2.23	2.62	0.45	7.52	5.57 3.13 16.23
NT Grain Drill	24'	MFWD 190	90,400	150	8	0.081	1.84	2.08	2.77	0.44	7.15	5.89 3.09 16.14
NT Grain Drill	30'	MFWD 225	103,000	150	8	0.065	1.47	1.97	2.52	0.39	6.36	5.37 2.69 14.44
NT Grain Drill & Pre	10'	2WD 130	41,400	150	8	0.211	4.77	3.68	3.28	0.68	12.41	6.98 4.52 23.92
NT Grain Drill & Pre	12'	2WD 130	55,200	150	8	0.176	3.97	3.06	3.64	0.56	11.26	7.75 3.76 22.78
NT Grain Drill & Pre	15'	MFWD 150	62,400	150	8	0.141	3.18	2.83	3.30	0.57	9.88	7.01 3.80 20.70
NT Grain Drill & Pre	20'	MFWD 170	78,400	150	8	0.105	2.38	2.40	3.10	0.48	8.39	6.61 3.37 18.38
NT Grain Drill & Pre	24'	MFWD 190	97,700	150	8	0.088	1.98	2.24	3.22	0.48	7.94	6.86 3.32 18.13
NT Grain Drill & Pre	30'	MFWD 225	111,000	150	8	0.070	1.59	2.12	2.93	0.42	7.07	6.23 2.90 16.21
NT Plant&Pre-Folding	8R-38	MFWD 170	65,000	150	8	0.083	1.88	1.90	2.03	0.38	6.21	4.33 2.67 13.21
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	102,000	150	8	0.055	1.25	1.26	2.12	0.25	4.90	4.52 1.77 11.21
NT Plant&Pre-Folding	12R-20	MFWD 190	78,300	150	8	0.105	2.38	2.68	3.10	0.57	8.76	6.60 3.99 19.35
NT Plant&Pre-Folding	12R-30	MFWD 190	87,500	150	8	0.070	1.59	1.79	2.31	0.38	6.08	4.91 2.66 13.66
NT Plant&Pre-Folding	12R-38	MFWD 190	102,000	150	8	0.055	1.25	1.41	2.12	0.30	5.10	4.52 2.10 11.73
NT Plant&Pre-Folding	16R-30	MFWD 190	130,000	150	8	0.052	1.19	1.34	2.57	0.28	5.40	5.48 1.99 12.88
NT Plant&Pre-Folding	23R-15	MFWD 190	163,000	150	8	0.073	1.65	1.86	4.48	0.40	8.41	9.54 2.77 20.73
NT Plant&Pre-Folding	24R-20	MFWD 190	182,000	150	8	0.052	1.19	1.34	3.60	0.28	6.43	7.67 1.99 16.10
NT Plant&Pre-Folding	24R-30	MFWD 190	200,000	150	8	0.035	0.79	0.89	2.64	0.19	4.52	5.62 1.33 11.48
NT Plant&Pre-Folding	31R-15	MFWD 225	194,000	150	8	0.054	1.23	1.64	3.97	0.32	7.18	8.45 2.25 17.88
NT Plant&Pre-Folding	32R-15	MFWD 225	210,000	150	8	0.052	1.19	1.59	4.16	0.31	7.26	8.85 2.18 18.29
NT Plant&Pre-Rigid	4R-30	2WD 130	29,300	150	8	0.211	4.77	3.68	2.32	0.68	11.45	4.94 4.52 20.92
NT Plant&Pre-Rigid	4R-38	2WD 130	35,200	150	8	0.166	3.75	2.89	2.19	0.53	9.39	4.67 3.56 17.62
NT Plant&Pre-Rigid	6R-30	MFWD 150	43,100	150	8	0.141	3.18	2.83	2.27	0.57	8.86	4.84 3.80 17.51
NT Plant&Pre-Rigid	6R-38	MFWD 150	41,800	150	8	0.111	2.51	2.23	1.74	0.45	6.94	3.71 3.00 13.66
NT Plant&Pre-Rigid	8R-30	MFWD 170	53,100	150	8	0.105	2.38	2.40	2.10	0.48	7.38	4.47 3.37 15.24
NT Plant&Pre-Rigid	8R-38	MFWD 170	50,600	150	8	0.083	1.88	1.90	1.58	0.38	5.76	3.37 2.67 11.80
NT Plant&Pre-Rigid	11R-15	MFWD 170	63,500	150	8	0.143	3.24	3.27	3.42	0.66	10.61	7.28 4.59 22.49
NT Plant&Pre-Rigid	11R-20	MFWD 170	62,300	150	8	0.115	2.60	2.62	2.70	0.53	8.47	5.74 3.69 17.90
NT Plant&Pre-Rigid	12R-20	MFWD 190	65,000	150	8	0.105	2.38	2.68	2.57	0.57	8.23	5.48 3.99 17.70
NT Plant&Pre-Rigid	12R-30	MFWD 190	79,300	150	8	0.070	1.59	1.79	2.09	0.38	5.86	4.45 2.66 12.98
NT Plant&Pre-Rigid	15R-15	MFWD 190	80,900	150	8	0.113	2.55	2.87	3.43	0.61	9.47	7.29 4.27 21.04
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	148,000	150	8	0.055	1.25	1.67	3.08	0.33	6.35	6.56 2.29 15.21
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	121,000	150	8	0.083	1.88	2.51	3.79	0.49	8.69	8.06 3.44 20.20
NT Plant-Folding	8R-38	MFWD 170	57,800	150	8	0.077	1.75	1.76	1.68	0.35	5.56	3.57 2.48 11.61
NT Plant-Folding	8R-38 2x1	MFWD 170	93,000	150	8	0.051	1.16	1.17	1.80	0.23	4.38	3.83 1.65 9.86
NT Plant-Folding	12R-20	MFWD 190	71,100	150	8	0.098	2.21	2.49	2.61	0.53	7.86	5.56 3.70 17.14
NT Plant-Folding	12R-30	MFWD 190	78,900	150	8	0.065	1.47	1.66	1.93	0.35	5.43	4.11 2.47 12.03
NT Plant-Folding	12R-38	MFWD 190	93,000	150	8	0.051	1.16	1.31	1.80	0.28	4.56	3.83 1.95 10.35
NT Plant-Folding	16R-30	MFWD 190	122,000	150	8	0.049	1.10	1.24	2.24	0.26	4.87	4.77 1.85 11.50
NT Plant-Folding	23R-15	MFWD 190	155,000	150	8	0.068	1.53	1.73	3.96	0.37	7.61	8.42 2.57 18.61
NT Plant-Folding	24R-20	MFWD 190	174,000	150	8	0.049	1.10	1.24	3.20	0.26	5.83	6.81 1.85 14.49
NT Plant-Folding	24R-30	MFWD 190	184,000	150	8	0.032	0.73	0.83	2.25	0.17	4.00	4.80 1.23 10.04
NT Plant-Folding	31R-15	MFWD 225	185,000	150	8	0.050	1.14	1.52	3.52	0.30	6.49	7.48 2.09 16.07
NT Plant-Folding	32R-15	MFWD 225	201,000	150	8	0.049	1.10	1.47	3.70	0.29	6.58	7.86 2.02 16.47
NT Plant-Rigid	4R-30	2WD 130	22,100	150	8	0.196	4.43	3.41	1.62	0.63	10.11	3.46 4.19 17.77
NT Plant-Rigid	4R-38	2WD 130	27,900	150	8	0.154	3.49	2.69	1.61	0.49	8.29	3.44 3.30 15.04

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019 (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-Rigid	6R-30	MFWD 150	35,800	150	8	0.130	2.95	2.62	1.75	0.53	7.87	3.73	3.53	15.14	
NT Plant-Rigid	6R-38	MFWD 150	34,500	150	8	0.103	2.33	2.07	1.33	0.41	6.16	2.84	2.78	11.79	
NT Plant-Rigid	8R-30	MFWD 170	45,800	150	8	0.098	2.21	2.23	1.68	0.45	6.59	3.58	3.13	13.31	
NT Plant-Rigid	8R-38	MFWD 170	43,300	150	8	0.077	1.75	1.76	1.26	0.35	5.13	2.68	2.48	10.29	
NT Plant-Rigid	11R-15	MFWD 170	56,200	150	8	0.133	3.01	3.03	2.81	0.61	9.48	5.98	4.26	19.74	
NT Plant-Rigid	11R-20	MFWD 170	55,000	150	8	0.107	2.42	2.44	2.21	0.49	7.57	4.70	3.42	15.71	
NT Plant-Rigid	12R-20	MFWD 190	57,800	150	8	0.098	2.21	2.49	2.12	0.53	7.37	4.52	3.70	15.61	
NT Plant-Rigid	12R-30	MFWD 190	70,700	150	8	0.065	1.47	1.66	1.73	0.35	5.23	3.69	2.47	11.40	
NT Plant-Rigid	15R-15	MFWD 190	72,300	150	8	0.105	2.37	2.67	2.84	0.57	8.46	6.05	3.96	18.48	
NT Plant-TwinRow	12R-30/40	MFWD 225	139,000	150	8	0.051	1.16	1.55	2.69	0.30	5.72	5.72	2.13	13.58	
NT Plant-TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.077	1.75	2.33	3.31	0.46	7.87	7.05	3.20	18.12	
Peanut Cond. & Lifter	6-Row	MFWD 190	13,300	300	20	0.100	1.35	2.54	0.22	0.54	4.66	0.37	3.77	8.81	
Peanut Conditioner	6-Row	MFWD 190	15,300	300	20	0.100	1.35	2.54	0.30	0.54	4.74	0.39	3.77	8.92	
Peanut Dig/Invertor	4R-30	MFWD 190	29,800	300	15	0.235	3.18	5.99	1.74	1.28	12.22	2.34	8.90	23.47	
Peanut Dig/Invertor	4R-38	MFWD 190	29,800	300	15	0.186	2.51	4.73	1.38	1.01	9.65	1.85	7.03	18.53	
Peanut Dig/Invertor	6R-38	MFWD 190	43,400	300	15	0.124	1.67	3.15	0.94	0.67	6.45	1.79	4.68	12.93	
Peanut Dump Cart	6-Row	MFWD 190	48,500	300	20	0.310	4.18	7.88	0.87	1.69	14.64	4.16	11.70	30.51	
Peanut Harvester	4R-30	MFWD 225	137,000	300	20	0.849	11.48	25.59	6.59	5.07	48.75	30.22	35.04	114.02	
Peanut Harvester	4R-38	MFWD 225	137,000	300	20	0.934	12.62	28.14	7.25	5.57	53.60	34.33	38.52	126.46	
Peanut Harvester	6R-38	MFWD 225	151,000	300	20	0.625	8.44	18.81	4.56	3.73	35.55	25.30	25.76	86.63	
Peanut Lifter	6-Row	MFWD 225	6,500	300	20	0.100	1.35	3.01	0.13	0.59	5.09	0.16	4.12	9.38	
Peanut Plt&Pre Fold.	12R-38	MFWD 190	91,000	150	8	0.080	1.81	2.04	2.74	0.43	7.04	5.83	3.03	15.91	
Peanut Plt&Pre Rigid	8R-30	MFWD 190	46,000	150	8	0.152	3.44	3.88	2.63	0.83	10.80	5.60	5.77	22.17	
Peanut Plt&Pre Rigid	8R-38	MFWD 190	43,400	150	8	0.120	2.72	3.07	1.96	0.66	8.42	4.17	4.56	17.16	
Pipe Spool 160ac	1/4m roll	2WD 130	3,600	15	12	0.003	0.09	0.05	0.00	0.01	0.16	0.07	0.06	0.31	
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.18	0.06	0.00	0.01	0.26	0.00	0.08	0.35	
Plant & Pre-Folding	8R-38	MFWD 170	57,900	150	8	0.080	1.81	1.82	1.74	0.37	5.75	3.70	2.56	12.02	
Plant & Pre-Folding	8R-38 2x1	MFWD 170	91,000	150	8	0.053	1.20	1.21	1.82	0.24	4.49	3.87	1.70	10.07	
Plant & Pre-Folding	12R-20	MFWD 190	67,600	150	8	0.101	2.29	2.58	2.57	0.55	8.00	5.47	3.83	17.31	
Plant & Pre-Folding	12R-30	MFWD 190	76,800	150	8	0.067	1.52	1.72	1.94	0.37	5.56	4.14	2.55	12.26	
Plant & Pre-Folding	12R-38	MFWD 190	91,000	150	8	0.053	1.20	1.35	1.82	0.29	4.68	3.87	2.01	10.57	
Plant & Pre-Folding	16R-30	MFWD 190	116,000	150	8	0.050	1.14	1.29	2.20	0.27	4.92	4.69	1.91	11.53	
Plant & Pre-Folding	23R-15	MFWD 190	143,000	150	8	0.070	1.59	1.79	3.78	0.38	7.55	8.03	2.66	18.25	
Plant & Pre-Folding	24R-20	MFWD 190	161,000	150	8	0.050	1.14	1.29	3.06	0.27	5.77	6.51	1.91	14.21	
Plant & Pre-Folding	24R-30	MFWD 190	178,000	150	8	0.033	0.76	0.86	2.25	0.18	4.06	4.80	1.27	10.15	
Plant & Pre-Folding	31R-15	MFWD 225	166,000	150	8	0.052	1.18	1.57	3.26	0.31	6.34	6.94	2.16	15.45	
Plant & Pre-Folding	32R-15	MFWD 225	181,000	150	8	0.050	1.14	1.52	3.44	0.30	6.42	7.32	2.09	15.84	
Plant & Pre-Rigid	4R-30	2WD 130	25,800	150	8	0.203	4.58	3.53	1.96	0.65	10.73	4.17	4.34	19.25	
Plant & Pre-Rigid	4R-38	2WD 130	31,600	150	8	0.159	3.60	2.78	1.89	0.51	8.80	4.02	3.41	16.24	
Plant & Pre-Rigid	6R-30	MFWD 150	25,900	150	8	0.135	3.05	2.71	1.31	0.54	7.63	2.79	3.65	14.08	
Plant & Pre-Rigid	6R-38	MFWD 150	36,400	150	8	0.106	2.41	2.14	1.45	0.43	6.45	3.10	2.88	12.43	
Plant & Pre-Rigid	8R-30	MFWD 170	46,000	150	8	0.101	2.29	2.31	1.75	0.46	6.82	3.72	3.24	13.79	
Plant & Pre-Rigid	8R-38	MFWD 170	43,400	150	8	0.080	1.81	1.82	1.30	0.37	5.31	2.77	2.56	10.65	
Plant & Pre-Rigid	11R-15	MFWD 170	53,700	150	8	0.148	3.34	3.37	2.98	0.68	10.38	6.34	4.73	21.46	
Plant & Pre-Rigid	11R-20	MFWD 170	52,500	150	8	0.110	2.50	2.52	2.18	0.51	7.72	4.64	3.54	15.91	
Plant & Pre-Rigid	12R-20	MFWD 190	54,300	150	8	0.101	2.29	2.58	2.06	0.55	7.49	4.39	3.83	15.72	
Plant & Pre-Rigid	12R-30	MFWD 190	68,600	150	8	0.067	1.52	1.72	1.74	0.37	5.36	3.70	2.55	11.61	
Plant & Pre-Rigid	15R-15	MFWD 190	67,500	150	8	0.108	2.45	2.76	2.74	0.59	8.55	5.84	4.10	18.50	
Plant & Pre-TwinRow	12R-30/40	MFWD 225	137,000	150	8	0.053	1.20	1.60	2.74	0.31	5.87	5.83	2.20	13.91	
Plant & Pre-TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.080	1.81	2.41	3.43	0.47	8.13	7.29	3.30	18.74	
Plant - Folding	8R-38	MFWD 170	50,600	150	8	0.074	1.68	1.69	1.41	0.34	5.13	3.00	2.38	10.52	
Plant - Folding	8R-38 2x1	MFWD 170	82,300	150	8	0.049	1.11	1.12	1.53	0.22	4.00	3.25	1.58	8.85	
Plant - Folding	12R-20	MFWD 190	60,400	150	8	0.094	2.12	2.39	2.13	0.51	7.17	4.54	3.56	15.27	
Plant - Folding	12R-30	MFWD 190	68,200	150	8	0.062	1.41	1.59	1.60	0.34	4.96	3.41	2.37	10.76	
Plant - Folding	12R-38	MFWD 190	82,300	150	8	0.049	1.11	1.26	1.53	0.27	4.18	3.25	1.87	9.31	
Plant - Folding	16R-30	MFWD 190	10,700	150	8	0.047	1.06	1.19	0.18	0.25	2.70	0.40	1.78	4.89	
Plant - Folding	23R-15	MFWD 190	134,000	150	8	0.065	1.47	1.66	3.29	0.35	6.79	6.99	2.47	16.25	
Plant - Folding	24R-20	MFWD 190	152,000	150	8	0.047	1.06	1.19	2.68	0.25	5.20	5.71	1.78	12.70	
Plant - Folding	24R-30	MFWD 190	178,000	150	8	0.031	0.70	0.79	2.09	0.17	3.77	4.45	1.18	9.42	
Plant - Folding	31R-15	MFWD 225	157,000	150	8	0.048	1.09	1.46	2.86	0.29	5.72	6.09	2.00	13.83	
Plant - Folding	32R-15	MFWD 225	173,000	150	8	0.047	1.06	1.41	3.05	0.28	5.82	6.50	1.94	14.26	
Plant - Rigid	4R-30	2WD 130	18,500	150	8	0.188	4.25	3.28	1.30	0.60	9.45	2.78	4.03	16.26	
Plant - Rigid	4R-38	2WD 130	24,300	150	8	0.148	3.35	2.58	1.35	0.47	7.76	2.87	3.17	13.81	
Plant - Rigid	6R-30	MFWD 150	30,500	150	8	0.125	2.83	2.52	1.43	0.51	7.30	3.05	3.39	13.75	
Plant - Rigid	6R-38	MFWD 150	29,200	150	8	0.099	2.24	1.99	1.08	0.40	5.72	2.31	2.67	10.71	
Plant - Rigid	8R-30	MFWD 170	38,700	150	8	0.094	2.12	2.14	1.36	0.43	6.07	2.90	3.01	11.99	
Plant - Rigid	8R-38	MFWD 170	36,200	150	8	0.074	1.68	1.69	1.01	0.34	4.73	2.15	2.38	9.26	
Plant - Rigid	11R-15	MFWD 170	46,400	150	8	0.137	3.10	3.13	2.39	0.63	9.26	5.09	4.39	18.75	
Plant - Rigid	11R-20	MFWD 170	45,200	150	8	0.103	2.32	2.34	1.74	0.47	6.89	3.71	3.29	13.89	
Plant - Rigid	12R-20	MFWD 190	47,100	150	8	0.094	2.12	2.39	1.66	0.51	6.70	3.54	3.56	13.80	
Plant - Rigid	12R-30	MFWD 190	59,900	150	8	0.062	1.41	1.59	1.41	0.34	4.77	3.00	2.37	10.14	
Plant - Rigid	15R-15	2WD 150	58,900	150	8	0.094	2.12	1.89	2.08	0.32	6.42	4.42	2.13	12.98	
Plant - TwinRow	12R-30/40	MFWD 225	128,000	150	8	0.049	1.11	1.49	2.38	0.29	5.29	5.06	2.04	12.40	
Plant - TwinRow	8R-30/40	MFWD 225	107,000	150	8	0.074	1.68	2.24	2.99	0.44	7.36	6.35	3.07	16.79	
Roller/Cultipacker	12'	2WD 130	6,910	300	12	0.124	1.68	2.16	0.20	0.40	4.44	0.31	2.66	7.41	
Roller/Cultipacker	20'	MFWD 150	17,000	300	12	0.074	1.00	1.49	0.29	0.30	3.11	0.45	2.01	5.58	
Roller/Cultipacker	30'	MFWD 170	19,100	300	12	0.049	0.67	1.13	0.22	0.23	2.25	0.34	1.58	4.19	
Roller/Cultipacker	38'	MFWD 225	21,300	300	12	0.039	0.53	1.18	0.19	0.23	2.14	0.30	1.62	4.06	
Roller/Stubble	20'	2WD 50	13,500	300	12	0.074	1.00	0.49	0.23	0.05	1.79	0.36	0.35	2.51	
Roller/Stubble	32'	MFWD 225	22,800	300	12	0.046	0.63	1.40	0.25	0.27	2.56	0.38	1.92	4.87	

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2019 (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-----							
Rotary Cutter	7'	MFWD 130	5,245	185	10	0.168	2.27	2.92	0.71	0.59	6.51	0.55	3.98	11.06
Rotary Cutter	12'	2WD 150	11,500	185	10	0.098	1.32	1.97	0.91	0.33	4.54	0.71	2.22	7.48
Rotary Cutter-Flex	15'	MFWD 150	21,100	185	10	0.078	1.06	1.57	1.34	0.31	4.30	1.04	2.12	7.46
Rotary Cutter-Flex	20'	MFWD 150	29,300	185	10	0.058	0.79	1.18	1.39	0.23	3.61	1.09	1.59	6.29
Row Cond & Inc-Fold.	26'	MFWD 190	26,600	100	10	0.063	1.14	1.61	0.42	0.34	3.52	1.97	2.39	7.89
Row Cond & Inc-Fold.	38'	MFWD 225	33,800	100	10	0.043	0.78	1.30	0.36	0.25	2.71	1.71	1.79	6.22
Row Cond & Inc-Rigid	13'	2WD 130	16,800	100	10	0.126	2.28	2.20	0.53	0.40	5.43	2.49	2.71	10.64
Row Cond & Inc-Rigid	21'	2WD 170	20,700	100	10	0.078	1.41	1.78	0.40	0.29	3.90	1.90	2.01	7.82
Row Cond & Inc-Rigid	26'	MFWD 190	23,400	100	10	0.026	0.48	0.67	0.15	0.14	1.45	0.72	1.00	3.19
Row Cond Folding	26'	MFWD 225	19,300	100	10	0.059	0.80	1.79	0.28	0.35	3.25	1.34	2.46	7.05
Row Cond Folding	38'	MFWD 225	25,800	100	10	0.040	0.55	1.23	0.26	0.24	2.29	1.23	1.68	5.20
Row Cond Rigid	13'	2WD 130	9,540	100	10	0.119	1.61	2.07	0.28	0.38	4.36	1.33	2.55	8.24
Row Cond Rigid	21'	2WD 170	13,400	100	10	0.073	0.99	1.68	0.24	0.27	3.20	1.15	1.89	6.26
Row Cond Rigid	26'	MFWD 190	16,200	100	10	0.059	0.80	1.51	0.24	0.32	2.89	1.13	2.25	6.28
Row Cond./Roll-Fol	30'	MFWD 190	35,600	160	10	0.062	0.84	1.58	0.55	0.34	3.33	1.62	2.36	7.31
Row Cond./Roll-Fold.	26'	MFWD 190	26,800	160	10	0.072	0.97	1.83	0.48	0.39	3.68	1.41	2.72	7.82
Row Cond./Roll-Rigid	40'	MFWD 225	23,700	160	10	0.046	0.63	1.41	0.27	0.27	2.60	0.81	1.93	5.34
Row Cond./Roll-Rig	21'	MFWD 190	23,000	160	10	0.089	1.20	2.27	0.51	0.48	4.47	1.50	3.37	9.35
Row Cond./Roll-Rig	26'	MFWD 190	25,800	160	10	0.072	0.97	1.83	0.46	0.39	3.66	1.35	2.72	7.75
Spin Spreader	5 ton	MFWD 190	12,400	100	8	0.042	0.94	1.07	0.29	0.23	2.54	0.65	1.58	4.78
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	4.69	0.45	0.08	0.49	5.73	0.11	2.13	7.98
Spray (ATV)	20'	800 CC	1,700	200	8	0.084	1.52	0.14	0.06	0.16	1.90	0.08	0.69	2.68
Spray (Band)	27' Fold	MFWD 170	7,270	200	8	0.062	1.13	1.42	0.21	0.28	3.06	0.28	2.00	5.34
Spray (Band)	40' Fold	MFWD 170	8,630	200	8	0.042	0.76	0.96	0.17	0.19	2.09	0.22	1.35	3.67
Spray (Band)	50' Fold	MFWD 170	13,700	200	8	0.033	0.61	0.77	0.21	0.15	1.75	0.28	1.08	3.12
Spray (Band)	60' Fold	MFWD 170	15,600	200	8	0.028	0.50	0.64	0.20	0.13	1.48	0.27	0.90	2.66
Spray (Bcast/HB)	13' Rigid	MFWD 150	6,760	200	8	0.130	2.34	2.61	0.41	0.52	5.90	0.54	3.51	9.96
Spray (Bcast/HB)	20' Rigid	MFWD 150	7,920	200	8	0.084	1.52	1.69	0.31	0.34	3.88	0.41	2.28	6.58
Spray (Bcast/HB)	27' Fold	MFWD 170	15,100	200	8	0.062	1.13	1.42	0.44	0.28	3.29	0.58	2.00	5.88
Spray (Bcast/HB)	27' Rigid	MFWD 170	9,570	200	8	0.062	1.13	1.42	0.28	0.28	3.12	0.37	2.00	5.50
Spray (Bcast/HB)	30' Fold	MFWD 170	18,600	200	8	0.056	1.01	1.28	0.49	0.26	3.05	0.65	1.80	5.50
Spray (Bcast/HB)	40' Fold	MFWD 170	21,800	200	8	0.042	0.76	0.96	0.43	0.19	2.35	0.57	1.35	4.27
Spray (Broadcast)	27'	MFWD 170	7,270	200	8	0.062	1.13	1.42	0.21	0.28	3.06	0.28	2.00	5.34
Spray (Broadcast)	40'	MFWD 170	8,630	200	8	0.042	0.76	0.96	0.17	0.19	2.09	0.22	1.35	3.67
Spray (Broadcast)	50'	MFWD 170	13,700	200	8	0.033	0.61	0.77	0.21	0.15	1.75	0.28	1.08	3.12
Spray (Broadcast)	60'	MFWD 170	15,600	200	8	0.028	0.50	0.64	0.20	0.13	1.48	0.27	0.90	2.66
Spray (Direct/Hood)	8R-30	MFWD 170	20,000	200	8	0.084	1.52	1.92	0.79	0.39	4.63	1.05	2.70	8.39
Spray (Direct/Hood)	8R-38	MFWD 170	21,500	200	8	0.066	1.20	1.52	0.67	0.30	3.71	0.89	2.13	6.74
Spray (Direct/Hood)	12R-30	MFWD 170	24,800	200	8	0.056	1.01	1.28	0.65	0.26	3.21	0.87	1.80	5.89
Spray (Direct/Hood)	12R-38	MFWD 170	26,600	200	8	0.044	0.80	1.01	0.55	0.20	2.57	0.73	1.42	4.73
Spray (Direct/Layby)	8R-30	MFWD 170	11,300	200	8	0.084	1.52	1.92	0.44	0.39	4.29	0.59	2.70	7.58
Spray (Direct/Layby)	8R-38	MFWD 170	11,300	200	8	0.066	1.20	1.52	0.35	0.30	3.39	0.47	2.13	5.99
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	14,900	200	8	0.044	0.80	1.01	0.31	0.20	2.33	0.41	1.42	4.16
Spray (Direct/Layby)	12R-30	MFWD 170	14,900	200	8	0.056	1.01	1.28	0.39	0.26	2.95	0.52	1.80	5.28
Spray (Direct/Layby)	12R-38	MFWD 170	14,900	200	8	0.044	0.80	1.01	0.31	0.20	2.33	0.41	1.42	4.16
Spray (Direct/Layby)	16R-20	MFWD 225	17,100	200	8	0.062	1.13	1.88	0.50	0.37	3.89	0.66	2.58	7.14
Spray (Levee Leaper)	50'	MFWD 225	13,200	200	8	0.033	0.61	1.01	0.20	0.20	2.04	0.27	1.39	3.71
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.50	0.84	0.53	0.16	2.06	0.71	1.16	3.94
Spray (Pull Type)	80'	MFWD 225	52,500	200	8	0.021	0.38	0.63	0.52	0.12	1.66	0.69	0.87	3.22
Spray (Pull Type)	90'	2WD 50	53,200	200	8	0.018	0.33	0.12	0.46	0.01	0.94	0.62	0.08	1.65
Spray (Pull Type)	120'	MFWD 225	80,900	200	8	0.014	0.25	0.42	0.53	0.08	1.29	0.71	0.58	2.58
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.52	2.15	0.16	0.46	4.30	0.21	3.19	7.71
Spray (Spot)	27'	MFWD 170	7,270	200	8	0.062	1.13	1.42	0.21	0.28	3.06	0.28	2.00	5.34
Spray (Spot)	40'	MFWD 170	8,630	200	8	0.042	0.76	0.96	0.17	0.19	2.09	0.22	1.35	3.67
Spray (Spot)	50'	MFWD 170	13,700	200	8	0.033	0.61	0.77	0.21	0.15	1.75	0.28	1.08	3.12
Spray (Spot)	60'	MFWD 225	15,600	200	8	0.028	0.50	0.84	0.20	0.16	1.73	0.27	1.16	3.17
Stalk Shredder	14'	MFWD 150	21,100	200	10	0.117	1.59	2.36	2.17	0.47	6.61	1.45	3.18	11.24
Stalk Shredder Flex	20'	MFWD 150	29,300	200	10	0.082	1.11	1.65	2.11	0.33	5.22	1.41	2.22	8.85
Stalk Shredder-Flail	12'	MFWD 150	17,400	200	10	0.137	1.85	2.76	2.09	0.55	7.26	1.39	3.71	12.37
Stalk Shredder-Flail	15'	MFWD 150	21,900	200	10	0.110	1.48	2.20	2.10	0.44	6.24	1.40	2.96	10.62
Stalk Shredder-Flail	18'	MFWD 150	29,200	200	10	0.091	1.23	1.84	2.34	0.37	5.79	1.56	2.47	9.83
Stalk Shredder-Flail	20'	MFWD 150	29,000	200	10	0.082	1.11	1.65	2.09	0.33	5.19	1.39	2.22	8.82
Stalk Shredder-Flail	25'	MFWD 150	41,000	200	10	0.066	0.89	1.32	2.36	0.26	4.85	1.58	1.78	8.21
Subsoiler	3 shank	MFWD 190	5,810	100	15	0.204	2.76	5.19	0.39	1.11	9.46	1.11	7.71	18.30
Subsoiler	4 shank	MFWD 225	9,200	100	15	0.153	2.07	4.62	0.47	0.91	8.08	1.32	6.33	15.75
Subsoiler	5 shank	MFWD 225	12,600	100	15	0.122	1.65	3.68	0.51	0.73	6.58	1.44	5.04	13.07
Subsoiler low-till	6 shank	MFWD 225	14,600	100	15	0.102	1.38	3.07	0.49	0.60	5.56	1.40	4.21	11.17
Subsoiler low-till	8 shank	MFWD 225	20,000	100	15	0.076	1.03	2.30	0.51	0.45	4.30	1.43	3.15	8.89

Notes:

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

Total Direct: Does not include interest on operating capital.

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2019

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Captan 50 WP	lb	4.28
Agri-Dex	pt	2.39	Cotton Seed Trt.	acre	20.00
Crop Oil Conc. (Pet.)	pt	2.37	CruiserMaxx	oz	4.28
Crop Oil Conc. (Veg.)	pt	2.58	Headline EC	oz	3.11
Dyne-A-Pak	pt	4.80	Propimax EC	pt	12.88
Induce	pt	3.59	Prosaro	oz	2.56
MSO	pt	2.09	Quadris	oz	2.25
Penetrator Plus	pt	2.34	Quadris Top	oz	2.61
Surfactant	pt	3.59	Quadris Top SBX	oz	2.75
CLEANING			Quilt	pt	18.55
Cleaning Peanuts	ton	18.00	Quilt XCEL	pt	25.43
CROP CONSULTANT			Stratego	pt	24.58
Corn Consultant	acre	6.00	Stratego YLD	oz	4.28
Cotton Consultant	acre	8.00	Tilt 3.6 EC	oz	0.75
Peanut Consultant	acre	9.25	Tilt/ Bravo SE	oz	0.41
Rice Consultant	acre	8.00	GINNING		
Sorghum Consultant	acre	6.00	Gin & Haul	lb	0.11
Soybeans Consultant	acre	6.50	GROWTH REGULATORS		
Wheat Consultant	acre	5.50	Mepex	oz	0.08
CUSTOM FERTILIZE			Mepichlor 4.2%	oz	0.08
App Fert by Air	cwt	7.00	Mepiquat	oz	0.08
App Fert by Air (Mi)	appl	7.00	Mepstar	oz	0.08
Custom Apply Fert	acre	7.50	Palisade	oz	1.25
CUSTOM LIME			Stance	oz	1.25
Lime (Spread)	ton	38.00	HARVEST AIDS		
CUSTOM PLANT			Adios	oz	1.99
Custom Plant	acre	7.50	Aim 2EC	oz	5.65
Custom Plant Air	cwt	7.00	Def/Folex	pt	10.90
CUSTOM			Defol 5	gal	5.40
App by Air (3 gal)	appl	5.00	Display	pt	40.61
App by Air (5 gal)	appl	6.50	Ethephon 6E	pt	3.53
App by Air (10 gal)	appl	9.00	Finish 6	pt	9.60
Custom Spray Ground	acre	7.00	Folex 6EC	pt	10.90
DRYING			Freefall SC	oz	0.97
Dry Corn	bu	0.19	Ginstar EC	pt	26.41
Dry Grain Sorghum	cwt	0.25	Gramoxone SL	oz	0.15
Dry Peanuts	ton	24.00	Sharpen	oz	6.45
Dry Rice	bu	0.40	Sodium Chlorate 5L	gal	5.40
ERADICATION FEE			SuperBoll	oz	0.22
Eradication	acre	1.00	Thidiazuron 4lb	oz	0.97
FERTILIZERS			Tribufos 6lb	pt	10.90
Agrotain Ultra	pt	9.12	HAULING		
Amm Sulfate (21% N)	cwt	14.50	Haul Corn	bu	0.23
Boron Plus	pt	3.50	Haul Peanuts	ton	14.50
DAP	cwt	23.76	Haul Rice	bu	0.35
Fert 10-34-0	cwt	22.25	Haul Sorghum	bu	0.25
Fert 10-34-0	gal	2.59	Haul Soybeans	bu	0.27
Fert 11-37-0	cwt	26.50	Haul Wheat	bu	0.26
Fert 33-0-0-12S	cwt	18.00	HERBICIDES		
Fert 41-0-0-4	cwt	14.25	2,4-D Ester	pt	4.17
Lime	ton	28.00	2,4-D Amine 4	pt	2.40
NBPT	pt	9.12	AAtrex 4L	pt	2.12
Phosphorus (46% P2O5)	cwt	23.75	Accent Q	oz	23.85
Potash (60% K2O)	cwt	20.00	Aim	oz	5.65
Sulfur Plus	pt	3.15	Anthem	oz	3.08
UAN (32% N)	cwt	11.25	Anthem Maxx	oz	6.16
UAN (32%)	gal	1.24	Armezon Pro	oz	1.26
UAN + Sulfur (28%)	cwt	12.40	Atrazine 4L	pt	1.98
UAN + Sulfur (28%)	gal	1.38	Atrazine 90DF	lb	3.38
Urea, Solid (46% N)	cwt	14.50	Authority Elite	pt	15.67
Zinc Plus	pt	4.99	Authority Maxx	lb	64.05
FUNGICIDES			Authority MTZ	lb	26.30
Aframe	oz	1.91	Axial XL	oz	1.18
Alfa Guard	lb	1.55	Axiom	oz	1.92
Allegiance Flowable	pt	49.00	Barrage	pt	6.63
Approach Prima	pt	42.10	Boundary	pt	11.21
Apron Maxx RTA	oz	0.95	Broadaxe	pt	16.57
Avicta Complete Bean	oz	0.49	Bucaneer Plus	pt	1.48
Bravo Weather Stick	pt	6.88			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2019(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Butyrac 200 (2,4-DB)	pt	4.34	Stalwart	pt	4.80
Bxxolero	pt	7.73	Stam 80 EDF	lb	9.64
Cadre	oz	3.54	Stam M4	qt	7.84
Caparol	pt	4.52	Staple LX	oz	7.63
Capreno	oz	7.13	Sterling Blue	pt	7.82
Cinch ATZ	pt	5.89	Storm	pt	11.41
Clarity	pt	11.51	Superwham	qt	9.20
Classic	oz	17.18	Suprend	lb	13.74
Clearpath	lb	61.27	Synchrony XP	oz	12.71
Clethomine 2E	oz	0.56	Tempest	oz	1.84
Clincher SF	oz	2.34	Touchdown Total	qt	6.97
Command 3ME	pt	19.93	Trifluralin	pt	3.56
Corvus	oz	7.29	Triflurex	pt	3.86
Cotoran	pt	6.42	Ultra Blazer	pt	10.26
Declare	oz	1.64	Valor SX	oz	4.57
Dicamba	pt	8.48	Warrant	pt	4.84
Direx	pt	2.93	XtendiMax	oz	9.10
Diuron	pt	2.90	Zidua	oz	9.05
Dual II Magnum	pt	14.83	INOCULANT		
Dual Magnum	pt	13.81	Inoculant-Soybean	acre	1.55
Duet	pt	5.35	Optimize LIFT	oz	0.55
Endigo	oz	1.80	INSECTICIDES		
Engenia	oz	1.02	Abamectin .15EC	oz	0.95
Facet L	pt	15.25	Acephate 90%	lb	8.70
Fierce	oz	7.54	Acephate 90SP	lb	7.92
First Rate	oz	43.40	Admire Pro	oz	1.80
Flexstar	pt	8.41	Baythroid XL	oz	2.65
Fusilade DX	oz	1.00	Belt	oz	7.90
Glyphosate 3lbs a.e	pt	2.16	Bidrin 8EC	oz	1.26
Glyphosate 3lbs a.e	oz	0.14	Bifenthrin	oz	0.76
Gramoxone SL 2.0	oz	0.15	Bifenture 2EC	oz	0.76
Grandstand R	pt	15.86	Brigade EC	pt	12.37
Halex GT	pt	7.80	Capture LFR	oz	2.28
Halomax	oz	21.44	Centric 40WG	oz	5.37
Harmony Extra SG	oz	13.79	Diamond .83EC	oz	1.40
Hero	pt	25.77	Dimethoate 4E	pt	5.35
Leadoff	oz	5.82	Dimilin 2L	oz	2.13
Lexar	pt	8.01	Force 3G	lb	6.03
Liberty 280	oz	0.59	Gaicho 600	oz	2.36
Loyant	oz	0.00	Imidacloprid 4F	oz	1.00
Metribuzin 4L	pt	9.98	Imidan 70 WSB	oz	0.67
Metribuzin 75	lb	16.40	IncidentalPestTrt \$8	acre	8.00
Newpath	oz	3.83	IncidentalPestTrt\$15	acre	15.00
Osprey	oz	3.62	IncidentalPestTrt\$22	acre	22.00
Outlook	pt	16.60	IncidentalPestTrt\$30	acre	30.00
Paraquat	oz	0.24	Intrepid 2F	oz	2.03
Parazone 3SL	oz	0.24	Intruder 70WSP	oz	9.05
Permit	oz	22.46	Karate Z	oz	2.74
Permit Plus	oz	21.02	Lambda	oz	1.09
Prefix	pt	6.53	Lannate LV	pt	10.99
Provisia	oz	0.78	Macho	oz	0.64
Prowl 3.3 EC	pt	6.09	Malathion 5E	pt	5.50
RealmQ	oz	4.97	Malathion 8E	pt	5.50
RebelEx	oz	2.51	Mustang Max	oz	1.34
Reflex	pt	6.53	Nuprid 4F	oz	1.06
Regiment	oz	44.90	Orthene 90	lb	9.49
Resicore	oz	0.58	Permethrin	oz	0.49
Resource	oz	1.83	Pounce 25WP	lb	14.15
RiceBeaux	pt	5.85	Prevathon	oz	1.32
Riceshot	pt	3.87	Radiant	oz	6.82
Ricestar HT	pt	24.35	Sevin 4F	pt	6.22
Roundup Power Max	oz	0.18	Sevin XLR Plus	qt	13.23
Roundup PowerMax	pt	2.80	Sivanto Prime	oz	2.52
Roundup WeatherMax	oz	0.26	Transform WG	oz	8.18
Roundup WeatherMax	pt	4.17	Warrior II	oz	2.67
Select Max	pt	12.71	IRRIGATION SUPPLIES		
Sequence	pt	5.94	Roll-Out Pipe	ft	0.25
Sharpen	oz	6.45	SEED/PLANTS		
Sinister	pt	15.63			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2019 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Corn Seed Conv.	thous	2.26	Rice Seed Trt/Insect	lbseed	0.23
Corn Seed BtRR	thous	3.63	Sorghum Concept	lb	2.10
Corn Seed RR2	thous	3.36	Sorghum Concept+ Po	lb	3.96
Cotton Seed B3XF	thous	2.40	Soybean Seed LL	lb	1.42
Cotton Seed GLB2	thous	2.54	Soybean Seed RR2	lb	1.34
Cotton Seed GLTP	thous	2.11	Soybean Seed RR2X	lb	1.55
Cotton Seed W3FE	thous	2.34	SOIL TEST		
CSeed B3XF/W3RE/GLTP	thous	2.28	Soil Test	acre	10.00
Peanut Seed	lb	0.84	SURVEY & MARK LEVEES		
Rice Clearfield	lb	1.06	Survey & Mark Levees	acre	4.50
Rice Clrflld Hyb Trt	lb	5.70			
Rice Conv Hyb Trt	lb	5.70			
Rice Seed CF(Levees)	lb	1.06			
Rice Seed CFH(Levee)	lb	1.78			
Rice Seed Conv.	lb	0.28			
Rice Seed Cv(Levees)	lb	0.28			
Rice Seed CvH(Levee)	lb	1.66			
Rice Seed Provisia	lb	1.15			

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2019

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	2.60
Gasoline	gal	2.50
INTEREST RATES		
Short-term	%	6.00
Intermediate-term	%	6.50

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2019

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	14.23
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, 2019

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '19	4.00	-0.20	3.80	2.10	3.80
Cotton Lint	lb	Dec '19	0.7572	-0.0158	0.7414	0.52	0.7414
Cottonseed	lb						0.10 ^f
Grain Sorghum	bu				3.61	2.02	3.61
Peanuts	ton				385.00	355.00	385.00
Soybeans	bu	Nov '19	9.29	+0.01	9.30	5.21	9.30
Rice	bu	Nov '19	4.98	-0.38	4.60	2.96	4.60
Wheat	bu	Jul '19	5.52	-0.15	5.37	2.76	5.37

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2018 for the stated contract months.

^b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2018 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.

^c The forward contract price for corn, cotton, rice, soybeans and wheat is the futures contract price plus the basis. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The forward contract price for peanuts is an estimate from a poll of Extension Peanut Marketing Specialists.

^d Average Mississippi County CCC Loan Rate for 2018 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2018 Farm-stored Loan Rate for long grain rough rice. National 2019 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

^e Price used in MSU Extension Service Planning Budgets.

^f Cottonseed price is the average marketing year price over the years 2008-2017.

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, 2019

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'		0.96	0.32	0.51			0.01	1.80	1.75	3.55
Set Up Engine											
IRRIGATE LABOR	hour				0.23			0.01	0.24		0.24
Ditcher (1m/160a)			0.21	0.06	0.13			0.01	0.41	0.33	0.74
Roll-Out Pipe	ft	8.25						0.21	8.46		8.46
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.28	0.09	0.40			0.02	0.79	0.72	1.51
IRRIGATE LABOR	hour				1.81			0.05	1.86		1.86
Apply Water											
IRRIGATE LABOR	hour				0.23			0.01	0.24		0.24
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		0.43	0.13	0.59			0.01	1.16	1.07	2.23
Land Forming (\$450)	each									36.89	36.89
Well & Pump, Furrow	each			2.96				0.07	3.03	10.09	13.12
Main Line Pipe	each									4.99	4.99
Engine, RPF, 75	each									9.53	9.53
June Irrigation	ac-in		7.41	1.31				0.22	8.94		8.94
July Irrigation	ac-in		7.41	1.31				0.17	8.89		8.89
August Irrigation	ac-in		7.41	1.31				0.13	8.85		8.85
TOTALS		8.25	24.11	7.49	4.36	0.00	0.92	45.13	65.37	110.50	

Note: Cost of production estimates are based on 2018 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, 2019

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.27			0.01	0.28	0.28
Maintenance										
IRRIGATE LABOR	hour				1.07			0.03	1.10	1.10
Apply Water										
IRRIGATE LABOR	hour				0.15				0.15	0.15
Apply Water										
IRRIGATE LABOR	hour				0.20				0.20	0.20
Apply Water										
IRRIGATE LABOR	hour				0.15				0.15	0.15
Pivot, 1/4 CP	each			13.48				0.34	13.82	61.18
Well & Pump, 1/4 CP	each			3.50				0.09	3.59	11.96
Engine, 1/4 CP, 65	each									11.29
June Irr. 3app@.75"	ac-in		8.74	1.40				0.25	10.39	10.39
July Irr. 4app@.75"	ac-in		11.65	1.87				0.27	13.79	13.79
Aug Irr. 3app@.75"	ac-in		8.74	1.40				0.15	10.29	10.29
TOTALS		0.00	29.13	21.65	1.84	0.00	1.14	53.76	84.43	138.19

Note: Cost of production estimates are based on 2018 input prices

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