

# Cotton 2019 Planning Budgets



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 1-year short-run decision. Decisions beyond 1 year, or long-run decisions, should be based on **“Returns Above Specified Expenses.”**

## Acknowledgments

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

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## 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 to provide educational programs to farmers,
- by lenders as a basis for credit,
- to provide basic data for research, and
- to inform nonfarmers 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. You 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 your specific situation.

## 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 that 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:

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

$$CRCPA = CRCPH \times PR$$

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 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 (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. You should, however, consider these items and factor them into the final budget for your own situation.

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

Table 1.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conservation tillage  
 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 3<sup>rd</sup> year.**

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

Table 1.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 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 3<sup>rd</sup> year.**

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



Table 1.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 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 3<sup>rd</sup> year.**

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

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

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
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 3<sup>rd</sup> year.**

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

\* Lease costs are based on hourly usage costs.

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

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

Table 2.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, 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 3<sup>rd</sup> year.**

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

Table 2.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, 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
Stalk & 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	
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 3<sup>rd</sup> year.**

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

Table 2.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, 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 3<sup>rd</sup> year.**

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

Table 2.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, 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
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 3<sup>rd</sup> year.**

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

\* Lease costs are based on hourly usage costs.



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

PRODUCT	---PERCENT---										---PRODUCT PRICE---											
	75	80	85	90	95	100	105	110	115	120	125	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92
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	-81	-53	-25	2	30	57	85	113	141	169	-298	-271	-243	-215	-187	-159	-132	-104	-76	-48	-20
60 900.00 lb	-42	-8	24	58	91	124	158	191	224	258	291	-231	-198	-165	-131	-98	-65	-31	1	34	68	101
70 1050.00 lb	24	63	102	141	180	219	258	297	336	375	414	-165	-126	-87	-48	-9	29	68	107	146	185	224
80 1200.00 lb	91	136	180	225	269	314	358	402	447	491	536	-98	-53	-9	35	79	124	168	213	257	302	346
90 1350.00 lb	158	208	258	308	358	408	458	508	558	608	658	-31	18	68	118	168	218	268	318	368	418	468
100 1500.00 lb	225	280	336	392	447	503	558	614	670	725	781	35	90	146	202	257	313	368	424	480	535	591
110 1650.00 lb	292	353	414	475	536	597	659	720	781	842	903	102	163	224	285	346	407	469	530	591	652	713
120 1800.00 lb	358	425	492	559	625	692	759	825	892	959	1026	168	235	302	369	435	502	569	636	702	769	836
130 1950.00 lb	425	498	570	642	714	787	859	931	1004	1076	1148	235	308	380	452	524	597	669	741	814	886	958
140 2100.00 lb	492	570	648	726	803	881	959	1037	1115	1193	1271	302	380	458	536	613	691	769	847	925	1003	1081
150 2250.00 lb	559	642	726	809	892	976	1059	1143	1226	1310	1393	369	452	536	619	703	786	869	953	1036	1120	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					
Eradiation	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 3<sup>rd</sup> year.**

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

Table 3.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, 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 3<sup>rd</sup> year.**

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

Table 3.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, 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	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 ( 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	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 ( 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	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
1/4-mi. Pivot Irr.	acre		29.13	21.65	1.84			1.14	53.76	84.43	138.19
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 3<sup>rd</sup> year.**

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

Table 3.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, 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
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 3<sup>rd</sup> year.**

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

\* Lease costs are based on hourly usage costs.

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

PRODUCT	PERCENT										Cotton Lint		
	75	80	85	90	95	100	105	110	115	120		125	
	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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 4.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, 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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, 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 3<sup>rd</sup> year.**

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

Table 4.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, 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			
-----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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

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

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
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 3<sup>rd</sup> year.**

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

\* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3RE/GLTP variety, Delta Area, Mississippi, 2019

PRODUCT	---PERCENT---										Cotton Lint	
	75	80	85	90	95	100	105	110	115	120		125
	0.55	0.59	0.63	0.66	0.70	0.74	0.77	0.81	0.85	0.88	0.92	
PERCENT	---dollars---											
YIELD	UNIT											
50	600.00	lb	-137	-115	-93	-71	-48	-26	17	40	62	84
			-252	-229	-207	-185	-163	-140	-96	-74	-51	-29
60	720.00	lb	-84	-57	-30	-4	22	49	102	129	155	182
			-198	-171	-145	-118	-91	-65	-11	14	41	68
70	840.00	lb	-30	0	31	62	93	124	187	218	249	280
			-145	-114	-82	-51	-20	10	72	103	135	166
80	960.00	lb	22	58	93	129	164	200	271	307	342	378
			-91	-56	-20	15	50	86	157	193	228	264
90	1080.00	lb	76	116	156	196	236	276	356	396	436	476
			-38	1	41	81	121	161	242	282	322	362
100	1200.00	lb	129	174	218	263	307	351	440	485	529	574
			15	59	104	148	193	237	326	371	415	460
110	1320.00	lb	183	231	280	329	378	427	525	574	623	672
			68	117	166	215	264	313	411	460	509	558
120	1440.00	lb	236	289	343	396	450	503	610	663	716	770
			122	175	228	282	335	389	495	549	602	655
130	1560.00	lb	289	347	405	463	521	579	694	752	810	868
			175	233	291	349	406	464	580	638	696	753
140	1680.00	lb	343	405	467	530	592	654	779	841	903	966
			229	291	353	415	478	540	665	727	789	851
150	1800.00	lb	396	463	530	597	663	730	863	930	997	1064
			282	349	415	482	549	616	749	816	883	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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" 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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" 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 3<sup>rd</sup> year.**

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



Table 5.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" 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	9.77
Bed/Disk (Hipper)	8R-38 2x1		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)	8R-38 2x1		1.56	1.01	1.56			0.14	4.27	3.00	7.27
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	5.77
Plant - Folding	8R-38 2x1		1.49	1.83	1.72			0.15	5.19	5.31	10.50
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	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
Spray (Direct/Layby)	8R-38 2x1		1.34	0.58	1.34			0.10	3.36	2.25	5.61
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	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
Spray (Direct/Layby)	8R-38 2x1		1.34	0.58	1.34			0.08	3.34	2.25	5.59
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	7.23
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	5.58
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	65.13
Boll Buggy	4R2x1(350)		5.19	2.34	4.41			0.06	12.00	10.07	22.07
Module Builder	4R2x1(350)		5.19	2.52	5.97			0.07	13.75	10.48	24.23
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	14.88
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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" 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
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 3<sup>rd</sup> year.**

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

\* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" 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	dollars										
50	405.50	lb	-259	-244	-229	-214	-199	-184	-169	-154	-139	-124	-109	-357	-342	-297	-282	-267	-252	-237	-222	-207
60	486.60	lb	-223	-205	-187	-169	-151	-133	-115	-97	-79	-61	-43	-321	-303	-249	-231	-213	-195	-177	-159	-141
70	567.70	lb	-187	-166	-145	-124	-103	-82	-61	-40	-19	1	22	-285	-264	-201	-180	-159	-138	-117	-96	-75
80	648.80	lb	-151	-127	-103	-79	-55	-31	-7	16	41	65	89	-249	-225	-153	-129	-105	-81	-56	-32	-8
90	729.90	lb	-115	-88	-61	-34	-6	20	47	74	101	128	155	-213	-186	-105	-77	-50	-23	3	30	57
100	811.00	lb	-79	-49	-18	11	41	71	101	131	161	191	221	-177	-147	-56	-26	3	33	63	93	123
110	892.10	lb	-42	-9	23	56	89	122	155	188	221	254	287	-140	-107	-8	24	57	90	123	156	189
120	973.20	lb	-6	29	65	101	137	173	209	245	281	317	353	-104	-68	39	75	111	147	183	219	255
130	1054.30	lb	29	68	107	146	185	224	263	302	341	381	420	-68	-29	87	126	165	204	243	283	322
140	1135.40	lb	65	107	149	191	233	275	317	360	402	444	486	-32	9	135	177	219	262	304	346	388
150	1216.50	lb	101	146	191	236	281	327	372	417	462	507	552	3	48	183	229	274	319	364	409	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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.B Summary of estimated costs and returns per acre  
 Cotton, 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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.C Estimated resource use for field operations, per acre  
 Cotton, 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	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)	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	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							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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.D Estimated costs for field operations, per acre  
 Cotton, 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	12.65
Bed/Disk (Hipper)Rd	8R-38		0.94	0.37	0.95			0.14	2.40	1.90	4.30
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
Fert Appl (Liquid)	8R-38		1.97	1.40	2.33			0.20	5.90	4.15	10.05
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	7.12
Plant - Folding	8R-38		1.90	1.82	2.59			0.19	6.50	5.83	12.33
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
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	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	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	7.52
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	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	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	110.00						0.55	110.55		110.55
Stalk Shredder-Flail	15'		2.80	2.71	2.82			0.04	8.37	5.56	13.93
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 3<sup>rd</sup> year.**

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

Table 6.E Estimated monthly income and expense flows per acre  
 Cotton, 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
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 3<sup>rd</sup> year.**

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

\* Lease costs are based on hourly usage costs.



Table 6.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 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	--dollars--													
YIELD UNIT														
50 500.00 lb	-130	-112	-93	-75	-56	-38	-19	-1	17	35	54			
	-251	-233	-214	-196	-177	-159	-140	-121	-103	-84	-66			
60 600.00 lb	-86	-64	-41	-19	2	24	47	69	91	113	136			
	-207	-184	-162	-140	-118	-95	-73	-51	-29	-6	15			
70 700.00 lb	-41	-15	10	35	61	87	113	139	165	191	217			
	-162	-136	-110	-84	-58	-32	-6	19	45	70	96			
80 800.00 lb	2	32	62	91	121	150	180	210	239	269	299			
	-118	-88	-58	-29	0	30	59	89	119	148	178			
90 900.00 lb	47	80	113	147	180	214	247	280	314	347	380			
	-73	-40	-6	26	59	93	126	160	193	226	260			
100 1000.00 lb	91	128	165	203	240	277	314	351	388	425	462			
	-28	8	45	82	119	156	193	230	267	304	341			
110 1100.00 lb	136	177	217	258	299	340	381	421	462	503	544			
	15	56	97	137	178	219	260	301	341	382	423			
120 1200.00 lb	180	225	269	314	358	403	447	492	536	581	625			
	60	104	149	193	238	282	327	371	416	460	505			
130 1300.00 lb	225	273	321	370	418	466	514	562	610	659	707			
	104	152	201	249	297	345	393	442	490	538	586			
140 1400.00 lb	270	321	373	425	477	529	581	633	685	737	788			
	149	201	253	304	356	408	460	512	564	616	668			
150 1500.00 lb	314	370	425	481	536	592	648	703	759	814	870			
	193	249	305	360	416	471	527	583	638	694	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 3<sup>rd</sup> year.**

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

Table 7.B Summary of estimated costs and returns per acre  
 Cotton, 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 3<sup>rd</sup> year.**

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

Table 7.C Estimated resource use for field operations, per acre  
 Cotton, 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% K20)	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 3<sup>rd</sup> year.**

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

Table 7.D Estimated costs for field operations, per acre  
 Cotton, 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 3<sup>rd</sup> year.**

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

Table 7.E Estimated monthly income and expense flows per acre  
 Cotton, 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
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 3<sup>rd</sup> year.**

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

\* Lease costs are based on hourly usage costs.

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

PRODUCT	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											
	PERCENT											
	PRODUCT PRICE											
50	450.00	lb	-145	-129	-112	-95	-79	-62	-45	-29	-12	20
			-255	-238	-221	-205	-188	-171	-155	-138	-121	-88
60	540.00	lb	-105	-85	-65	-45	-25	-5	14	34	54	94
			-215	-195	-175	-155	-135	-115	-95	-75	-54	-14
70	630.00	lb	-65	-42	-19	4	27	50	74	97	121	167
			-175	-151	-128	-104	-81	-58	-34	-11	11	58
80	720.00	lb	-25	0	27	54	81	107	134	161	187	241
			-134	-108	-81	-54	-28	-1	25	51	78	131
90	810.00	lb	14	44	74	104	134	164	194	224	254	314
			-94	-64	-34	-4	25	55	85	115	145	205
100	900.00	lb	54	87	121	154	187	221	254	288	321	388
			-54	-21	11	45	78	112	145	178	212	278
110	990.00	lb	94	131	167	204	241	278	314	351	388	461
			-14	22	58	95	132	168	205	242	278	352
120	1080.00	lb	134	174	214	254	294	334	374	414	454	535
			25	65	105	145	185	225	265	305	345	425
130	1170.00	lb	174	218	261	304	348	391	435	478	521	608
			65	108	152	195	239	282	325	369	412	499
140	1260.00	lb	214	261	308	354	401	448	495	541	588	681
			105	152	199	245	292	339	385	432	479	572
150	1350.00	lb	254	305	355	405	455	505	555	605	655	755
			145	195	245	295	345	395	445	496	546	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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 8.B Summary of estimated costs and returns per acre  
 Cotton, 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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 8.C Estimated resource use for field operations, per acre  
 Cotton, 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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 8.D Estimated costs for field operations, per acre  
 Cotton, 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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 8.E Estimated monthly income and expense flows per acre  
 Cotton, 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
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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 \* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 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	--dollars--													
YIELD UNIT														
50 500.00 lb	-110	-91	-72	-54	-35	-17	1	19	38	56	75			
	-241	-223	-204	-186	-167	-149	-130	-112	-93	-74	-56			
60 600.00 lb	-65	-43	-20	1	23	45	68	90	112	134	156			
	-197	-174	-152	-130	-108	-86	-63	-41	-19	2	25			
70 700.00 lb	-20	5	30	56	82	108	134	160	186	212	238			
	-152	-126	-100	-74	-48	-22	3	28	54	80	106			
80 800.00 lb	23	53	82	112	142	171	201	231	260	290	320			
	-108	-78	-48	-19	10	40	69	99	129	158	188			
90 900.00 lb	68	101	134	168	201	235	268	301	335	368	401			
	-63	-30	3	36	69	103	136	169	203	236	270			
100 1000.00 lb	112	149	186	223	261	298	335	372	409	446	483			
	-19	18	55	92	129	166	203	240	277	314	351			
110 1100.00 lb	157	198	238	279	320	361	401	442	483	524	565			
	25	66	107	147	188	229	270	310	351	392	433			
120 1200.00 lb	201	246	290	335	379	424	468	513	557	602	646			
	70	114	159	203	248	292	336	381	425	470	514			
130 1300.00 lb	246	294	342	390	439	487	535	583	631	680	728			
	114	162	211	259	307	355	403	451	500	548	596			
140 1400.00 lb	290	342	394	446	498	550	602	654	706	758	809			
	159	211	262	314	366	418	470	522	574	626	678			
150 1500.00 lb	335	391	446	502	557	613	669	724	780	835	891			
	203	259	314	370	426	481	537	592	648	704	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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 9.B Summary of estimated costs and returns per acre  
 Cotton, 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 3<sup>rd</sup> year.**

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

Table 9.C Estimated resource use for field operations, per acre  
 Cotton, 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	POWER 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					
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			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							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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**



Table 9.D Estimated costs for field operations, per acre  
 Cotton, 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 3<sup>rd</sup> year.**

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

Table 9.E Estimated monthly income and expense flows per acre  
 Cotton, 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
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 3<sup>rd</sup> year.**

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

\* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 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		
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	-105	-88	-71	-54	-38	-21	-4	11	28	45
			-244	-228	-211	-194	-178	-161	-144	-127	-111	-94	-77
60	540.00	lb	-81	-61	-41	-21	-1	18	38	58	78	98	118
			-204	-184	-164	-144	-124	-104	-84	-64	-44	-24	-4
70	630.00	lb	-41	-18	5	28	51	75	98	121	145	168	192
			-164	-141	-117	-94	-71	-47	-24	-1	22	45	68
80	720.00	lb	-1	25	51	78	105	132	158	185	212	238	265
			-124	-97	-71	-44	-17	8	35	62	89	115	142
90	810.00	lb	38	68	98	128	158	188	218	248	278	308	338
			-84	-54	-24	5	35	65	95	125	155	185	215
100	900.00	lb	78	112	145	178	212	245	278	312	345	379	412
			-44	-10	22	55	89	122	155	189	222	255	289
110	990.00	lb	118	155	192	228	265	302	339	375	412	449	485
			-4	32	69	105	142	179	216	252	289	326	362
120	1080.00	lb	158	199	239	279	319	359	399	439	479	519	559
			35	75	115	156	196	236	276	316	356	396	436
130	1170.00	lb	199	242	285	329	372	415	459	502	546	589	632
			76	119	162	206	249	292	336	379	422	466	509
140	1260.00	lb	239	285	332	379	425	472	519	566	612	659	706
			116	162	209	256	302	349	396	443	489	536	583
150	1350.00	lb	279	329	379	429	479	529	579	629	679	729	779
			156	206	256	306	356	406	456	506	556	606	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 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> 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 3<sup>rd</sup> year.**

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

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

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

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

\* Lease costs are based on hourly usage costs.



Table 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										Cotton Lint	
	75	80	85	90	95	100	105	110	115	120		125
	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	-69	-47	-25	-3	19	63	85	107	130
			-308	-286	-263	-241	-219	-197	-152	-130	-108	-85
60	720.00	lb	-38	-12	14	41	68	94	148	174	201	228
			-254	-228	-201	-174	-148	-121	-68	-41	-14	11
70	840.00	lb	14	45	76	108	139	170	232	263	294	326
			-201	-170	-139	-108	-76	-45	16	47	78	109
80	960.00	lb	68	103	139	174	210	246	317	352	388	424
			-148	-112	-76	-41	-5	29	101	136	172	207
90	1080.00	lb	121	161	201	241	281	321	401	441	481	521
			-94	-54	-14	25	65	105	185	225	265	305
100	1200.00	lb	175	219	264	308	353	397	486	530	575	619
			-41	3	47	92	136	181	270	314	359	403
110	1320.00	lb	228	277	326	375	424	473	571	620	668	717
			12	61	110	159	208	257	354	403	452	501
120	1440.00	lb	282	335	388	442	495	548	655	709	762	815
			65	119	172	225	279	332	439	492	546	599
130	1560.00	lb	335	393	451	508	566	624	740	798	855	913
			119	177	234	292	350	408	524	581	639	697
140	1680.00	lb	388	451	513	575	638	700	824	887	949	1011
			172	235	297	359	421	484	608	670	733	795
150	1800.00	lb	442	509	575	642	709	776	909	976	1042	1109
			226	292	359	426	493	559	693	759	826	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---		Total Direct	--Fixed--		Total Cost	
									Imp.	P.U.		Imp.	P.U.		
			dollars	hours	years	hr/ac	-----\$/acre-----								
Bed-Paratill	Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.09	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 Flow-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 Flow-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 Flow-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 Flow-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 Flow-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 Flow-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 Flow-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 Flow-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 Flow-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--- Imp.	P.U.	Total Direct	--Fixed-- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	-----\$/acre-----							
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	19.10	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 - Drapper	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--- Imp.	P.U.	Total Direct	--Fixed-- Imp.	P.U.	Total Cost
			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-Fold.	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	Gaucha 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 <sup>a</sup>	Basis <sup>b</sup>	Forward Contract Price <sup>c</sup>	Loan Rate <sup>d</sup>	Budget Price <sup>e</sup>
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 <sup>f</sup>
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

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

<sup>b</sup> Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 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.

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

<sup>d</sup> Average Mississippi County CCC Loan Rate for 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.

<sup>e</sup> Price used in MSU Extension Service Planning Budgets.

<sup>f</sup> Cottonseed price is the average marketing year price over the years 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			
-----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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