

# **COTTON**

## **2021**

# **PLANNING BUDGETS**

**Mississippi State University  
Department of Agricultural Economics  
Budget Report 2020-01**

**October 2020**



## Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses.**" Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2021 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

## Acknowledgments

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

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

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# 2021 Planning Budgets

## Budgets for Agricultural Enterprises

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

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

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

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

## Methods and Procedures

### Production Practices

The production practices listed in each budget are the result of a combined effort by researchers and extension personnel to represent those practices that producers could use in a specific production system. Producers might use different practices in their own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage.

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 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 2020. (Appendix Tables 1, 2, and 3).

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

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

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

### Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

RPH = R&M cost per hour of use

RLC = Replacement cost of machine

RP = R&M percentage (percent of RLC)

THL = Total hours of machine life

RPA = R&M cost per acre

PR = Performance rate

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

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

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

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

### Estimates of Fixed Costs

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

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

where:

IIR = Capital recovery factor

IIR = Intermediate-term interest rate

TYL = Total years of life

$$\begin{aligned} CRCPY &= [(RLC - SV) \times CRF] \\ &\quad + (SV \times IIR) \end{aligned}$$

where:

CRCPY = Capital recovery charge per year

RLC = Replacement cost

SV = Salvage value (at end of useful life)

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

### Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2020 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

### Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 and 9. A dryland crop budget may be converted to an irrigated crop budget by adding the appropriate direct and fixed costs to the costs of the dryland crop. Also, adjustments in crop yields and other costs may be required with the addition of supplemental irrigation.

### Net Returns

Net returns are generally considered to be the amount left after subtracting all costs from all incomes for a particular enterprise. In these budgets, "RETURNS ABOVE DIRECT EXPENSES" and "RETURNS ABOVE TOTAL SPECIFIED EXPENSES" are used as a proxy for the economic concepts of net returns above variable costs and net returns above variable plus fixed costs, respectively. Some items are intentionally left out of these calculations, i.e., costs for land or land rent, taxes, insurance premiums, general farm overhead, and expected incomes from government payments or insurance payments. These costs and incomes vary widely among farms and farm situations so as to make routine calculation for representative situations impractical. These items should, however, be considered by each producer and factored into the final budget each producer develops for his own situation.



## Enterprise Budgets

Table 1.A Estimated costs per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE variety, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.00	2.5000	17.50	_____
App by Air ( 3 gal)	appl	5.50	5.2500	28.88	_____
<b>HARVEST AIDS</b>					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
<b>GINNING</b>					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
<b>FERTILIZERS</b>					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	34.3582	46.04	_____
<b>FUNGICIDES</b>					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
<b>HERBICIDES</b>					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Select Max	pt	12.74	1.0000	12.74	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
Warrant	pt	4.39	3.0000	13.17	_____
<b>INSECTICIDES</b>					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	5.2000	6.03	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	1.31	2.0000	2.62	_____
Bifenthrin	oz	0.94	12.8000	12.03	_____
Lambda	oz	0.95	1.0000	0.95	_____
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.35	1.5000	11.02	_____
<b>SEED/PLANTS</b>					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
<b>GROWTH REGULATORS</b>					
Mepiquat Chloride	oz	0.06	48.0000	2.88	_____
<b>ADJUVANTS</b>					
Surfactant	pt	3.30	0.4000	1.32	_____
<b>CUSTOM FERTILIZE</b>					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
<b>ERADICATION FEE</b>					
Eradication	acre	1.00	1.0000	1.00	_____
<b>CUSTOM LIME</b>					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
<b>CROP CONSULTANT</b>					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	14.68	0.3993	5.86	_____
Self-Propelled	hour	14.68	0.2075	3.04	_____
<b>HAND LABOR</b>					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
<b>UNALLOCATED LABOR</b>					
hour		14.68	0.4855	7.13	_____
<b>DIESEL FUEL</b>					
Tractors	gal	1.53	4.6248	7.08	_____
Self-Propelled	gal	1.53	4.8836	7.47	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	7.40	1.0000	7.40	_____
Tractors	acre	2.91	1.0000	2.91	_____
Self-Propelled	acre	22.33	1.0000	22.33	_____
INTEREST ON OP. CAP.	acre	11.78	1.0000	11.78	_____
<hr/>					
<b>TOTAL DIRECT EXPENSES</b>				<b>718.02</b>	_____
<b>FIXED EXPENSES</b>					
Implements	acre	10.22	1.0000	10.22	_____
Tractors	acre	17.71	1.0000	17.71	_____
Self-Propelled	acre	87.04	1.0000	87.04	_____
<hr/>					
<b>TOTAL FIXED EXPENSES</b>				<b>114.97</b>	_____
<hr/>					
<b>TOTAL SPECIFIED EXPENSES</b>				<b>832.99</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	1200.0000	773.04	_____
Cotton Seed	lb	0.08	1620.0000	129.60	_____
				-----	
<b>TOTAL INCOME</b>				<b>902.64</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	79.21	1.0000	79.21	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	95.43	1.0000	95.43	_____
INSECTICIDES	acre	77.66	1.0000	77.66	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	2.88	1.0000	2.88	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
OPERATOR LABOR	hour	14.68	0.6069	8.90	_____
UNALLOCATED LABOR	hour	14.68	0.4855	7.13	_____
DIESEL FUEL	gal	1.53	9.5084	14.55	_____
REPAIR & MAINTENANCE	acre	32.64	1.0000	32.64	_____
INTEREST ON OP. CAP.	acre	11.78	1.0000	11.78	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>718.02</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>184.62</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>114.97</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>832.99</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>69.65</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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-Subsoil 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
Cot. Seed B3XF/W3FE	thous						45.0000				
Cotton Seed Trt.	acre						1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May				0.01	0.01	0.00
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 600-825gal	90' 250hp		0.011	1.00	Jun				0.01	0.01	0.00
Bidrin 8EC	oz						3.2000				
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				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun			0.04	0.04	0.06	0.03
Warrant	pt						3.0000				
Liberty 280	oz						29.0000				
Mepiquat Chloride	oz						16.0000				
Centric 40WG	oz						2.0000				
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Diamond .83EC	oz						6.0000				
Imidacloprid 4F	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
App by Air ( 3 gal)	appl						1.0000				
Acephate 90%	lb						0.7500				
Mepiquat Chloride	oz						16.0000				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl						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		
Transform WG	oz						1.5000				
App by Air ( 5 gal)	appl						1.00	Sep	1.0000		
Thidiazuron 4lb	oz						2.3000				
Ethephon 6E	pt						2.0000				
App by Air ( 5 gal)	appl						0.50	Sep	0.5000		
Tribufos 6lb	pt						0.5000				
Ethephon 6E	pt						0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct				0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct		1200.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct			0.08	0.08	0.08	0.06
TOTALS									0.60	0.39	0.92
											0.48

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

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					0.13	3.46	3.46
Lime (Spread)	ton	31.60					1.26	32.86	32.86
Custom Apply Fert	acre	7.50					0.30	7.80	7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50	34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42		0.16	4.24	4.59
Bed/Disk (Hipper)	12R-38		0.44	0.50	0.65		0.06	1.65	1.90
App by Air ( 5 gal)	appl	7.00					0.19	7.19	7.19
Clarity	pt	5.37					0.14	5.51	5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27	4.27
Select Max	pt	12.74					0.34	13.08	13.08
Surfactant	pt	0.66					0.02	0.68	0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.08	3.65	3.01
UAN (32%)	gal	23.02					0.54	23.56	23.56
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43	2.97
Plant - Folding	12R-38		0.88	1.91	1.76		0.09	4.64	5.06
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42	118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40	20.40
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29
Gramoxone SL 2.0	oz	9.12					0.18	9.30	9.30
Cotoran	pt	12.02					0.24	12.26	12.26
Surfactant	pt	0.66					0.01	0.67	0.67
Cotton Consultant	acre	8.00					0.16	8.16	8.16
Eradication	acre	1.00					0.02	1.02	1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81	1.29
Dual Magnum	pt	13.33					0.27	13.60	13.60
Liberty 280	oz	12.76					0.26	13.02	13.02
Acephate 90%	lb	1.74					0.03	1.77	1.77
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.01	0.80	1.29
Bidrin 8EC	oz	3.71					0.06	3.77	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63	3.01
UAN (32%)	gal	23.02					0.38	23.40	23.40
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.05	2.93	2.45
Warrant	pt	13.17					0.22	13.39	13.39
Liberty 280	oz	12.76					0.21	12.97	12.97
Mepiquat Chloride	oz	0.96					0.02	0.98	0.98
Centric 40WG	oz	10.16					0.17	10.33	10.33
App by Air ( 3 gal)	appl	5.50					0.07	5.57	5.57
Diamond .83EC	oz	7.68					0.10	7.78	7.78
Imidacloprid 4F	oz	2.62					0.03	2.65	2.65
Mepiquat Chloride	oz	0.96					0.01	0.97	0.97
App by Air ( 3 gal)	appl	5.50					0.07	5.57	5.57
Acephate 90%	lb	5.21					0.07	5.28	5.28
Mepiquat Chloride	oz	0.96					0.01	0.97	0.97
Bifenthrin	oz	6.02					0.08	6.10	6.10
App by Air ( 3 gal)	appl	1.38					0.02	1.40	1.40
Lambda	oz	0.95					0.01	0.96	0.96
Bidrin 8EC	oz	2.32					0.03	2.35	2.35
Incidental Pest									
App by Air ( 3 gal)	appl	5.50					0.07	5.57	5.57
IncidentalPestTrt\$15	acre	15.00					0.20	15.20	15.20
App by Air ( 3 gal)	appl	5.50					0.06	5.56	5.56
Acephate 90%	lb	5.21					0.05	5.26	5.26
Bifenthrin	oz	6.02					0.06	6.08	6.08
App by Air ( 3 gal)	appl	5.50					0.06	5.56	5.56
Transform WG	oz	11.02					0.11	11.13	11.13
App by Air ( 5 gal)	appl	7.00					0.05	7.05	7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45	3.45
Ethephon 6E	pt	8.00					0.05	8.05	8.05
App by Air ( 5 gal)	appl	3.50					0.02	3.52	3.52
Tribufos 6lb	pt	5.11					0.03	5.14	5.14
Ethephon 6E	pt	1.25					0.01	1.26	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74	83.17
Gin & Haul	lb	132.00					0.44	132.44	132.44
Stalk Shredder-Flail	20'		1.46	2.79	2.18		0.02	6.45	4.94
TOTALS		640.20	14.55	32.64	18.85	0.00	11.78	718.02	114.97
									832.99

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	902.64
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	23.02	0.00	23.02	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	22.27	0.00	47.23	25.93	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	39.80	22.25	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.96	1.92	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	2.07	0.00	0.00	0.00	0.00	1.60	3.56	3.33	0.00	0.00	0.00	8.29
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.39	0.00	0.00	0.00	0.00	0.92	2.06	1.94	0.00	0.00	0.00	8.24
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	1.05	2.89	1.97	0.00	0.00	0.00	24.52
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.80	0.62	4.07	1.18	0.77	0.34	0.18	0.58
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	30.73	27.21	207.31	72.20	60.37	33.59	28.47	173.63
NET INCOME	-84.51	0.00	0.00	0.00	-30.73	-27.21	-207.31	-72.20	-60.37	-33.59	-28.47	729.01
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-115.24	-142.45	-349.76	-421.96	-482.33	-515.92	-544.39	184.62

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-232 -347	-212 -327	-193 -308	-174 -289	-155 -269	-135 -250	-116 -231	-97 -211	-77 -192	-58 -173	-39 -154
60	720.00	lb	-187 -302	-164 -279	-141 -256	-118 -232	-94 -209	-71 -186	-48 -163	-25 -140	-2 -117	21 -93	44 -70
70	840.00	lb	-142 -257	-115 -230	-88 -203	-61 -176	-34 -149	-7 -122	19 -95	46 -68	73 -41	100 -14	127 12
80	960.00	lb	-98 -213	-67 -182	-36 -151	-5 -120	25 -89	56 -58	87 -27	118 3	149 34	180 65	211 96
90	1080.00	lb	-53 -168	-18 -133	16 -98	50 -63	85 -29	120 5	155 40	190 75	224 109	259 144	294 179
100	1200.00	lb	-8 -123	30 -84	68 -46	107 -7	145 30	184 69	223 108	261 146	300 185	339 224	377 262
110	1320.00	lb	36 -78	78 -36	121 6	163 48	206 91	248 133	291 176	333 218	376 261	418 303	461 346
120	1440.00	lb	80 -34	127 12	173 58	219 105	266 151	312 197	359 244	405 290	451 336	498 383	544 429
130	1560.00	lb	125 10	175 60	226 111	276 161	326 211	376 261	427 312	477 362	527 412	577 462	628 513
140	1680.00	lb	170 55	224 109	278 163	332 217	386 271	440 325	494 380	549 434	603 488	657 542	711 596
150	1800.00	lb	215 100	273 158	330 216	388 273	446 331	504 389	562 447	620 505	678 563	736 621	794 679

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 2020 input prices.

Table 2.A Estimated costs per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars					dollars
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.00	2.5000	17.50	
App by Air ( 3 gal)	appl	5.50	5.7500	31.63	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	
Ethepron 6E	pt	4.00	2.3125	9.25	
Tribufos 6lb	pt	10.21	0.5000	5.11	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	
UAN (32%)	gal	1.34	34.3582	46.04	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Select Max	pt	12.74	1.0000	12.74	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Cotoran	pt	6.01	2.0000	12.02	
Dual Magnum	pt	13.33	1.0000	13.33	
Liberty 280	oz	0.44	58.0000	25.52	
Warrant	pt	4.39	3.0000	13.17	
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	
Bidrin 8EC	oz	1.16	5.2000	6.03	
Diamond .83EC	oz	1.28	6.0000	7.68	
Imidacloprid 4F	oz	1.31	2.0000	2.62	
Centric 40WG	oz	5.08	2.0000	10.16	
Bifenthrin	oz	0.94	12.8000	12.03	
Lambda	oz	0.95	1.0000	0.95	
Incidental Pest Trt \$15	acre	15.00	1.5000	22.50	
Transform WG	oz	7.35	1.5000	11.02	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	51.0000	3.06	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
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	47.45	0.6660	31.60	
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	14.68	0.5025	7.38	
Self-Propelled	hour	14.68	0.2075	3.04	
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	0.1899	1.71	
UNALLOCATED LABOR					
hour	14.68	0.5052	7.42		
DIESEL FUEL					
Tractors	gal	1.53	5.6368	8.63	
Self-Propelled	gal	1.53	4.8836	7.47	
Roll-Out Pipe Irr.	gal	1.53	8.5535	13.08	
REPAIR & MAINTENANCE					
Implements	acre	7.90	1.0000	7.90	
Tractors	acre	3.52	1.0000	3.52	
Self-Propelled	acre	22.33	1.0000	22.33	
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	12.46	1.0000	12.46	
TOTAL DIRECT EXPENSES				798.06	
FIXED EXPENSES					
Implements	acre	12.27	1.0000	12.27	
Tractors	acre	21.45	1.0000	21.45	
Self-Propelled	acre	87.04	1.0000	87.04	
Roll-Out Pipe Irr.	acre	51.84	1.0000	51.84	
TOTAL FIXED EXPENSES				172.60	
TOTAL SPECIFIED EXPENSES				970.66	

Note: Cost of production estimates are based on 2020 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	1500.0000	966.30	_____
Cotton Seed	lb	0.08	2025.0000	162.00	_____
<b>TOTAL INCOME</b>				<b>1128.30</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	49.13	1.0000	49.13	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	79.21	1.0000	79.21	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	95.43	1.0000	95.43	_____
INSECTICIDES	acre	85.16	1.0000	85.16	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	3.06	1.0000	3.06	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	14.68	0.7101	10.42	_____
UNALLOCATED LABOR	hour	14.68	0.5052	7.42	_____
DIESEL FUEL	gal	1.53	19.0740	29.18	_____
REPAIR & MAINTENANCE	acre	40.91	1.0000	40.91	_____
INTEREST ON OP. CAP.	acre	12.46	1.0000	12.46	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>798.06</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>330.24</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>172.60</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>970.66</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>157.64</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

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-Subsoil Fold	12R-38	MFWD 225	0.053	1.00	Nov			0.05	0.05	0.05
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	1.00	Nov			0.04	0.04	0.04
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
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May			0.04	0.04	0.04
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May			0.04	0.04	0.09
Cot. Seed B3XF/W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
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 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Jun			0.05	0.05	0.07
UAN (32%)	gal					17.1791				
App by Air ( 3 gal)	appl			1.00	Jul	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
Warrant	pt					3.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					19.0000				
Centric 40WG	oz					2.0000				
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				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1500.0000				
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct			0.08	0.08	0.08
Roll-Out Pipe Irr.	acre					1.0000		0.07	0.07	0.44
-----										
TOTALS						0.71	0.50	1.38	0.50	

Note: Cost of production estimates are based on 2020 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Soil Test	acre	3.33				0.13	3.46	3.46
Lime (Spread)	ton	31.60				1.26	32.86	32.86
Custom Apply Fert	acre	7.50				0.30	7.80	7.80
Potash (60% K2O)	cwt	33.17				1.33	34.50	34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42	0.16	4.24	4.59
Bed/Disk (Hipper)	12R-38		0.87	0.99	1.30	0.13	3.29	3.81
App by Air ( 5 gal)	appl	7.00				0.19	7.19	7.19
Clarity	pt	5.37				0.14	5.51	5.51
Glyphosate 3lbs a.e	oz	4.16				0.11	4.27	4.27
Select Max	pt	12.74				0.34	13.08	13.08
Surfactant	pt	0.66				0.02	0.68	0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60	0.08	3.65	3.01
UAN (32%)	gal	23.02				0.54	23.56	23.56
Row Cond Folding	38'		0.72	0.58	1.08	0.05	2.43	2.97
Plant - Folding	12R-38		0.88	1.91	1.76	0.09	4.64	5.06
Cot. Seed B3XF/W3FE	thous	116.10				2.32	118.42	118.42
Cotton Seed Trt.	acre	20.00				0.40	20.40	20.40
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36	0.02	0.81	1.29
Gramoxone SL 2.0	oz	9.12				0.18	9.30	9.30
Cotoran	pt	12.02				0.24	12.26	12.26
Surfactant	pt	0.66				0.01	0.67	0.67
Cotton Consultant	acre	8.00				0.16	8.16	8.16
Eradication	acre	1.00				0.02	1.02	1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36	0.02	0.81	1.29
Dual Magnum	pt	13.33				0.27	13.60	13.60
Liberty 280	oz	12.76				0.26	13.02	13.02
Acephate 90%	lb	1.74				0.03	1.77	1.77
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36	0.01	0.80	1.29
Bidrin 8EC	oz	3.71				0.06	3.77	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60	0.06	3.63	3.01
UAN (32%)	gal	23.02				0.38	23.40	23.40
App by Air ( 3 gal)	appl	5.50				0.07	5.57	5.57
Diamond .83EC	oz	7.68				0.10	7.78	7.78
Imidacloprid 4F	oz	2.62				0.03	2.65	2.65
Mepiquat Chloride	oz	0.96				0.01	0.97	0.97
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37	0.04	2.92	2.45
Warrant	pt	13.17				0.18	13.35	13.35
Liberty 280	oz	12.76				0.17	12.93	12.93
Mepiquat Chloride	oz	1.14				0.02	1.16	1.16
Centric 40WG	oz	10.16				0.14	10.30	10.30
App by Air ( 3 gal)	appl	5.50				0.07	5.57	5.57
Acephate 90%	lb	5.21				0.07	5.28	5.28
Mepiquat Chloride	oz	0.96				0.01	0.97	0.97
Bifenthrin	oz	6.02				0.08	6.10	6.10
App by Air ( 3 gal)	appl	1.38				0.02	1.40	1.40
Lambda	oz	0.95				0.01	0.96	0.96
Bidrin 8EC	oz	2.32				0.03	2.35	2.35
Incidental Pest								
App by Air ( 3 gal)	appl	8.25				0.11	8.36	8.36
IncidentalPestTrt\$15	acre	22.50				0.30	22.80	22.80
App by Air ( 3 gal)	appl	5.50				0.06	5.56	5.56
Acephate 90%	lb	5.21				0.05	5.26	5.26
Bifenthrin	oz	6.02				0.06	6.08	6.08
App by Air ( 3 gal)	appl	5.50				0.06	5.56	5.56
Transform WG	oz	11.02				0.11	11.13	11.13
App by Air ( 5 gal)	appl	7.00				0.05	7.05	7.05
Thidiazuron 4lb	oz	3.43				0.02	3.45	3.45
Ethephon 6E	pt	8.00				0.05	8.05	8.05
App by Air ( 5 gal)	appl	3.50				0.02	3.52	3.52
Tribufos 6lb	pt	5.11				0.03	5.14	5.14
Ethephon 6E	pt	1.25				0.01	1.26	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11	0.12	34.74	83.17
Gin & Haul	lb	165.00				0.55	165.55	165.55
Stalk Shredder-Flail	20'		1.46	2.79	2.18	0.02	6.45	4.94
Roll-Out Pipe Irr.	acre	7.92	14.20	7.78	4.46	0.48	34.84	55.72
<b>TOTALS</b>		691.55	29.18	40.91	23.96	0.00	12.46	798.06
								172.60
								970.66

Note: Cost of production estimates are based on 2020 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1128.30
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	20.63	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	23.02	0.00	23.02	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	22.27	0.00	47.23	0.00	25.93	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	3.71	57.46	22.25	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.00	3.06	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	2.72	0.00	0.00	0.00	0.00	1.60	3.79	4.55	1.60	0.23	0.62	8.85
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.82	0.00	0.00	0.00	0.00	0.92	2.06	5.81	5.15	4.36	0.25	8.81
REPAIR & MAINTENANCE	2.70	0.00	0.00	0.00	0.00	1.05	2.89	5.78	2.12	1.40	0.15	24.82
INTEREST ON OP. CAP.	3.31	0.00	0.00	0.00	0.80	0.62	4.07	0.84	1.54	0.40	0.19	0.69
TOTAL DIRECT EXPENSES	86.15	0.00	0.00	0.00	30.73	27.21	207.54	51.63	117.49	39.64	29.50	208.17
NET INCOME	-86.15	0.00	0.00	0.00	-30.73	-27.21	-207.54	-51.63	-117.49	-39.64	-29.50	920.13
NET INCOME TO DATE	-86.15	-86.15	-86.15	-86.15	-116.88	-144.09	-351.63	-403.26	-520.75	-560.39	-589.89	330.24

Note: Cost of production estimates are based on 2020 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/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2021

PRODUCT	PERCENT													
	75	80	85	90	95	100	105	110	115	120	125			
			PRODUCT PRICE											
Cotton Lint				0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars											
50	750.00	lb	-190 -363	-166 -339	-142 -315	-118 -291	-94 -266	-70 -242	-45 -218	-21 -194	2 -170	26 -146	50 -121	
60	900.00	lb	-135 -307	-106 -278	-77 -249	-48 -220	-19 -191	9 -162	38 -133	67 -104	96 -75	125 -46	154 -17	
70	1050.00	lb	-79 -251	-45 -217	-11 -184	22 -150	56 -116	90 -82	123 -48	157 -14	191 18	225 52	259 86	
80	1200.00	lb	-23 -195	15 -157	54 -118	92 -79	131 -41	170 -2	208 36	247 74	286 113	324 152	363 190	
90	1350.00	lb	32 -139	76 -96	119 -52	163 -9	206 34	250 77	293 121	337 164	380 208	424 251	467 294	
100	1500.00	lb	88 -83	136 -35	185 12	233 61	281 109	330 157	378 205	426 254	475 302	523 350	571 399	
110	1650.00	lb	144 -28	197 25	250 78	304 131	357 184	410 237	463 290	516 344	569 397	622 450	676 503	
120	1800.00	lb	200 27	258 85	316 143	374 201	432 259	490 317	548 375	606 433	664 491	722 549	780 607	
130	1950.00	lb	256 83	319 146	382 209	444 272	507 335	570 397	633 460	696 523	758 586	821 649	884 711	
140	2100.00	lb	312 139	379 207	447 275	515 342	582 410	650 477	718 545	785 613	853 680	921 748	988 816	
150	2250.00	lb	368 195	440 268	513 340	585 413	658 485	730 558	803 630	875 702	948 775	1020 847	1092 920	

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 2020 input prices.

Table 3.A Estimated costs per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
 B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.00	2.5000	17.50	_____
App by Air ( 3 gal)	appl	5.50	5.7500	31.63	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	34.3582	46.04	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e.	oz	0.13	32.0000	4.16	_____
Select Max	pt	12.74	1.0000	12.74	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
Warrant	pt	4.39	3.0000	13.17	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	5.2000	6.03	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	1.31	2.0000	2.62	_____
Bifenthrin	oz	0.94	12.8000	12.03	_____
Lambda	oz	0.95	1.0000	0.95	_____
Incidental Pest Trt \$15	acre	15.00	1.5000	22.50	_____
Transform WG	oz	7.35	1.5000	11.02	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	48.0000	2.88	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
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	47.45	0.6660	31.60	_____
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	14.68	0.3993	5.86	_____
Self-Propelled	hour	14.68	0.2075	3.04	_____
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	0.1899	1.71	_____
UNALLOCATED LABOR					
hour	14.68	0.4855	7.13	_____	
DIESEL FUEL					
Tractors	gal	1.53	4.6248	7.08	_____
Self-Propelled	gal	1.53	4.8836	7.47	_____
1/4-mi. Pivot Irr.	gal	1.53	11.2011	17.14	_____
REPAIR & MAINTENANCE					
implements	acre	7.40	1.0000	7.40	_____
Tractors	acre	2.91	1.0000	2.91	_____
Self-Propelled	acre	22.33	1.0000	22.33	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	12.64	1.0000	12.64	_____
TOTAL DIRECT EXPENSES				803.06	_____
FIXED EXPENSES					
implements	acre	10.22	1.0000	10.22	_____
Tractors	acre	17.71	1.0000	17.71	_____
Self-Propelled	acre	87.04	1.0000	87.04	_____
1/4-mi. Pivot Irr.	acre	71.85	1.0000	71.85	_____
TOTAL FIXED EXPENSES				186.82	_____
TOTAL SPECIFIED EXPENSES				989.88	_____

Note: Cost of production estimates are based on 2020 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3rd year.  
 Lime cost prorated for application every 3rd year.

Table 3.B Summary of estimated costs and returns per acre  
Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	1500.0000	966.30	_____
Cotton Seed	lb	0.08	2025.0000	162.00	_____
				-----	
<b>TOTAL INCOME</b>				<b>1128.30</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	49.13	1.0000	49.13	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	79.21	1.0000	79.21	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	95.43	1.0000	95.43	_____
INSECTICIDES	acre	85.16	1.0000	85.16	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	2.88	1.0000	2.88	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	14.68	0.6069	8.90	_____
UNALLOCATED LABOR	hour	14.68	0.4855	7.13	_____
DIESEL FUEL	gal	1.53	20.7096	31.69	_____
REPAIR & MAINTENANCE	acre	54.59	1.0000	54.59	_____
INTEREST ON OP. CAP.	acre	12.64	1.0000	12.64	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>803.06</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>325.24</b>	_____
				-----	
<b>TOTAL FIXED EXPENSES</b>				<b>186.82</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>989.88</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>138.42</b>	_____

Note: Cost of production estimates are based on 2020 input prices.

Table 3.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
 B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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-Subsoil 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
Cot. Seed B3XF/W3FE	thous						45.0000				
Cotton Seed Trt.	acre						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz						48.0000				
Cotoran	pt						2.0000				
Surfactant	pt						0.2000				
Cotton Consultant	acre						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 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz						3.2000				
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				
Spray (Direct/Layby)	12R-38	MFWD	225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt						3.0000				
Liberty 280	oz						29.0000				
Mepiquat Chloride	oz						16.0000				
Centric 40WG	oz						2.0000				
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Diamond .83EC	oz						6.0000				
Imidacloprid 4F	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
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				
Transform WG	oz						1.5000				
App by Air ( 5 gal)	appl				1.00	Sep	1.0000				
Thidiazuron 4lb	oz						2.3000				
Ethephon 6E	pt						2.0000				
App by Air ( 5 gal)	appl				0.50	Sep	0.5000				
Tribufos 6lb	pt						0.5000				
Ethephon 6E	pt						0.3125				
Cotton Picker/Module	6R-38 (500)			0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb				1.00	Oct	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								0.60	0.39	1.12	0.48

Note: Cost of production estimates are based on 2020 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/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Soil Test	acre	3.33					0.13	3.46
Lime (Spread)	ton	31.60					1.26	32.86
Custom Apply Fert	acre	7.50					0.30	7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42		0.16	4.24
Bed/Disk (Hipper)	12R-38		0.44	0.50	0.65		0.06	1.65
App by Air ( 5 gal)	appl	7.00					0.19	7.19
Clarity	pt	5.37					0.14	5.51
Glyphosate 3lbs a.e.	oz	4.16					0.11	4.27
Select Max	pt	12.74					0.34	13.08
Surfactant	pt	0.66					0.02	0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.08	3.65
UAN (32%)	gal	23.02					0.54	23.56
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43
Plant - Folding	12R-38		0.88	1.91	1.76		0.09	4.64
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81
Gramoxone SL 2.0	oz	9.12					0.18	9.30
Cotoran	pt	12.02					0.24	12.26
Surfactant	pt	0.66					0.01	0.67
Cotton Consultant	acre	8.00					0.16	8.16
Eradication	acre	1.00					0.02	1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81
Dual Magnum	pt	13.33					0.27	13.60
Liberty 280	oz	12.76					0.26	13.02
Acephate 90%	lb	1.74					0.03	1.77
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.01	0.80
Bidrin 8EC	oz	3.71					0.06	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63
UAN (32%)	gal	23.02					0.38	23.40
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.05	2.93
Warrant	pt	13.17					0.22	13.39
Liberty 280	oz	12.76					0.21	12.97
Mepiquat Chloride	oz	0.96					0.02	0.98
Centric 40WG	oz	10.16					0.17	10.33
App by Air ( 3 gal)	appl	5.50					0.07	5.57
Diamond .83EC	oz	7.68					0.10	7.78
Imidacloprid 4F	oz	2.62					0.03	2.65
Mepiquat Chloride	oz	0.96					0.01	0.97
App by Air ( 3 gal)	appl	5.50					0.07	5.57
Acephate 90%	lb	5.21					0.07	5.28
Mepiquat Chloride	oz	0.96					0.01	0.97
Bifenthrin	oz	6.02					0.08	6.10
App by Air ( 3 gal)	appl	1.38					0.02	1.40
Lambda	oz	0.95					0.01	0.96
Bidrin 8EC	oz	2.32					0.03	2.35
Incidental Pest								
App by Air ( 3 gal)	appl	8.25					0.11	8.36
IncidentalPestTrt\$15	acre	22.50					0.30	22.80
App by Air ( 3 gal)	appl	5.50					0.06	5.56
Acephate 90%	lb	5.21					0.05	5.26
Bifenthrin	oz	6.02					0.06	6.08
App by Air ( 3 gal)	appl	5.50					0.06	5.56
Transform WG	oz	11.02					0.11	11.13
App by Air ( 5 gal)	appl	7.00					0.05	7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45
Ethephon 6E	pt	8.00					0.05	8.05
App by Air ( 5 gal)	appl	3.50					0.02	3.52
Tribufos 6lb	pt	5.11					0.03	5.14
Ethephon 6E	pt	1.25					0.01	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74
Gin & Haul	lb	165.00					0.55	165.55
Stalk Shredder-Flail	20'		1.46	2.79	2.18		0.02	6.45
1/4-mi. Pivot Irr.	acre		17.14	21.95	1.84		0.61	41.54
TOTALS		683.45	31.69	54.59	20.69	0.00	12.64	803.06
								186.82
								989.88

Note: Cost of production estimates are based on 2020 input prices.

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

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

**Lime cost prorated for application every 3rd year.**

Table 3.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
 B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1128.30
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	20.63	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	23.02	0.00	23.02	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	22.27	0.00	47.23	25.93	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	47.30	22.25	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.96	1.92	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	2.07	0.00	0.00	0.00	0.00	1.60	4.90	3.48	0.20	0.15	0.00	8.29
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.39	0.00	0.00	0.00	0.00	0.92	2.06	7.08	6.86	5.14	0.00	8.24
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	1.05	2.89	20.44	1.99	1.49	0.00	24.52
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.80	0.62	4.10	1.57	1.03	0.41	0.18	0.69
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	30.73	27.21	208.68	96.35	79.93	40.44	28.47	206.74
NET INCOME	-84.51	0.00	0.00	0.00	-30.73	-27.21	-208.68	-96.35	-79.93	-40.44	-28.47	921.56
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-115.24	-142.45	-351.13	-447.48	-527.41	-567.85	-596.32	325.24

Note: Cost of production estimates are based on 2020 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 irrig.,  
 B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-195 -382	-171 -358	-147 -334	-123 -310	-99 -286	-75 -261	-50 -237	-26 -213	-2 -189	21 -165	45 -141
60	900.00	lb	-140 -326	-111 -297	-82 -268	-53 -239	-24 -210	4 -181	33 -152	62 -123	91 -94	120 -65	149 -36
70	1050.00	lb	-84 -270	-50 -237	-16 -203	17 -169	51 -135	85 -101	118 -67	152 -34	186 -0	220 33	254 67
80	1200.00	lb	-28 -214	10 -176	49 -137	87 -99	126 -60	165 -21	203 16	242 55	281 94	319 132	358 171
90	1350.00	lb	27 -159	71 -115	114 -72	158 -28	201 14	245 58	288 101	332 145	375 188	419 232	462 275
100	1500.00	lb	83 -103	131 -54	180 -6	228 41	276 90	325 138	373 186	421 235	470 283	518 331	566 379
110	1650.00	lb	139 -47	192 5	245 59	299 112	352 165	405 218	458 271	511 324	564 377	617 431	671 484
120	1800.00	lb	195 8	253 66	311 124	369 182	427 240	485 298	543 356	601 414	659 472	717 530	775 588
130	1950.00	lb	251 64	314 127	377 190	439 253	502 315	565 378	628 441	691 504	753 567	816 629	879 692
140	2100.00	lb	307 120	374 188	442 255	510 323	577 391	645 458	713 526	780 594	848 661	916 729	983 796
150	2250.00	lb	363 176	435 248	508 321	580 393	653 466	725 538	798 611	870 683	943 756	1015 828	1087 901

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 2020 input prices.

Table 4.A Estimated costs per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3FE variety, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.00	2.5000	17.50	_____
App by Air ( 3 gal)	appl	5.50	5.2500	28.88	_____
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	25.4000	34.04	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Select Max	pt	12.74	1.0000	12.74	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
Warrant	pt	4.39	3.0000	13.17	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	5.2000	6.03	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
Diamond .83EC	oz	1.28	6.0000	7.68	_____
Imidacloprid 4F	oz	1.31	2.0000	2.62	_____
Bifenthrin	oz	0.94	12.8000	12.03	_____
Lambda	oz	0.95	1.0000	0.95	_____
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	_____
Transform WG	oz	7.35	1.5000	11.02	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	48.0000	2.88	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
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	47.45	0.6660	31.60	_____
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	14.68	0.2712	3.98	_____
Self-Propelled	hour	14.68	0.2075	3.04	_____
HAND LABOR					
implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
UNALLOCATED LABOR					
hour	14.69	0.3830	5.63	_____	
DIESEL FUEL					
Tractors	gal	1.53	3.1417	4.81	_____
Self-Propelled	gal	1.53	4.8836	7.47	_____
REPAIR & MAINTENANCE					
implements	acre	5.35	1.0000	5.35	_____
Tractors	acre	1.98	1.0000	1.98	_____
Self-Propelled	acre	22.33	1.0000	22.33	_____
INTEREST ON OP. CAP.	acre	11.14	1.0000	11.14	_____
TOTAL DIRECT EXPENSES				696.54	_____
FIXED EXPENSES					
implements	acre	6.97	1.0000	6.97	_____
Tractors	acre	12.03	1.0000	12.03	_____
Self-Propelled	acre	87.04	1.0000	87.04	_____
TOTAL FIXED EXPENSES				106.04	_____
TOTAL SPECIFIED EXPENSES				802.58	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	1200.0000	773.04	_____
Cotton Seed	lb	0.08	1620.0000	129.60	_____
				-----	
<b>TOTAL INCOME</b>				<b>902.64</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	67.21	1.0000	67.21	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	95.43	1.0000	95.43	_____
INSECTICIDES	acre	77.66	1.0000	77.66	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	2.88	1.0000	2.88	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2897	2.61	_____
OPERATOR LABOR	hour	14.68	0.4788	7.02	_____
UNALLOCATED LABOR	hour	14.69	0.3830	5.63	_____
DIESEL FUEL	gal	1.53	8.0253	12.28	_____
REPAIR & MAINTENANCE	acre	29.66	1.0000	29.66	_____
INTEREST ON OP. CAP.	acre	11.14	1.0000	11.14	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>696.54</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>206.10</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>106.04</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>802.58</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>100.06</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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
Cot. Seed B3XF/W3FE	thous						45.0000				
Cotton Seed Trt.	acre						1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May				0.01	0.01	0.00
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 600-825gal	90' 250hp		0.011	1.00	Jun				0.01	0.01	0.00
Bidrin 8EC	oz						3.2000				
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				
Spray (Direct/Layby)	12R-38	MFWD 225	0.044	1.00	Jun			0.04	0.04	0.06	0.03
Warrant	pt						3.0000				
Liberty 280	oz						29.0000				
Mepiquat Chloride	oz						16.0000				
Centric 40WG	oz						2.0000				
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Diamond .83EC	oz						6.0000				
Imidacloprid 4F	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
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				
Transform WG	oz						1.5000				
App by Air ( 5 gal)	appl				1.00	Sep	1.0000				
Thidiazuron 4lb	oz						2.3000				
Ethephon 6E	pt						2.0000				
App by Air ( 5 gal)	appl				0.50	Sep	0.5000				
Tribufos 6lb	pt						0.5000				
Ethephon 6E	pt						0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct				0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000					
Stalk Shredder-Flail	20'	MFWD 225	0.082	1.00	Oct			0.08	0.08	0.08	0.06
TOTALS							0.47	0.27	0.76	0.38	

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

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					0.13	3.46
Lime (Spread)	ton	31.60					1.26	32.86
Custom Apply Fert	acre	7.50					0.30	7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50
App by Air ( 5 gal)	appl	7.00					0.19	7.19
Clarity	pt	5.37					0.14	5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27
Select Max	pt	12.74					0.34	13.08
Surfactant	pt	0.66					0.02	0.68
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43
NT Plant-Folding	12R-38		0.92	2.19	1.84		0.10	5.05
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81
Gramoxone SL 2.0	oz	9.12					0.18	9.30
Cotoran	pt	12.02					0.24	12.26
Surfactant	pt	0.66					0.01	0.67
Cotton Consultant	acre	8.00					0.16	8.16
Eradication	acre	1.00					0.02	1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81
Dual Magnum	pt	13.33					0.27	13.60
Liberty 280	oz	12.76					0.26	13.02
Acephate 90%	lb	1.74					0.03	1.77
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.01	0.80
Bidrin 8EC	oz	3.71					0.06	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63
UAN (32%)	gal	34.04					0.57	34.61
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.05	2.93
Warrant	pt	13.17					0.22	13.39
Liberty 280	oz	12.76					0.21	12.97
Mepiquat Chloride	oz	0.96					0.02	0.98
Centric 40WG	oz	10.16					0.17	10.33
App by Air ( 3 gal)	appl	5.50					0.07	5.57
Diamond .83EC	oz	7.68					0.10	7.78
Imidacloprid 4F	oz	2.62					0.03	2.65
Mepiquat Chloride	oz	0.96					0.01	0.97
App by Air ( 3 gal)	appl	5.50					0.07	5.57
Acephate 90%	lb	5.21					0.07	5.28
Mepiquat Chloride	oz	0.96					0.01	0.97
Bifenthrin	oz	6.02					0.08	6.10
App by Air ( 3 gal)	appl	1.38					0.02	1.40
Lambda	oz	0.95					0.01	0.96
Bidrin 8EC	oz	2.32					0.03	2.35
Incidental Pest								
App by Air ( 3 gal)	appl	5.50					0.07	5.57
IncidentalPestTrt\$15	acre	15.00					0.20	15.20
App by Air ( 3 gal)	appl	5.50					0.06	5.56
Acephate 90%	lb	5.21					0.05	5.26
Bifenthrin	oz	6.02					0.06	6.08
App by Air ( 3 gal)	appl	5.50					0.06	5.56
Transform WG	oz	11.02					0.11	11.13
App by Air ( 5 gal)	appl	7.00					0.05	7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45
Ethephon 6E	pt	8.00					0.05	8.05
App by Air ( 5 gal)	appl	3.50					0.02	3.52
Tribufos 6lb	pt	5.11					0.03	5.14
Ethephon 6E	pt	1.25					0.01	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74
Gin & Haul	lb	132.00					0.44	132.44
Stalk Shredder-Flail	20'		1.46	2.79	2.18		0.02	6.45
TOTALS		628.20	12.28	29.66	15.26	0.00	11.14	696.54
								106.04
								802.58

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	902.64
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	0.00	0.00	34.04	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	22.27	0.00	47.23	25.93	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	39.80	22.25	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.96	1.92	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	3.64	3.33	0.00	0.00	0.00	8.29
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	2.10	1.94	0.00	0.00	0.00	8.24
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.17	1.97	0.00	0.00	0.00	24.52
INTEREST ON OP. CAP.	3.02	0.00	0.00	0.00	0.80	0.00	4.08	1.37	0.77	0.34	0.18	0.58
TOTAL DIRECT EXPENSES	78.62	0.00	0.00	0.00	30.73	0.00	207.72	83.41	60.37	33.59	28.47	173.63
NET INCOME	-78.62	0.00	0.00	0.00	-30.73	0.00	-207.72	-83.41	-60.37	-33.59	-28.47	729.01
NET INCOME TO DATE	-78.62	-78.62	-78.62	-78.62	-109.35	-109.35	-317.07	-400.48	-460.85	-494.44	-522.91	206.10

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-210 -316	-191 -297	-172 -278	-152 -258	-133 -239	-114 -220	-94 -200	-75 -181	-56 -162	-36 -142	-17 -123
60	720.00	lb	-166 -272	-142 -248	-119 -225	-96 -202	-73 -179	-50 -156	-26 -132	-3 -109	19 -86	42 -63	65 -40
70	840.00	lb	-121 -227	-94 -200	-67 -173	-40 -146	-13 -119	13 -92	40 -65	68 -38	95 -10	122 16	149 43
80	960.00	lb	-76 -182	-45 -151	-14 -120	16 -89	47 -58	77 -28	108 2	139 33	170 64	201 95	232 126
90	1080.00	lb	-31 -137	2 -103	37 -68	72 -33	107 1	142 36	176 70	211 105	246 140	281 175	315 209
100	1200.00	lb	12 -93	51 -54	90 -15	128 22	167 61	206 100	244 138	283 177	322 216	360 254	399 293
110	1320.00	lb	57 -48	100 -5	142 36	185 79	227 121	270 164	312 206	355 249	397 291	440 334	482 376
120	1440.00	lb	102 -3	148 42	195 89	241 135	287 181	334 228	380 274	426 320	473 367	519 413	566 460
130	1560.00	lb	147 41	197 91	247 141	297 191	348 241	398 292	448 342	498 392	549 442	599 493	649 543
140	1680.00	lb	191 85	245 139	300 193	354 248	408 302	462 356	516 410	570 464	624 518	678 572	732 626
150	1800.00	lb	236 130	294 188	352 246	410 304	468 362	526 420	584 478	642 536	700 594	758 652	816 710

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 2020 input prices.

Table 5.A Estimated costs per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	
CUSTOM SPRAY				dollars	
App by Air ( 5 gal)	appl	7.00	2.5000	17.50	
App by Air ( 3 gal)	appl	5.50	5.2500	28.88	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	
Ethephon 6E	pt	4.00	2.3125	9.25	
Tribufos 6lb	pt	10.21	0.5000	5.11	
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	
UAN (32%)	gal	1.34	32.5498	43.62	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	
Select Max	pt	12.74	1.0000	12.74	
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	
Cotoran	pt	6.01	2.0000	12.02	
Dual Magnum	pt	13.33	1.0000	13.33	
Liberty 280	oz	0.44	58.0000	25.52	
Warrant	pt	4.39	2.0000	8.78	
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	
Bidrin 8EC	oz	1.16	5.2000	6.03	
Centric 40WG	oz	5.08	1.3400	6.81	
Diamond .83EC	oz	1.28	6.0000	7.68	
Imidacloprid 4F	oz	1.31	2.0000	2.62	
Bifenthrin	oz	0.94	12.8000	12.03	
Lambda	oz	0.95	1.0000	0.95	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
Transform WG	oz	7.35	1.5000	11.02	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	30.0000	77.40	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	42.7200	2.56	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
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	47.45	0.6660	31.60	
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	14.68	0.8159	11.97	
Self-Propelled	hour	14.68	0.1958	2.87	
HAND LABOR					
Implements	hour	9.06	0.3181	2.87	
Self-Propelled	hour	9.06	0.1840	1.66	
UNALLOCATED LABOR					
UNALLOCATED LABOR	hour	14.66	0.8094	11.87	
DIESEL FUEL					
Tractors	gal	1.53	9.4502	14.46	
Self-Propelled	gal	1.53	3.4035	5.21	
REPAIR & MAINTENANCE					
Implements	acre	10.87	1.0000	10.87	
Tractors	acre	5.93	1.0000	5.93	
Self-Propelled	acre	10.01	1.0000	10.01	
INTEREST ON OP. CAP.	acre	10.62	1.0000	10.62	
TOTAL DIRECT EXPENSES				629.97	
FIXED EXPENSES					
Implements	acre	16.42	1.0000	16.42	
Tractors	acre	36.21	1.0000	36.21	
Self-Propelled	acre	39.37	1.0000	39.37	
TOTAL FIXED EXPENSES				92.00	
TOTAL SPECIFIED EXPENSES				721.97	

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	811.0000	522.45	_____
Cotton Seed	lb	0.08	1095.0000	87.60	_____
				-----	
<b>TOTAL INCOME</b>				<b>610.05</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	76.79	1.0000	76.79	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	91.04	1.0000	91.04	_____
INSECTICIDES	acre	74.31	1.0000	74.31	_____
SEED/PLANTS	acre	77.40	1.0000	77.40	_____
GROWTH REGULATORS	acre	2.56	1.0000	2.56	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5022	4.53	_____
OPERATOR LABOR	hour	14.68	1.0118	14.84	_____
UNALLOCATED LABOR	hour	14.66	0.8094	11.87	_____
DIESEL FUEL	gal	1.53	12.8538	19.67	_____
REPAIR & MAINTENANCE	acre	26.81	1.0000	26.81	_____
INTEREST ON OP. CAP.	acre	10.62	1.0000	10.62	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>629.97</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>-19.92</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>92.00</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>721.97</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-111.92</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	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-Subsoil 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
Cot. Seed B3XF/W3FE	thous					30.0000				
Cotton Seed Trt.	acre					0.6700				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
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				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Bidrin 8EC	oz					3.2000				
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				
Spray (Direct/Layby)	8R-38 2x1	MFWD 225	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Warrant	pt					2.0000				
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					10.7200				
Centric 40WG	oz					1.3400				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
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				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R2x1(350)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	4R2x1(350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1(350)	MFWD 225	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	811.0000				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.01	0.81	1.51	0.80

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.13	3.46
Lime (Spread)	ton	31.60					1.26	32.86
Custom Apply Fert	acre	7.50					0.30	7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50
Bed-Subsoil Fold	8R-38 2x1		0.95	1.71	1.42		0.16	4.24
Bed/Disk (Hipper)	8R-38 2x1		0.44	0.50	0.65		0.06	1.65
App by Air ( 5 gal)	appl	7.00					0.19	7.19
Clarity	pt	5.37					0.14	5.51
Glyphosate 3lbs a.e.	oz	4.16					0.11	4.27
Select Max	pt	12.74					0.34	13.08
Surfactant	pt	0.66					0.02	0.68
Fert Appl (Liquid)	8R-38 2x1		0.92	1.10	1.60		0.08	3.70
UAN (32%)	gal	21.81					0.51	22.32
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43
Plant - Folding	8R-38 2x1		0.88	1.91	1.76		0.09	4.64
Cot. Seed B3XF/W3FE	thous	77.40					1.55	78.95
Cotton Seed Trt.	acre	13.40					0.27	13.67
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81
Gramoxone SL 2.0	oz	9.12					0.18	9.30
Cotoran	pt	12.02					0.24	12.26
Surfactant	pt	0.66					0.01	0.67
Cotton Consultant	acre	8.00					0.16	8.16
Eradication	acre	1.00					0.02	1.02
Sprayer 600-825gal	90' 250hp		0.23	0.20	0.36		0.02	0.81
Dual Magnum	pt	13.33					0.27	13.60
Liberty 280	oz	12.76					0.26	13.02
Acephate 90%	lb	1.74					0.03	1.77
Spray (Direct/Layby)	8R-38 2x1		0.79	0.72	1.37		0.05	2.93
Bidrin 8EC	oz	3.71					0.06	3.77
Fert Appl (Liquid)	8R-38 2x1		0.92	1.10	1.60		0.06	3.68
UAN (32%)	gal	21.81					0.36	22.17
Spray (Direct/Layby)	8R-38 2x1		0.79	0.72	1.37		0.05	2.93
Warrant	pt	8.78					0.15	8.93
Liberty 280	oz	12.76					0.21	12.97
Mepiquat Chloride	oz	0.64					0.01	0.65
Centric 40WG	oz	6.81					0.11	6.92
App by Air ( 3 gal)	appl	5.50					0.07	5.57
Diamond .83EC	oz	7.68					0.10	7.78
Imidacloprid 4F	oz	2.62					0.03	2.65
Mepiquat Chloride	oz	0.96					0.01	0.97
App by Air ( 3 gal)	appl	5.50					0.07	5.57
Acephate 90%	lb	5.21					0.07	5.28
Mepiquat Chloride	oz	0.96					0.01	0.97
Bifenthrin	oz	6.02					0.08	6.10
App by Air ( 3 gal)	appl	1.38					0.02	1.40
Lambda	oz	0.95					0.01	0.96
Bidrin 8EC	oz	2.32					0.03	2.35
Incidental Pest								
App by Air ( 3 gal)	appl	5.50					0.07	5.57
IncidentalPestTrt\$15	acre	15.00					0.20	15.20
App by Air ( 3 gal)	appl	5.50					0.06	5.56
Acephate 90%	lb	5.21					0.05	5.26
Bifenthrin	oz	6.02					0.06	6.08
App by Air ( 3 gal)	appl	5.50					0.06	5.56
Transform WG	oz	11.02					0.11	11.13
App by Air ( 5 gal)	appl	7.00					0.05	7.05
Thidiazuron 4lb	oz	3.43					0.02	3.45
Ethephon 6E	pt	8.00					0.05	8.05
App by Air ( 5 gal)	appl	3.50					0.02	3.52
Ethephon 6E	pt	1.25					0.01	1.26
Tribufos 6lb	pt	5.11					0.03	5.14
Cotton Picker	4R2x1(350)		4.75	9.61	6.11		0.07	20.54
Boll Buggy	4R2x1(350)		3.05	2.56	4.55		0.03	10.19
Module Builder	4R2x1(350)		3.05	2.74	6.11		0.04	11.94
Gin & Haul	lb	89.21					0.30	89.51
Stalk Shredder-Flail	15'		1.95	3.16	2.90		0.03	8.04
TOTALS		541.63	19.67	26.81	31.24	0.00	10.62	629.97
								92.00
								721.97

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	610.05
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	17.88	11.00	10.50	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.21
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	21.81	0.00	21.81	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	22.27	0.00	47.23	21.54	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	10.52	39.80	22.25	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	77.40	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	0.64	1.92	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	2.07	0.00	0.00	0.00	0.00	1.60	3.56	4.34	0.00	0.00	0.00	19.67
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.39	0.00	0.00	0.00	0.00	0.92	2.06	2.50	0.00	0.00	0.00	12.80
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.00	1.10	2.89	2.54	0.00	0.00	0.00	18.07
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.80	0.59	3.17	1.06	0.77	0.34	0.18	0.47
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	30.73	26.02	161.11	64.95	60.37	33.59	28.47	140.22
NET INCOME	-84.51	0.00	0.00	0.00	-30.73	-26.02	-161.11	-64.95	-60.37	-33.59	-28.47	469.83
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-115.24	-141.26	-302.37	-367.32	-427.69	-461.28	-489.75	-19.92

Note: Cost of production estimates are based on 2020 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/W3FE variety, Delta, Mississippi, 2021

PRODUCT	PERCENT										
	75	80	85	90	95	100	105	110	115	120	125
PRODUCT PRICE-----											
Cotton Lint	0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT YIELD UNIT ----- dollars -----											
50 405.50 lb	-301 -393	-288 -380	-275 -367	-262 -354	-249 -341	-236 -328	-223 -315	-210 -302	-197 -289	-184 -276	-171 -263
60 486.60 lb	-271 -363	-255 -347	-240 -332	-224 -316	-208 -300	-193 -285	-177 -269	-161 -253	-146 -238	-130 -222	-114 -206
70 567.70 lb	-241 -333	-222 -314	-204 -296	-186 -278	-168 -260	-149 -241	-131 -223	-113 -205	-94 -186	-76 -168	-58 -150
80 648.80 lb	-210 -302	-190 -282	-169 -261	-148 -240	-127 -219	-106 -198	-85 -177	-64 -156	-43 -135	-22 -114	-2 -94
90 729.90 lb	-180 -272	-157 -249	-133 -225	-110 -202	-86 -178	-63 -155	-39 -131	-16 -108	7 -84	30 -61	54 -37
100 811.00 lb	-150 -242	-124 -216	-98 -190	-72 -164	-46 -138	-19 -111	6 -85	32 -59	58 -33	84 -7	110 18
110 892.10 lb	-120 -212	-91 -183	-62 -154	-34 -126	-5 -97	23 -68	52 -39	80 -11	109 17	138 46	167 75
120 973.20 lb	-90 -182	-58 -150	-27 -119	3 -88	35 -56	66 -25	98 6	129 37	160 68	192 100	223 131
130 1054.30 lb	-59 -151	-25 -117	8 -83	42 -49	76 -15	109 17	143 51	177 85	211 119	245 153	279 187
140 1135.40 lb	-29 -121	6 -85	43 -48	80 -11	116 24	153 61	189 97	226 134	262 170	299 207	336 244
150 1216.50 lb	0 -91	39 -52	78 -13	118 26	157 65	196 104	235 143	274 182	314 222	353 261	392 300

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 2020 input prices.

Table 6.A Estimated costs per acre  
 Cotton, 8R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	
				dollars	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	28.9332	38.77	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
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	47.45	0.6660	31.60	_____
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	14.68	0.9288	13.63	_____
Self-Propelled	hour	14.68	0.3221	4.74	_____
HAND LABOR					
Implements	hour	9.06	0.3579	3.24	_____
Self-Propelled	hour	9.06	0.2472	2.24	_____
UNALLOCATED LABOR	hour	14.69	1.0008	14.71	_____
DIESEL FUEL					
Tractors	gal	1.53	10.7574	16.47	_____
Self-Propelled	gal	1.53	4.4973	6.86	_____
REPAIR & MAINTENANCE					
Implements	acre	11.10	1.0000	11.10	_____
Tractors	acre	6.76	1.0000	6.76	_____
Self-Propelled	acre	14.22	1.0000	14.22	_____
INTEREST ON OP. CAP.	acre	10.31	1.0000	10.31	-----
TOTAL DIRECT EXPENSES				605.34	_____
FIXED EXPENSES					
Implements	acre	16.32	1.0000	16.32	_____
Tractors	acre	41.23	1.0000	41.23	_____
Self-Propelled	acre	58.97	1.0000	58.97	_____
TOTAL FIXED EXPENSES				116.52	_____
TOTAL SPECIFIED EXPENSES				721.86	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	1000.0000	644.20	_____
Cotton Seed	lb	0.08	1350.0000	108.00	_____
				-----	
<b>TOTAL INCOME</b>				<b>752.20</b>	_____
<b>DIRECT EXPENSES</b>					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	71.95	1.0000	71.95	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	41.03	1.0000	41.03	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.6051	5.48	_____
OPERATOR LABOR	hour	14.68	1.2510	18.37	_____
UNALLOCATED LABOR	hour	14.69	1.0008	14.71	_____
DIESEL FUEL	gal	1.53	15.2547	23.33	_____
REPAIR & MAINTENANCE	acre	32.08	1.0000	32.08	_____
INTEREST ON OP. CAP.	acre	10.31	1.0000	10.31	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>605.34</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>146.86</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>116.52</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>721.86</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>30.34</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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-Subsoil Fold	8R-38	MFWD 225	0.080	1.00	Nov			0.08	0.08	0.08	0.06
Bed/Disk (Hipper) Rd	8R-38	MFWD 225	0.074	0.50	Nov			0.03	0.03	0.03	0.02
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 225	0.077	1.00	Apr			0.07	0.07	0.11	0.06
UAN (32%)	gal						14.4666				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	May			0.05	0.05	0.05	0.04
Plant - Folding	8R-38	MFWD 225	0.074	1.00	May			0.07	0.07	0.14	0.05
Cot. Seed B3XF/W3FE	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				
Liberty 280	oz						29.0000				
Acephate 90%	lb						0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun				0.01	0.02	0.01
Bidrin 8EC	oz						3.2000				
Fert Appl (Liquid)	8R-38	MFWD 225	0.077	1.00	Jun			0.07	0.07	0.11	0.06
UAN (32%)	gal						14.4666				
Spray (Direct/Layby)	8R-38	MFWD 225	0.066	1.00	Jun			0.06	0.06	0.10	0.05
Liberty 280	oz						29.0000				
Mepiquat Chloride	oz						16.0000				
Centric 40WG	oz						2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul				0.01	0.02	0.01
Mepiquat Chloride	oz						16.0000				
Acephate 90%	lb						0.7500				
Incidental Pest					1.00	Jul					
Sprayer 600-750gal	60' 175hp		0.017						0.01	0.02	0.01
Incidental Pest Trt \$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				
Ethepron 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				
Ethepron 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 225	0.172	1.00	Oct			0.17	0.17	0.17	0.13
Module Builder	6R-38 (355)	MFWD 225	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 225	0.110	1.00	Oct			0.11	0.11	0.11	0.08
TOTALS									1.25	0.92	1.85
											1.00

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33			0.13	3.46			3.46		
Lime (Spread)	ton	31.60			1.26	32.86			32.86		
Custom Apply Fert	acre	7.50			0.30	7.80			7.80		
Potash (60% K2O)	cwt	33.17			1.33	34.50			34.50		
Bed-Subsoil Fold	8R-38		1.43	1.96	2.14	0.22	5.75	5.86	11.61		
Bed/Disk (Hipper) Rd	8R-38		0.66	0.45	0.98	0.08	2.17	2.11	4.28		
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55	0.03	1.02	1.30	2.32		
Clarity	pt	5.37				0.14	5.51		5.51		
Glyphosate 3lbs a.e	oz	4.16				0.11	4.27		4.27		
Surfactant	pt	0.66				0.02	0.68		0.68		
Fert Appl (Liquid)	8R-38		1.38	1.64	2.40	0.13	5.55	4.61	10.16		
UAN (32%)	gal	19.39				0.45	19.84		19.84		
Row Cond Rigid	26'		1.06	0.69	1.58	0.07	3.40	3.70	7.10		
Plant - Folding	8R-38		1.32	2.04	2.65	0.12	6.13	6.08	12.21		
Cot. Seed B3XF/W3FE	thous	116.10				2.32	118.42		118.42		
Cotton Seed Trt.	acre	20.00				0.40	20.40		20.40		
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55	0.02	1.01	1.30	2.31		
Gramoxone SL 2.0	oz	9.12				0.18	9.30		9.30		
Cotoran	pt	12.02				0.24	12.26		12.26		
Surfactant	pt	0.66				0.01	0.67		0.67		
Cotton Consultant	acre	8.00				0.16	8.16		8.16		
Eradication	acre	1.00				0.02	1.02		1.02		
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55	0.02	1.01	1.30	2.31		
Dual Magnum	pt	13.33				0.27	13.60		13.60		
Liberty 280	oz	12.76				0.26	13.02		13.02		
Acephate 90%	lb	1.74				0.03	1.77		1.77		
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55	0.02	1.01	1.30	2.31		
Bidrin 8EC	oz	3.71				0.06	3.77		3.77		
Fert Appl (Liquid)	8R-38		1.38	1.64	2.40	0.09	5.51	4.61	10.12		
UAN (32%)	gal	19.39				0.32	19.71		19.71		
Spray (Direct/Layby)	8R-38		1.19	0.98	2.07	0.07	4.31	3.53	7.84		
Liberty 280	oz	12.76				0.21	12.97		12.97		
Mepiquat Chloride	oz	0.96				0.02	0.98		0.98		
Centric 40WG	oz	10.16				0.17	10.33		10.33		
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55	0.01	1.00	1.30	2.30		
Mepiquat Chloride	oz	0.96				0.01	0.97		0.97		
Acephate 90%	lb	5.21				0.07	5.28		5.28		
Incidental Pest											
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55	0.01	1.00	1.30	2.30		
Incidental Pest Trt \$15	acre	15.00				0.20	15.20		15.20		
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55	0.01	1.00	1.30	2.30		
Acephate 90%	lb	5.21				0.05	5.26		5.26		
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55	0.01	1.00	1.30	2.30		
Thidiazuron 4lb	oz	3.43				0.02	3.45		3.45		
Ethepron 6E	pt	8.00				0.05	8.05		8.05		
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27		0.49	0.65	1.14		
Tribufos 6lb	pt	5.11				0.03	5.14		5.14		
Ethepron 6E	pt	1.25				0.01	1.26		1.26		
Cotton Picker	6R-38(355)		4.82	12.52	6.11	0.08	23.53	47.92	71.45		
Boll Buggy	6R-38(355)		3.05	2.56	4.55	0.03	10.19	10.22	20.41		
Module Builder	6R-38(355)		3.05	2.74	6.11	0.04	11.94	10.58	22.52		
Gin & Haul	lb	110.00				0.37	110.37		110.37		
Stalk Shredder-Flail	15'		1.95	3.16	2.90	0.03	8.04	6.25	14.29		
<b>TOTALS</b>		501.06	23.33	32.08	38.56	0.00	10.31	605.34	116.52	721.86	

Note: Cost of production estimates are based on 2020 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 6.E Estimated monthly income and expense flows per acre  
 Cotton, 8R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	752.20
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	19.39	0.00	19.39	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	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	20.21	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	3.12	0.00	0.00	0.00	0.55	2.40	5.33	5.02	1.10	0.55	0.82	19.67
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.09	0.00	0.00	0.00	0.24	1.38	2.86	2.81	0.48	0.24	0.36	12.87
REPAIR & MAINTENANCE	2.41	0.00	0.00	0.00	0.20	1.64	3.13	2.82	0.40	0.20	0.30	20.98
INTEREST ON OP. CAP.	3.32	0.00	0.00	0.00	0.30	0.58	4.12	0.96	0.30	0.06	0.12	0.55
TOTAL DIRECT EXPENSES	86.54	0.00	0.00	0.00	11.48	25.39	210.17	58.59	23.45	6.26	19.39	164.07
NET INCOME	-86.54	0.00	0.00	0.00	-11.48	-25.39	-210.17	-58.59	-23.45	-6.26	-19.39	588.13
NET INCOME TO DATE	-86.54	-86.54	-86.54	-86.54	-98.02	-123.41	-333.58	-392.17	-415.62	-421.88	-441.27	146.86

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-200 -317	-184 -300	-168 -284	-152 -268	-136 -252	-120 -236	-103 -220	-87 -204	-71 -188	-55 -172	-39 -156
60	600.00	lb	-163 -279	-143 -260	-124 -241	-105 -221	-85 -202	-66 -183	-47 -163	-28 -144	-8 -125	10 -105	29 -86
70	700.00	lb	-126 -242	-103 -219	-80 -197	-58 -174	-35 -152	-13 -129	9 -107	31 -84	54 -62	76 -39	99 -17
80	800.00	lb	-88 -205	-62 -179	-37 -153	-11 -127	14 -102	40 -76	65 -50	91 -24	117 0	143 26	168 52
90	900.00	lb	-51 -167	-22 -138	6 -110	35 -81	64 -52	93 -23	122 5	151 34	180 63	209 92	238 121
100	1000.00	lb	-14 -130	18 -98	50 -66	82 -34	114 -1	146 30	179 62	211 94	243 126	275 159	307 191
110	1100.00	lb	23 -93	58 -58	93 -22	129 12	164 48	200 83	235 119	271 154	306 190	341 225	377 260
120	1200.00	lb	60 -56	99 -17	137 21	176 59	214 98	253 137	292 175	330 214	369 253	408 291	446 330
130	1300.00	lb	97 -18	139 22	181 64	223 106	265 148	307 190	348 232	390 274	432 316	474 357	516 399
140	1400.00	lb	134 18	180 63	225 108	270 153	315 198	360 243	405 288	450 334	495 379	540 424	585 469
150	1500.00	lb	172 55	220 103	268 152	317 200	365 248	413 297	462 345	510 393	558 442	607 490	655 538

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 2020 input prices.

Table 7.A Estimated costs per acre  
 Cotton, 8R-38" solid, no-till  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
<b>DIRECT EXPENSES</b>							
<b>HARVEST AIDS</b>							
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____		
Ethephon 6E	pt	4.00	2.3125	9.25	_____		
Tribufos 6lb	pt	10.21	0.5000	5.11	_____		
<b>GINNING</b>							
Gin & Haul	lb	0.11	900.0000	99.00	_____		
<b>FERTILIZERS</b>							
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____		
UAN (32%)	gal	1.34	18.4000	24.66	_____		
<b>FUNGICIDES</b>							
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____		
<b>HERBICIDES</b>							
Clarity	pt	10.73	0.5000	5.37	_____		
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____		
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____		
Cotoran	pt	6.01	2.0000	12.02	_____		
Dual Magnum	pt	13.33	1.0000	13.33	_____		
Liberty 280	oz	0.44	58.0000	25.52	_____		
<b>INSECTICIDES</b>							
Acephate 90%	lb	6.94	1.7500	12.15	_____		
Bidrin 8EC	oz	1.16	3.2000	3.71	_____		
Centric 40WG	oz	5.08	2.0000	10.16	_____		
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	_____		
<b>SEED/PLANTS</b>							
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____		
<b>GROWTH REGULATORS</b>							
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____		
<b>ADJUVANTS</b>							
Surfactant	pt	3.30	0.4000	1.32	_____		
<b>CUSTOM FERTILIZE</b>							
Custom Apply Fert	acre	7.50	1.0000	7.50	_____		
<b>ERADICATION FEE</b>							
Eradication	acre	1.00	1.0000	1.00	_____		
<b>CUSTOM LIME</b>							
Lime (Spread)	ton	47.45	0.6660	31.60	_____		
<b>CROP CONSULTANT</b>							
Cotton Consultant	acre	8.00	1.0000	8.00	_____		
<b>SOIL TEST</b>							
Soil Test	acre	10.00	0.3330	3.33	_____		
<b>OPERATOR LABOR</b>							
Tractors	hour	14.68	0.7365	10.81	_____		
Self-Propelled	hour	14.68	0.3221	4.74	_____		
<b>HAND LABOR</b>							
Implements	hour	9.06	0.3222	2.91	_____		
Self-Propelled	hour	9.06	0.2472	2.24	_____		
UNALLOCATED LABOR	hour	14.68	0.8469	12.44	_____		
<b>DIESEL FUEL</b>							
Tractors	gal	1.53	8.5298	13.06	_____		
Self-Propelled	gal	1.53	4.4973	6.86	_____		
<b>REPAIR &amp; MAINTENANCE</b>							
Implements	acre	8.74	1.0000	8.74	_____		
Tractors	acre	5.36	1.0000	5.36	_____		
Self-Propelled	acre	14.22	1.0000	14.22	_____		
INTEREST ON OP. CAP.	acre	9.49	1.0000	9.49	_____		
<hr/>							
<b>TOTAL DIRECT EXPENSES</b>				<b>566.81</b>	_____		
<b>FIXED EXPENSES</b>							
Implements	acre	12.88	1.0000	12.88	_____		
Tractors	acre	32.70	1.0000	32.70	_____		
Self-Propelled	acre	58.97	1.0000	58.97	_____		
<hr/>							
<b>TOTAL FIXED EXPENSES</b>				<b>104.55</b>	_____		
<hr/>							
<b>TOTAL SPECIFIED EXPENSES</b>				<b>671.36</b>	_____		

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	900.0000	579.78	_____
Cotton Seed	lb	0.08	1215.0000	97.20	_____
				-----	
<b>TOTAL INCOME</b>				<b>676.98</b>	_____
<b>DIRECT EXPENSES</b>					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	57.83	1.0000	57.83	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	41.03	1.0000	41.03	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5694	5.15	_____
OPERATOR LABOR	hour	14.68	1.0586	15.55	_____
UNALLOCATED LABOR	hour	14.68	0.8469	12.44	_____
DIESEL FUEL	gal	1.53	13.0271	19.92	_____
REPAIR & MAINTENANCE	acre	28.32	1.0000	28.32	_____
INTEREST ON OP. CAP.	acre	9.49	1.0000	9.49	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>566.81</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>110.17</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>104.55</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>671.36</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>5.62</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre		0.33	Nov		0.3330				
Lime (Spread)	ton		0.33	Nov		0.6660				
Custom Apply Fert	acre		1.00	Nov		1.0000				
Potash (60% K2O)	cwt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Row Cond Rigid	26'	MFWD 225	0.059	1.00	May		0.05	0.05	0.05	0.04
NT Plant-Folding	8R-38	MFWD 225	0.077	1.00	May		0.07	0.07	0.15	0.06
Cot. Seed B3XF/W3FE	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				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	8R-38	MFWD 225	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32%)	gal					18.4000				
Spray (Direct/Layby)	8R-38	MFWD 225	0.066	1.00	Jun		0.06	0.06	0.10	0.05
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
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 225	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38 (355)	MFWD 225	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 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.05	0.73	1.62	0.84

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

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					0.13	3.46
Lime (Spread)	ton	31.60					1.26	32.86
Custom Apply Fert	acre	7.50					0.30	7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.03	1.02
Clarity	pt	5.37					0.14	5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27
Surfactant	pt	0.66					0.02	0.68
Row Cond Rigid	26'		1.06	0.69	1.58		0.07	3.40
NT Plant-Folding	8R-38		1.38	2.33	2.75		0.13	6.59
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01
Gramoxone SL 2.0	oz	9.12					0.18	9.30
Cotoran	pt	12.02					0.24	12.26
Surfactant	pt	0.66					0.01	0.67
Cotton Consultant	acre	8.00					0.16	8.16
Eradication	acre	1.00					0.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01
Dual Magnum	pt	13.33					0.27	13.60
Liberty 280	oz	12.76					0.26	13.02
Acephate 90%	lb	1.74					0.03	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01
Bidrin 8EC	oz	3.71					0.06	3.77
Fert Appl (Liquid)	8R-38		1.38	1.64	2.40		0.09	5.51
UAN (32%)	gal	24.66					0.41	25.07
Spray (Direct/Layby)	8R-38		1.19	0.98	2.07		0.07	4.31
Liberty 280	oz	12.76					0.21	12.97
Mepiquat Chloride	oz	0.96					0.02	0.98
Centric 40WG	oz	10.16					0.17	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00
Mepiquat Chloride	oz	0.96					0.01	0.97
Acephate 90%	lb	5.21					0.07	5.28
Incidental Pest								
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00
Incidental Pest Trt \$15	acre	15.00					0.20	15.20
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00
Acephate 90%	lb	5.21					0.05	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00
Thidiazuron 4lb	oz	3.43					0.02	3.45
Ethepron 6E	pt	8.00					0.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27			0.49
Tribufos 6lb	pt	5.11					0.03	5.14
Ethepron 6E	pt	1.25					0.01	1.26
Cotton Picker	6R-38(355)		4.82	12.52	6.11		0.08	23.53
Boll Buggy	6R-38(355)		3.05	2.56	4.55		0.03	10.19
Module Builder	6R-38(355)		3.05	2.74	6.11		0.04	11.94
Gin & Haul	lb	99.00					0.33	99.33
Stalk Shredder-Flail	15'		1.95	3.16	2.90		0.03	8.04
TOTALS		475.94	19.92	28.32	33.14	0.00	9.49	566.81
								104.55
								671.36

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	676.98
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	0.00	0.00	24.66	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	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	20.21	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	0.55	0.00	5.43	5.02	1.10	0.55	0.82	19.67
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.24	0.00	2.92	2.81	0.48	0.24	0.36	12.87
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.42	2.82	0.40	0.20	0.30	20.98
INTEREST ON OP. CAP.	3.02	0.00	0.00	0.00	0.30	0.00	4.13	1.05	0.30	0.06	0.12	0.51
TOTAL DIRECT EXPENSES	78.62	0.00	0.00	0.00	11.48	0.00	210.63	63.95	23.45	6.26	19.39	153.03
NET INCOME	-78.62	0.00	0.00	0.00	-11.48	0.00	-210.63	-63.95	-23.45	-6.26	-19.39	523.95
NET INCOME TO DATE	-78.62	-78.62	-78.62	-78.62	-90.10	-90.10	-300.73	-364.68	-388.13	-394.39	-413.78	110.17

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-202 -307	-188 -292	-173 -278	-159 -263	-144 -249	-130 -234	-115 -220	-101 -205	-86 -191	-72 -176	-57 -162
60	540.00	lb	-168 -273	-151 -256	-134 -238	-116 -221	-99 -203	-82 -186	-64 -169	-47 -151	-29 -134	-12 -116	4 -99
70	630.00	lb	-135 -239	-115 -219	-94 -199	-74 -179	-54 -158	-33 -138	-13 -118	6 -97	26 -77	47 -57	67 -37
80	720.00	lb	-101 -206	-78 -183	-55 -160	-32 -136	-9 -113	14 -90	37 -67	60 -44	83 -20	106 2	130 25
90	810.00	lb	-68 -172	-42 -146	-16 -120	9 -94	36 -68	62 -42	88 -16	114 9	140 35	166 61	192 88
100	900.00	lb	-34 -139	-5 -110	23 -81	52 -52	81 -23	110 5	139 34	168 63	197 92	226 121	255 150
110	990.00	lb	-1 -105	30 -73	62 -41	94 -10	126 21	158 53	190 85	221 117	253 149	285 181	317 213
120	1080.00	lb	32 -72	67 -37	101 -2	136 32	171 66	206 101	241 136	275 171	310 206	345 240	380 275
130	1170.00	lb	65 -38	103 -0	141 36	178 74	216 112	254 149	291 187	329 225	367 262	405 300	442 338
140	1260.00	lb	99 -5	140 35	180 76	221 116	261 157	302 197	342 238	383 278	424 319	464 360	505 400
150	1350.00	lb	132 28	176 71	219 115	263 158	306 202	350 245	393 289	437 332	480 376	524 376	567 463

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 2020 input prices.

Table 8.A Estimated costs per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
			dollars	dollars	
<b>DIRECT EXPENSES</b>					
<b>HARVEST AIDS</b>					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethepron 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
<b>GINNING</b>					
Gin & Haul	lb	0.11	1000.0000	110.00	_____
<b>FERTILIZERS</b>					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	28.9332	38.77	_____
<b>FUNGICIDES</b>					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
<b>HERBICIDES</b>					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
<b>INSECTICIDES</b>					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	_____
<b>SEED/PLANTS</b>					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
<b>GROWTH REGULATORS</b>					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
<b>ADJUVANTS</b>					
Surfactant	pt	3.30	0.4000	1.32	_____
<b>CUSTOM FERTILIZE</b>					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
<b>ERADICATION FEE</b>					
Eradication	acre	1.00	1.0000	1.00	_____
<b>CUSTOM LIME</b>					
Lime (Spread)	ton	47.45	0.6660	31.60	_____
<b>CROP CONSULTANT</b>					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	14.68	0.4268	6.26	_____
Self-Propelled	hour	14.68	0.3221	4.74	_____
<b>HAND LABOR</b>					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.2472	2.24	_____
<b>UNALLOCATED LABOR</b>					
hour	14.70	0.5992	8.81		_____
<b>DIESEL FUEL</b>					
Tractors	gal	1.53	4.9433	7.57	_____
Self-Propelled	gal	1.53	5.7832	8.82	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	7.57	1.0000	7.57	_____
Tractors	acre	3.11	1.0000	3.11	_____
Self-Propelled	acre	23.43	1.0000	23.43	_____
INTEREST ON OP. CAP.	acre	10.05	1.0000	10.05	_____
<b>TOTAL DIRECT EXPENSES</b>					
				584.77	_____
<b>FIXED EXPENSES</b>					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	18.93	1.0000	18.93	_____
Self-Propelled	acre	94.22	1.0000	94.22	_____
<b>TOTAL FIXED EXPENSES</b>					
				123.46	_____
<b>TOTAL SPECIFIED EXPENSES</b>					
				708.23	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	1000.0000	644.20	_____
Cotton Seed	lb	0.08	1350.0000	108.00	_____
				-----	
<b>TOTAL INCOME</b>				<b>752.20</b>	_____
<b>DIRECT EXPENSES</b>					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	71.95	1.0000	71.95	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	41.03	1.0000	41.03	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3708	3.35	_____
OPERATOR LABOR	hour	14.68	0.7490	11.00	_____
UNALLOCATED LABOR	hour	14.70	0.5992	8.81	_____
DIESEL FUEL	gal	1.53	10.7266	16.39	_____
REPAIR & MAINTENANCE	acre	34.11	1.0000	34.11	_____
INTEREST ON OP. CAP.	acre	10.05	1.0000	10.05	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>584.77</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>167.43</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>123.46</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>708.23</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>43.97</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	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-Subsoil 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
Cot. Seed B3XF/W3FE	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					1.0000				
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				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bidrin 8EC	oz					3.2000				
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	Jun		0.04	0.04	0.06	0.03
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
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				
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				
Stalk Shredder-Flail	15'	MFWD 225	0.110	1.00	Oct	1000.0000		0.11	0.11	0.08
TOTALS								0.74	0.42	1.11
										0.59

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

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					0.13	3.46	3.46
Lime (Spread)	ton	31.60					1.26	32.86	32.86
Custom Apply Fert	acre	7.50					0.30	7.80	7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50	34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42		0.16	4.24	4.59
Bed/Disk (Hipper)	12R-38		0.44	0.50	0.65		0.06	1.65	1.90
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.03	1.02	1.30
Clarity	pt	5.37					0.14	5.51	5.51
Glyphosate 3lbs a.e	oz	4.16					0.11	4.27	4.27
Surfactant	pt	0.66					0.02	0.68	0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.08	3.65	3.01
UAN (32%)	gal	19.39					0.45	19.84	19.84
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43	2.97
Plant - Folding	12R-38		0.88	1.91	1.76		0.09	4.64	5.06
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42	118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30
Gramoxone SL 2.0	oz	9.12					0.18	9.30	9.30
Cotoran	pt	12.02					0.24	12.26	12.26
Surfactant	pt	0.66					0.01	0.67	0.67
Cotton Consultant	acre	8.00					0.16	8.16	8.16
Eradication	acre	1.00					0.02	1.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30
Dual Magnum	pt	13.33					0.27	13.60	13.60
Liberty 280	oz	12.76					0.26	13.02	13.02
Acephate 90%	lb	1.74					0.03	1.77	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30
Bidrin 8EC	oz	3.71					0.06	3.77	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63	3.01
UAN (32%)	gal	19.39					0.32	19.71	19.71
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.05	2.93	2.45
Liberty 280	oz	12.76					0.21	12.97	12.97
Mepiquat Chloride	oz	0.96					0.02	0.98	0.98
Centric 40WG	oz	10.16					0.17	10.33	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30
Mepiquat Chloride	oz	0.96					0.01	0.97	0.97
Acephate 90%	lb	5.21					0.07	5.28	5.28
Incidental Pest									
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30
Incidental Pest Trt \$15	acre	15.00					0.20	15.20	15.20
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30
Acephate 90%	lb	5.21					0.05	5.26	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30
Thidiazuron 4lb	oz	3.43					0.02	3.45	3.45
Ethepron 6E	pt	8.00					0.05	8.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27			0.49	0.65
Tribufos 6lb	pt	5.11					0.03	5.14	5.14
Ethepron 6E	pt	1.25					0.01	1.26	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74	83.17
Gin & Haul	lb	110.00					0.37	110.37	110.37
Stalk Shredder-Flail	15'		1.95	3.16	2.90		0.03	8.04	6.25
<b>TOTALS</b>		501.06	16.39	34.11	23.16	0.00	10.05	584.77	123.46
									708.23

Note: Cost of production estimates are based on 2020 input prices.

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

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

**Lime cost prorated for application every 3rd year.**

Table 8.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	752.20
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	19.39	0.00	19.39	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	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	20.21	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	2.07	0.00	0.00	0.00	0.55	1.60	3.94	3.52	1.10	0.55	0.82	9.01
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.39	0.00	0.00	0.00	0.24	0.92	2.08	1.95	0.48	0.24	0.36	8.73
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.20	1.05	2.89	1.97	0.40	0.20	0.30	24.89
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.30	0.53	4.07	0.91	0.30	0.06	0.12	0.52
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	11.48	23.49	207.71	55.33	23.45	6.26	19.39	153.15
NET INCOME	-84.51	0.00	0.00	0.00	-11.48	-23.49	-207.71	-55.33	-23.45	-6.26	-19.39	599.05
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-95.99	-119.48	-327.19	-382.52	-405.97	-412.23	-431.62	167.43

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120		
		PRODUCT PRICE											
Cotton Lint		0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80	
PERCENT YIELD UNIT dollars													
50	500.00	lb	-180 -303	-163 -287	-147 -271	-131 -255	-115 -239	-99 -222	-83 -206	-67 -190	-51 -174	-35 -158	-18 -142
60	600.00	lb	-142 -266	-123 -246	-104 -227	-84 -208	-65 -188	-46 -169	-26 -150	-7 -130	11 -111	31 -92	50 -72
70	700.00	lb	-105 -228	-82 -206	-60 -183	-37 -161	-15 -138	7 -116	29 -93	52 -71	74 -48	97 -25	120 -3
80	800.00	lb	-68 -191	-42 -165	-16 -140	9 -114	34 -88	60 -62	86 -37	112 -11	137 14	163 40	189 66
90	900.00	lb	-30 -154	-1 -125	27 -96	56 -67	85 -38	114 -9	143 19	172 48	201 77	230 106	258 135
100	1000.00	lb	6 -117	38 -84	70 -52	103 -20	135 11	167 43	199 76	231 108	264 140	296 172	328 205
110	1100.00	lb	43 -79	79 -44	114 -8	149 26	185 61	220 97	256 132	291 168	327 203	362 239	397 274
120	1200.00	lb	80 -42	119 -3	158 34	196 73	235 112	274 150	312 189	351 228	390 266	428 305	467 343
130	1300.00	lb	118 -5	160 36	201 78	243 120	285 162	327 204	369 245	411 287	453 329	495 371	536 413
140	1400.00	lb	155 32	200 77	245 122	290 167	335 212	380 257	426 302	471 347	516 392	561 437	606 482
150	1500.00	lb	192 69	241 117	289 165	337 214	386 262	434 310	482 359	530 407	579 455	627 504	675 552

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 2020 input prices.

Table 9.A Estimated costs per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethepron 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	18.4000	24.66	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e.	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
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	47.45	0.6660	31.60	_____
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	14.68	0.2987	4.38	_____
Self-Propelled	hour	14.68	0.3221	4.74	_____
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	_____
Self-Propelled	hour	9.06	0.2472	2.24	_____
UNALLOCATED LABOR					
hour	14.71	0.4967	7.31	_____	
DIESEL FUEL					
Tractors	gal	1.53	3.4602	5.30	_____
Self-Propelled	gal	1.53	5.7832	8.82	_____
REPAIR & MAINTENANCE					
Implements	acre	5.52	1.0000	5.52	_____
Tractors	acre	2.18	1.0000	2.18	_____
Self-Propelled	acre	23.43	1.0000	23.43	_____
INTEREST ON OP. CAP.	acre	9.36	1.0000	9.36	_____
-----					
TOTAL DIRECT EXPENSES				550.12	_____
FIXED EXPENSES					
Implements	acre	7.06	1.0000	7.06	_____
Tractors	acre	13.25	1.0000	13.25	_____
Self-Propelled	acre	94.22	1.0000	94.22	_____
-----					
TOTAL FIXED EXPENSES				114.53	_____
TOTAL SPECIFIED EXPENSES					
				664.65	_____

Note: Cost of production estimates are based on 2020 input prices.

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

Lime cost prorated for application every 3rd year.

Table 9.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	900.0000	579.78	_____
Cotton Seed	lb	0.08	1215.0000	97.20	_____
				-----	
<b>TOTAL INCOME</b>				<b>676.98</b>	_____
<b>DIRECT EXPENSES</b>					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	57.83	1.0000	57.83	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	41.03	1.0000	41.03	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3470	3.14	_____
OPERATOR LABOR	hour	14.68	0.6209	9.12	_____
UNALLOCATED LABOR	hour	14.71	0.4967	7.31	_____
DIESEL FUEL	gal	1.53	9.2435	14.12	_____
REPAIR & MAINTENANCE	acre	31.13	1.0000	31.13	_____
INTEREST ON OP. CAP.	acre	9.36	1.0000	9.36	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>550.12</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>126.86</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>114.53</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>664.65</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>12.33</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre		0.33	Nov		0.3330				
Lime (Spread)	ton		0.33	Nov		0.6660				
Custom Apply Fert	acre		1.00	Nov		1.0000				
Potash (60% K2O)	cwt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.10	0.04
Cot. Seed B3XF/W3FE	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				
Liberty 280	oz					29.0000				
Acephate 90%	lb					0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bidrin 8EC	oz					3.2000				
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
Liberty 280	oz					29.0000				
Mepiquat Chloride	oz					16.0000				
Centric 40WG	oz					2.0000				
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				
Ethepron 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				
Ethepron 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 225	0.110	1.00	Oct		0.11	0.11	0.11	0.08
-----										
<b>TOTALS</b>						0.62	0.29	0.96	0.49	

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

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					0.13	3.46
Lime (Spread)	ton	31.60					1.26	32.86
Custom Apply Fert	acre	7.50					0.30	7.80
Potash (60% K2O)	cwt	33.17					1.33	34.50
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.03	1.02
Clarity	pt	5.37					0.14	5.51
Glyphosate 3lbs a.e.	oz	4.16					0.11	4.27
Surfactant	pt	0.66					0.02	0.68
Row Cond Folding	38'		0.72	0.58	1.08		0.05	2.43
NT Plant-Folding	12R-38		0.92	2.19	1.84		0.10	5.05
Cot. Seed B3XF/W3FE	thous	116.10					2.32	118.42
Cotton Seed Trt.	acre	20.00					0.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01
Gramoxone SL 2.0	oz	9.12					0.18	9.30
Cotoran	pt	12.02					0.24	12.26
Surfactant	pt	0.66					0.01	0.67
Cotton Consultant	acre	8.00					0.16	8.16
Eradication	acre	1.00					0.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01
Dual Magnum	pt	13.33					0.27	13.60
Liberty 280	oz	12.76					0.26	13.02
Acephate 90%	lb	1.74					0.03	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01
Bidrin 8EC	oz	3.71					0.06	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		0.06	3.63
UAN (32%)	gal	24.66					0.41	25.07
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		0.05	2.93
Liberty 280	oz	12.76					0.21	12.97
Mepiquat Chloride	oz	0.96					0.02	0.98
Centric 40WG	oz	10.16					0.17	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00
Mepiquat Chloride	oz	0.96					0.01	0.97
Acephate 90%	lb	5.21					0.07	5.28
Incidental Pest								
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00
Incidental Pest Trt \$15	acre	15.00					0.20	15.20
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00
Acephate 90%	lb	5.21					0.05	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00
Thidiazuron 4lb	oz	3.43					0.02	3.45
Ethephon 6E	pt	8.00					0.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27			0.49
Tribufos 6lb	pt	5.11					0.03	5.14
Ethephon 6E	pt	1.25					0.01	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		0.12	34.74
Gin & Haul	lb	99.00					0.33	99.33
Stalk Shredder-Flail	15'		1.95	3.16	2.90		0.03	8.04
<b>TOTALS</b>		475.94	14.12	31.13	19.57	0.00	9.36	550.12
								114.53
								664.65

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	676.98
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	0.00	0.00	24.66	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	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	20.21	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	0.55	0.00	4.02	3.52	1.10	0.55	0.82	9.01
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.24	0.00	2.12	1.95	0.48	0.24	0.36	8.73
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.17	1.97	0.40	0.20	0.30	24.89
INTEREST ON OP. CAP.	3.02	0.00	0.00	0.00	0.30	0.00	4.08	1.00	0.30	0.06	0.12	0.48
TOTAL DIRECT EXPENSES	78.62	0.00	0.00	0.00	11.48	0.00	208.12	60.69	23.45	6.26	19.39	142.11
NET INCOME	-78.62	0.00	0.00	0.00	-11.48	0.00	-208.12	-60.69	-23.45	-6.26	-19.39	534.87
NET INCOME TO DATE	-78.62	-78.62	-78.62	-78.62	-90.10	-90.10	-298.22	-358.91	-382.36	-388.62	-408.01	126.86

Note: Cost of production estimates are based on 2020 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/W3FE variety, Non-Delta Area, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT YIELD UNIT dollars													
50	450.00	lb	-185 -300	-171 -285	-156 -271	-142 -256	-127 -242	-113 -227	-98 -213	-84 -198	-69 -184	-55 -169	-40 -155
60	540.00	lb	-152 -266	-134 -249	-117 -232	-100 -214	-82 -197	-65 -179	-47 -162	-30 -145	-13 -127	4 -110	21 -92
70	630.00	lb	-118 -233	-98 -212	-78 -192	-57 -172	-37 -152	-17 -131	3 -111	23 -91	43 -70	63 -50	84 -30
80	720.00	lb	-85 -199	-61 -176	-38 -153	-15 -130	7 -106	30 -83	53 -60	77 -37	100 -14	123 9	146 32
90	810.00	lb	-51 -166	-25 -140	0 -113	26 -87	52 -61	78 -35	104 -9	130 16	157 42	183 68	209 94
100	900.00	lb	-18 -132	10 -103	39 -74	68 -45	97 -16	126 12	155 41	184 70	213 99	242 128	271 157
110	990.00	lb	15 -99	47 -67	79 -35	111 -3	143 28	174 60	206 92	238 124	270 156	302 187	334 219
120	1080.00	lb	49 -65	83 -30	118 4	153 38	188 73	222 108	257 143	292 177	327 212	362 247	396 282
130	1170.00	lb	82 -31	120 5	157 43	195 81	233 118	270 156	308 194	346 231	384 269	421 307	459 344
140	1260.00	lb	116 1	156 42	197 82	237 123	278 163	319 204	359 245	400 285	440 326	481 366	521 407
150	1350.00	lb	149 35	193 78	236 122	280 165	323 209	367 252	410 296	454 339	497 383	541 383	584 469

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 2020 input prices.

Table 10.A Estimated costs per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.49	2.3000	3.43	_____
Ethephon 6E	pt	4.00	2.3125	9.25	_____
Tribufos 6lb	pt	10.21	0.5000	5.11	_____
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	_____
FERTILIZERS					
Potash (60% K2O)	cwt	22.11	1.5000	33.17	_____
UAN (32%)	gal	1.34	28.9332	38.77	_____
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
HERBICIDES					
Clarity	pt	10.73	0.5000	5.37	_____
Glyphosate 3lbs a.e	oz	0.13	32.0000	4.16	_____
Gramoxone SL 2.0	oz	0.19	48.0000	9.12	_____
Cotoran	pt	6.01	2.0000	12.02	_____
Dual Magnum	pt	13.33	1.0000	13.33	_____
Liberty 280	oz	0.44	58.0000	25.52	_____
INSECTICIDES					
Acephate 90%	lb	6.94	1.7500	12.15	_____
Bidrin 8EC	oz	1.16	3.2000	3.71	_____
Centric 40WG	oz	5.08	2.0000	10.16	_____
Incidental Pest Trt \$15	acre	15.00	1.5000	22.50	_____
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.58	45.0000	116.10	_____
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.06	32.0000	1.92	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
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	47.45	0.6660	31.60	_____
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	14.68	0.4268	6.26	_____
Self-Propelled	hour	14.68	0.3309	4.87	_____
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	0.2516	2.28	_____
UNALLOCATED LABOR					
hour	14.69	0.6062	8.91	_____	
DIESEL FUEL					
Tractors	gal	1.53	4.9433	7.57	_____
Self-Propelled	gal	1.53	5.8626	8.94	_____
1/4-mi. Pivot Irr.	gal	1.53	11.2011	17.14	_____
REPAIR & MAINTENANCE					
Implements	acre	7.57	1.0000	7.57	_____
Tractors	acre	3.11	1.0000	3.11	_____
Self-Propelled	acre	23.54	1.0000	23.54	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	10.84	1.0000	10.84	_____
TOTAL DIRECT EXPENSES				656.49	_____
FIXED EXPENSES					
Implements	acre	10.31	1.0000	10.31	_____
Tractors	acre	18.93	1.0000	18.93	_____
Self-Propelled	acre	94.87	1.0000	94.87	_____
1/4-mi. Pivot Irr.	acre	71.85	1.0000	71.85	_____
TOTAL FIXED EXPENSES				195.96	_____
TOTAL SPECIFIED EXPENSES				852.45	_____

Note: Cost of production estimates are based on 2020 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/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.64	1200.0000	773.04	_____
Cotton Seed	lb	0.08	1620.0000	129.60	_____
				-----	
<b>TOTAL INCOME</b>				<b>902.64</b>	_____
<b>DIRECT EXPENSES</b>					
HARVEST AIDS	acre	17.79	1.0000	17.79	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	71.95	1.0000	71.95	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	69.52	1.0000	69.52	_____
INSECTICIDES	acre	48.53	1.0000	48.53	_____
SEED/PLANTS	acre	116.10	1.0000	116.10	_____
GROWTH REGULATORS	acre	1.92	1.0000	1.92	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	31.60	1.0000	31.60	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3752	3.39	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	14.68	0.7578	11.13	_____
UNALLOCATED LABOR	hour	14.69	0.6062	8.91	_____
DIESEL FUEL	gal	1.53	22.0071	33.65	_____
REPAIR & MAINTENANCE	acre	56.17	1.0000	56.17	_____
INTEREST ON OP. CAP.	acre	10.84	1.0000	10.84	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>656.49</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>246.15</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>195.96</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>852.45</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>50.19</b>	_____

Note: Cost of production estimates are based on 2020 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/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	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-Subsoil 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
Cot. Seed B3XF/W3FE	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				
Liberty 280	oz						29.0000				
Acephate 90%	lb						0.2500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun				0.01	0.02	0.01
Bidrin 8EC	oz						3.2000				
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	Jun			0.04	0.04	0.06	0.03
Liberty 280	oz						29.0000				
Mepiquat Chloride	oz						16.0000				
Centric 40WG	oz						2.0000				
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					1.50	Jul					
Sprayer 600-750gal	60' 175hp		0.017						0.02	0.03	0.02
Incidental Pest Trt \$15	acre						1.5000				
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				
Ethepron 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				
Ethepron 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 225	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							0.75	0.42	1.33	0.60	

Note: Cost of production estimates are based on 2020 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/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL COST	FIXED COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Soil Test	acre	3.33					3.46	3.46
Lime (Spread)	ton	31.60					32.86	32.86
Custom Apply Fert	acre	7.50					7.80	
Potash (60% K2O)	cwt	33.17					34.50	34.50
Bed-Subsoil Fold	12R-38		0.95	1.71	1.42		4.24	4.59
Bed/Disk (Hipper)	12R-38		0.44	0.50	0.65		1.65	1.90
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		1.02	1.30
Clarity	pt	5.37					5.51	5.51
Glyphosate 3lbs a.e.	oz	4.16					4.27	4.27
Surfactant	pt	0.66					0.68	0.68
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		3.65	3.01
UAN (32%)	gal	19.39					19.84	19.84
Row Cond Folding	38'		0.72	0.58	1.08		2.43	2.97
Plant - Folding	12R-38		0.88	1.91	1.76		4.64	5.06
Cot. Seed B3XF/W3FE	thous	116.10					118.42	118.42
Cotton Seed Trt.	acre	20.00					20.40	20.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		1.01	1.30
Gramoxone SL 2.0	oz	9.12					9.30	9.30
Cotoran	pt	12.02					12.26	12.26
Surfactant	pt	0.66					0.67	0.67
Cotton Consultant	acre	8.00					8.16	8.16
Eradication	acre	1.00					1.02	1.02
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		1.01	1.30
Dual Magnum	pt	13.33					13.60	13.60
Liberty 280	oz	12.76					13.02	13.02
Acephate 90%	lb	1.74					1.77	1.77
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		1.01	1.30
Bidrin 8EC	oz	3.71					3.77	3.77
Fert Appl (Liquid)	12R-38		0.92	1.05	1.60		3.63	3.01
UAN (32%)	gal	19.39					19.71	19.71
Spray (Direct/Layby)	12R-38		0.79	0.72	1.37		2.93	2.45
Liberty 280	oz	12.76					12.97	12.97
Mepiquat Chloride	oz	0.96					0.98	0.98
Centric 40WG	oz	10.16					10.33	10.33
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		1.00	1.30
Mepiquat Chloride	oz	0.96					0.97	0.97
Acephate 90%	lb	5.21					5.28	5.28
Incidental Pest								
Sprayer 600-750gal	60' 175hp		0.36	0.31	0.82		1.51	1.95
IncidentalPestTrt\$15	acre	22.50					22.80	22.80
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		1.00	1.30
Acephate 90%	lb	5.21					5.26	5.26
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		1.00	1.30
Thidiazuron 4lb	oz	3.43					3.45	3.45
Ethepron 6E	pt	8.00					8.05	8.05
Sprayer 600-750gal	60' 175hp		0.12	0.10	0.27		0.49	0.65
Tribufos 6lb	pt	5.11					5.14	5.14
Ethepron 6E	pt	1.25					1.26	1.26
Cotton Picker/Module	6R-38(500)		6.78	21.73	6.11		34.74	83.17
Gin & Haul	lb	132.00					132.44	132.44
Stalk Shredder-Flail	15'		1.95	3.16	2.90		8.04	6.25
1/4-mi. Pivot Irr.	acre	17.14	21.95	1.84			41.54	71.85
<b>TOTALS</b>		530.56	33.65	56.17	25.27	0.00	10.84	656.49
								195.96
								852.45

Note: Cost of production estimates are based on 2020 input prices.

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

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

**Lime cost prorated for application every 3rd year.**

Table 10.E Estimated monthly income and expense flows per acre  
Cotton, 12R-38" solid, conservation tillage  
B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	902.64
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	33.17	0.00	0.00	0.00	0.00	19.39	0.00	19.39	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	9.53	0.00	47.23	12.76	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.74	13.87	27.71	5.21	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	116.10	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	0.96	0.96	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	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	31.60	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	2.07	0.00	0.00	0.00	0.55	1.60	5.28	3.67	1.57	0.70	0.82	9.01
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.39	0.00	0.00	0.00	0.24	0.92	2.08	7.09	7.46	5.38	0.36	8.73
REPAIR & MAINTENANCE	2.21	0.00	0.00	0.00	0.20	1.05	2.89	20.44	2.50	1.69	0.30	24.89
INTEREST ON OP. CAP.	3.24	0.00	0.00	0.00	0.30	0.53	4.10	1.30	0.53	0.13	0.12	0.59
TOTAL DIRECT EXPENSES	84.51	0.00	0.00	0.00	11.48	23.49	209.08	79.48	40.73	13.11	19.39	175.22
NET INCOME	-84.51	0.00	0.00	0.00	-11.48	-23.49	-209.08	-79.48	-40.73	-13.11	-19.39	727.42
NET INCOME TO DATE	-84.51	-84.51	-84.51	-84.51	-95.99	-119.48	-328.56	-408.04	-448.77	-461.88	-481.27	246.15

Note: Cost of production estimates are based on 2020 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/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2021

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.48	0.51	0.54	0.57	0.61	0.64	0.67	0.70	0.74	0.77	0.80
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-170 -366	-151 -347	-132 -328	-112 -308	-93 -289	-74 -270	-54 -250	-35 -231	-16 -212	3 -192	22 -173
60	720.00	lb	-126 -322	-102 -298	-79 -275	-56 -252	-33 -229	-10 -206	13 -182	36 -159	59 -136	82 -113	105 -90
70	840.00	lb	-81 -277	-54 -250	-27 -223	-0 -196	26 -169	53 -141	81 -114	108 -87	135 -60	162 -33	189 -6
80	960.00	lb	-36 -232	-5 -201	25 -170	56 -139	87 -108	118 -77	148 -47	179 -16	210 14	241 45	272 76
90	1080.00	lb	8 -187	42 -153	77 -118	112 -83	147 -48	182 -13	216 20	251 55	286 90	321 125	356 160
100	1200.00	lb	52 -143	91 -104	130 -65	168 -27	207 11	246 50	284 88	323 127	362 166	400 204	439 243
110	1320.00	lb	97 -98	140 -55	182 -13	225 29	267 71	310 114	352 156	395 199	437 241	480 284	522 326
120	1440.00	lb	142 -53	188 -7	235 39	281 85	327 131	374 178	420 224	467 271	513 317	559 363	606 410
130	1560.00	lb	187 -8	237 41	287 91	337 141	388 192	438 242	488 292	538 342	589 393	639 443	689 493
140	1680.00	lb	231 35	285 89	340 144	394 198	448 252	502 306	556 360	610 414	664 468	718 522	772 576
150	1800.00	lb	276 80	334 138	392 196	450 254	508 312	566 370	624 428	682 486	740 544	798 602	856 660

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 2020 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, 2021

Item Name	Size	Purchase	Annual	Useful	Fuel	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use				Direct		Cost
		dollars	hours	years	gal/hr	\$/hour-----					
Combine (250-299 hp)	265 hp	391,000	300	8	13.64	14.68	20.86	40.72	76.27	155.91	232.19
Combine (300-349 hp)	325 hp	395,000	300	8	16.73	14.68	25.59	41.14	81.42	157.50	238.93
Combine (350-399 hp)	355 hp	401,000	300	8	18.27	14.68	27.95	41.77	84.40	159.90	244.30
Combine (400-449 hp)	425 hp	436,000	300	8	21.87	14.68	33.47	45.41	93.56	173.85	267.42
Combine (450-499hp)	475 hp	462,000	300	8	24.44	14.68	37.40	48.12	100.21	184.22	284.43
Tractor( 20-39hp)CB	MFWD 30	30,100	600	8	1.54	14.68	2.36	0.94	17.98	5.46	23.44
Tractor( 20-39hp)RB	MFWD 30	20,700	600	8	1.54	14.68	2.36	0.64	17.68	3.75	21.44
Tractor( 40-59hp)CB	2WD 50	30,900	600	8	2.57	14.68	3.93	0.96	19.58	5.61	25.19
Tractor( 40-59hp)CB	MFWD 50	41,400	600	8	2.57	14.68	3.93	1.29	19.91	7.51	27.43
Tractor( 40-59hp)RB	2WD 50	21,700	600	8	2.57	14.68	3.93	0.67	19.29	3.94	23.23
Tractor( 40-59hp)RB	MFWD 50	27,200	600	8	2.57	14.68	3.93	0.85	19.46	4.93	24.40
Tractor( 60-89hp)CB	2WD 75	53,200	600	8	3.86	14.68	5.90	1.66	22.24	9.66	31.91
Tractor( 60-89hp)CB	MFWD 75	57,600	600	8	3.86	14.68	5.90	1.80	22.38	10.46	32.84
Tractor( 60-89hp)RB	2WD 75	38,400	600	8	3.86	14.68	5.90	1.20	21.78	6.97	28.76
Tractor( 60-89hp)RB	MFWD 75	41,800	600	8	3.86	14.68	5.90	1.30	21.89	7.59	29.48
Tractor( 90-119hp)CB	2WD 105	71,200	600	8	5.40	14.68	8.26	2.22	25.17	12.93	38.10
Tractor( 90-119hp)CB	MFWD 105	91,700	600	8	5.40	14.68	8.26	2.86	25.81	16.65	42.46
Tractor( 90-119hp)RB	2WD 105	64,600	600	8	5.40	14.68	8.26	2.01	24.96	11.73	36.69
Tractor( 90-119hp)RB	MFWD 105	71,900	600	8	5.40	14.68	8.26	2.24	25.19	13.05	38.25
Tractor(120-139hp)CB	2WD 130	113,000	600	8	6.69	14.68	10.23	3.53	28.44	20.52	48.97
Tractor(120-139hp)CB	MFWD 130	126,000	600	8	6.69	14.68	10.23	3.93	28.85	22.88	51.73
Tractor(140-159hp)	2WD 150	111,000	600	8	7.72	14.68	11.81	3.46	29.96	20.15	50.12
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	14.68	11.81	4.46	30.96	25.97	56.93
Tractor(160-179hp)CB	MFWD 170	160,000	600	8	8.75	14.68	13.38	5.00	33.06	30.47	63.54
Tractor(180-199hp)CB	MFWD 190	194,000	600	8	9.77	14.68	14.96	6.06	35.70	36.95	72.66
Tractor(200-249hp)CB	MFWD 225	233,000	600	8	11.58	14.68	17.71	7.28	39.68	44.38	84.06
Tractor(250-349hp)CB	4WD 300	314,000	600	8	15.44	14.68	23.62	9.81	48.11	59.81	107.93
Tractor(250-349hp)CB	MFWD 300	321,000	600	8	15.44	14.68	23.62	10.03	48.33	61.14	109.48
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	14.68	23.62	10.28	48.58	62.67	111.25
Tractor(350-449hp)	Track 400	453,000	600	8	20.58	14.68	31.50	14.15	60.33	86.29	146.63
Tractor(350-449hp)CB	4WD 400	366,000	600	8	20.58	14.68	31.50	11.43	57.61	69.72	127.33
Tractor(450-550hp)CB	4WD 500	412,000	600	8	25.73	14.68	39.37	12.87	66.93	78.48	145.41
Tractor(450-550hp)CB	Track 500	470,000	600	8	25.73	14.68	39.37	14.68	68.74	89.53	158.27
Utility Vehicle	800 CC	12,200	200	8	0.70	14.68	1.32	1.90	17.90	7.29	25.20
Utility Vehicle	900 CC	15,800	200	8	1.00	14.68	1.89	2.46	19.03	9.45	28.48

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, 2021

Item Name	Size	Purchase	Annual	Useful	Fuel	Perf	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use	Rate				Direct		Cost
		dollars	hours	years	gal/hr	hr/ac			\$/acre			
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	6.11	5.07	10.79	21.98	41.32	63.31
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.11	7.10	14.13	27.36	54.11	81.48
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	4.09	4.74	9.61	18.45	36.79	55.24
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	5.18	6.10	15.85	27.14	60.70	87.84
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.09	4.81	12.51	21.42	47.92	69.35
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.11	8.12	21.58	35.82	82.64	118.47
Cotton Picker/Module	6R-30 (500)	808,000	200	8	25.73	0.218	5.18	8.59	27.55	41.32	105.47	146.80
Cotton Picker/Module	6R-38 (500)	807,000	200	8	25.73	0.172	4.09	6.78	21.72	32.60	83.17	115.77
Dry Applicator SP	70'300cuft	365,000	350	8	16.98	0.015	0.29	0.39	0.29	0.97	1.88	2.86
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.33	0.24	0.20	0.78	1.30	2.08
Sprayer 600-825gal	80' 175hp	225,000	350	8	11.81	0.013	0.25	0.23	0.15	0.65	1.01	1.66
Sprayer 600-825gal	90' 250hp	322,000	350	8	12.73	0.011	0.22	0.22	0.20	0.65	1.29	1.95
Sprayer 800gal	100' 250hp	324,000	350	8	14.15	0.010	0.20	0.22	0.18	0.61	1.17	1.78
Sprayer 800gal	80' 250hp	292,000	350	8	12.86	0.013	0.25	0.26	0.20	0.72	1.31	2.04
Sprayer 1000-1400gal	90' 275hp	322,000	350	8	14.15	0.010	0.20	0.22	0.18	0.61	1.16	1.77
Sprayer 1000gal	100' 300hp	365,000	350	8	15.44	0.010	0.20	0.24	0.20	0.66	1.31	1.97
Sprayer 1200+gal	120' 300hp	392,000	350	8	15.44	0.008	0.16	0.20	0.18	0.56	1.18	1.74

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, 2021

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---			Total	--Fixed--		Total
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost	
			dollars	hours	years	hr/ac	\$/acre-----								
Bed-Paratill w/ro	4R-30	MFWD 225	18,700	150	12	0.204	2.99	3.62	1.37	1.48	9.48	2.29	9.06	20.85	
Bed-Paratill w/ro	4R-38	MFWD 225	18,700	150	12	0.160	2.36	2.85	1.08	1.17	7.47	1.81	7.14	16.42	
Bed-Paratill w/ro	6R-38	MFWD 225	25,500	150	12	0.107	1.57	1.90	0.99	0.78	5.25	1.65	4.77	11.68	
Bed-Rip/Disk Fold.	8R-38	MFWD 190	46,900	300	20	0.073	1.07	1.09	0.17	0.44	2.78	0.76	2.70	6.24	
Bed-Rip/Disk Fold.	12R-30	MFWD 225	67,900	300	20	0.061	0.90	1.09	0.20	0.44	2.65	0.93	2.73	6.32	
Bed-Rip/Disk Fold.	12R-38	MFWD 225	67,900	300	20	0.046	0.67	0.81	0.15	0.33	1.99	0.70	2.05	4.74	
Bed-Rip/Disk Rigid	4R-30	MFWD 190	21,300	300	20	0.184	2.71	2.76	0.19	1.12	6.79	0.88	6.83	14.51	
Bed-Rip/Disk Rigid	4R-38	MFWD 190	21,300	300	20	0.146	2.15	2.19	0.15	0.88	5.39	0.70	5.42	11.51	
Bed-Rip/Disk Rigid	6R-30	MFWD 190	29,700	300	20	0.123	1.80	1.84	0.18	0.74	4.58	0.82	4.55	9.95	
Bed-Rip/Disk Rigid	6R-38	MFWD 190	29,700	300	20	0.097	1.42	1.45	0.14	0.58	3.61	0.64	3.59	7.86	
Bed-Rip/Disk Rigid	8R-30	MFWD 190	39,800	300	20	0.139	2.04	2.07	0.27	0.84	5.23	1.24	5.13	11.61	
Bed-Rip/Disk Rigid	8R-38	MFWD 190	39,800	300	20	0.073	1.07	1.09	0.14	0.44	2.75	0.65	2.70	6.10	
Bed-Rip/Disk Cond.	6-Row	MFWD 225	24,800	150	12	0.107	1.57	1.90	0.96	0.78	5.23	1.60	4.77	11.60	
Bed-Rip/Disk Cond.	8-Row	MFWD 225	33,000	150	12	0.080	1.18	1.43	0.96	0.58	4.16	1.60	3.58	9.35	
Bed-Subsoil Fold	8R-38	MFWD 225	46,900	150	12	0.080	1.18	1.43	1.36	0.58	4.57	2.27	3.58	10.43	
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	67,900	150	12	0.053	0.78	0.95	1.31	0.39	3.45	2.19	2.38	8.03	
Bed-Subsoil Fold	12R-38	MFWD 225	67,900	150	12	0.053	0.78	0.95	1.31	0.39	3.45	2.19	2.38	8.03	
Bed-Subsoil Rigid	4R-30	MFWD 225	17,500	150	12	0.204	2.99	3.62	1.29	1.48	9.39	2.15	9.06	20.62	
Bed-Subsoil Rigid	4R-38	MFWD 225	16,800	150	12	0.160	2.36	2.85	0.97	1.17	7.36	1.62	7.14	16.12	
Bed-Subsoil Rigid	6R-30	MFWD 225	24,300	150	12	0.136	1.99	2.41	1.19	0.99	6.60	1.99	6.04	14.63	
Bed-Subsoil Rigid	6R-38	MFWD 225	25,300	150	12	0.107	1.57	1.90	0.98	0.78	5.24	1.63	4.77	11.66	
Bed-Subsoil Rigid	8R-30	MFWD 225	32,500	150	12	0.102	1.49	1.81	1.19	0.74	5.25	1.99	4.53	11.78	
Bed-Subsoil Rigid	8R-38	MFWD 225	33,600	150	12	0.080	1.18	1.43	0.97	0.58	4.18	1.63	3.58	9.40	
Bed/Disk (Hipper)	4R-38	MFWD 150	10,500	160	10	0.147	2.16	1.74	0.38	0.65	4.95	0.98	3.83	9.78	
Bed/Disk (Hipper)	6R-38	MFWD 170	16,200	160	10	0.098	1.44	1.32	0.39	0.49	3.66	1.01	3.00	7.68	
Bed/Disk (Hipper)	8R-30	MFWD 190	20,800	160	10	0.093	1.37	1.40	0.48	0.56	3.83	1.24	3.46	8.54	
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	51,400	160	10	0.049	0.72	0.73	0.63	0.29	2.39	1.61	1.82	5.83	
Bed/Disk (Hipper)	12R-30	MFWD 225	40,100	160	10	0.062	0.91	1.10	0.62	0.45	3.10	1.59	2.77	7.47	
Bed/Disk (Hipper)	12R-38	MFWD 225	51,400	160	10	0.049	0.72	0.87	0.63	0.35	2.59	1.61	2.18	6.39	
Bed/Disk (Hipper)	16R40	MFWD 300	60,800	160	10	0.035	0.51	0.83	0.53	0.35	2.24	1.37	2.16	5.78	
Bed/Disk (Hipper) Fl	8R-38	MFWD 190	22,000	160	10	0.074	1.08	1.10	0.40	0.44	3.05	1.03	2.73	6.83	
Bed/Disk (Hipper) Rd	8R-38	MFWD 190	19,700	160	10	0.074	1.08	1.10	0.36	0.44	3.01	0.93	2.73	6.68	
Bed/Disk w/roller	8R-30	MFWD 190	26,900	160	10	0.093	1.37	1.40	0.63	0.56	3.97	1.60	3.46	9.04	
Bed/Disk w/roller	8R-38	MFWD 190	30,800	160	10	0.074	1.08	1.10	0.57	0.44	3.21	1.45	2.73	7.41	
Bed/Disk w/roller	12R-30/40	MFWD 225	50,900	160	10	0.062	0.91	1.10	0.79	0.45	3.27	2.02	2.77	8.07	
Bed/Lister	4R-38	MFWD 150	18,100	160	8	0.228	3.35	2.69	0.96	1.02	8.03	2.95	5.93	16.92	
Bed/Lister	6R-38	MFWD 150	20,400	160	8	0.120	1.76	1.41	0.57	0.53	4.29	1.75	3.12	9.16	
Bed/Lister	8R-30	MFWD 190	24,900	160	8	0.114	1.67	1.70	0.66	0.69	4.74	2.03	4.21	10.99	
Bed/Lister	8R-38	MFWD 190	25,000	160	8	0.090	1.32	1.35	0.52	0.54	3.75	1.61	3.33	8.70	
Bed/Lister	8R-38 2x1	MFWD 190	40,400	160	8	0.060	0.88	0.89	0.56	0.36	2.71	1.73	2.22	6.67	
Bed/Lister	12R-38	MFWD 225	40,400	160	8	0.060	0.88	1.06	0.56	0.43	2.95	1.73	2.66	7.35	
Bed/Lister	16R-30	MFWD 225	54,700	160	8	0.035	0.51	0.62	0.45	0.25	1.84	1.37	1.55	4.77	
Bed/Lister	16R40	MFWD 300	57,000	160	8	0.043	0.63	1.01	0.57	0.43	2.65	1.75	2.63	7.04	
Bed/Lister-Roll-Fo	8R-38	MFWD 190	24,300	160	10	0.095	1.40	1.43	0.58	0.58	4.00	1.48	3.54	9.03	
Bed/Lister-Roll-Fo	12R-30	MFWD 225	37,800	160	10	0.080	1.18	1.43	0.76	0.58	3.97	1.94	3.58	9.51	
Bed/Lister-Roll-Fo	12R-38	MFWD 225	36,700	160	10	0.063	0.93	1.13	0.58	0.46	3.11	1.49	2.83	7.44	
Bed/Lister-Roll-Fo	16R-30	MFWD 225	48,700	160	10	0.060	0.89	1.07	0.73	0.44	3.14	1.88	2.69	7.72	
Bed/Lister-Roll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.40	1.43	0.59	0.58	4.02	1.52	3.54	9.09	
Blade-Box	6'-7'	MFWD 105	1,470	200	20	0.020	0.29	0.16	0.01	0.04	0.51	0.01	0.26	0.78	
Blade-Box	8'-10'	MFWD 105	3,830	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Blade-Box	12'-16'	MFWD 105	6,190	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	1,270	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	3,870	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Blade-Scraper	12'-16'	MFWD 105	9,810	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	3.78	3.85	1.96	1.56	11.16	3.84	9.52	24.54	
Boll Buggy	4R-38 (350)	MFWD 190	30,500	200	10	0.257	3.78	3.85	1.96	1.56	11.16	3.84	9.52	24.54	
Boll Buggy	4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.52	2.57	1.31	1.04	7.46	2.57	6.36	16.40	
Boll Buggy	6R-30 (355)	MFWD 190	30,500	200	10	0.218	3.20	3.26	1.66	1.32	9.45	3.25	8.06	20.78	
Boll Buggy	6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.52	2.57	1.31	1.04	7.46	2.57	6.36	16.40	
Chisel Plow-Folding	24'	MFWD 190	43,500	150	12	0.076	1.12	1.14	1.20	0.46	3.93	2.00	2.82	8.75	
Chisel Plow-Folding	32'	MFWD 225	54,500	150	12	0.057	0.84	1.02	1.13	0.42	3.42	1.89	2.56	7.88	
Chisel Plow-Folding	42'	MFWD 225	65,700	150	12	0.044	0.64	0.78	1.04	0.32	2.79	1.74	1.95	6.48	
Chisel Plow-Folding	50'	MFWD 225	85,900	150	12	0.036	0.54	0.65	1.14	0.26	2.61	1.91	1.64	6.16	
Chisel Plow-Folding	61'	MFWD 225	99,100	150	12	0.030	0.44	0.53	1.08	0.22	2.28	1.80	1.34	5.44	
Chisel Plow-Rigid	10'	MFWD 170	7,790	150	12	0.184	2.71	2.47	0.52	0.92	6.63	0.86	5.63	13.13	
Chisel Plow-Rigid	15'	2WD 130	13,200	150	12	0.123	1.80	1.26	0.58	0.43	4.09	0.97	2.52	7.60	
Chisel Plow-Rigid	20'	MFWD 225	13,400	150	12	0.102	1.50	1.81	0.49	0.74	4.57	0.82	4.55	9.95	
Cultivate	4R-30	2WD 105	14,600	150	10	0.206	3.02	1.70	0.80	0.45	5.99	2.04	2.66	10.70	
Cultivate	4R-38	2WD 105	14,200	150	10	0.162	2.38	1.34	0.61	0.32	4.66	1.56	1.90	8.14	
Cultivate	6R-30	MFWD 150	18,500	150	10	0.137	2.01	1.62	0.67	0.61	4.93	1.72	3.57	10.23	
Cultivate	6R-38	MFWD 150	19,300	150	10	0.108	1.59	1.28	0.55	0.48	3.91	1.42	2.81	8.16	
Cultivate	8R-30	MFWD 190	23,800	150	10	0.103	1.51	1.54	0.65	0.62	4.33	1.66	3.81	9.81	
Cultivate	8R-38	MFWD 190	28,400	150	10	0.073	1.08	1.10	0.55	0.4					

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Imp.	--Fixed--	Total Cost	
									Imp.	P.U.	Direct	Imp.	P.U.	
			dollars	hours	years	hr/ac			-----\$/acre-----					
Cultivate	12R-30	MFWD 225	42,500	150	10	0.068	1.00	1.21	0.77	0.50	3.50	1.98	3.05	8.54
Cultivate	12R-38	MFWD 225	43,800	150	10	0.054	0.79	0.96	0.63	0.39	2.78	1.61	2.40	6.81
Cultivate	16R-30	MFWD 225	58,400	150	10	0.051	0.75	0.91	0.80	0.37	2.84	2.04	2.28	7.18
Cultivate & Post	4R-30	2WD 105	21,900	150	10	0.220	4.22	1.81	1.28	0.44	7.77	3.27	2.58	13.63
Cultivate & Post	4R-38	2WD 105	21,600	150	10	0.173	3.32	1.43	0.99	0.34	6.10	2.54	2.03	10.68
Cultivate & Post	6R-30	MFWD 150	25,900	150	10	0.146	2.81	1.73	1.01	0.65	6.21	2.58	3.80	12.60
Cultivate & Post	6R-38	MFWD 150	26,600	150	10	0.115	2.22	1.36	0.82	0.51	4.93	2.09	3.00	10.03
Cultivate & Post	8R-30	MFWD 190	31,200	150	10	0.110	2.11	1.64	0.91	0.66	5.34	2.33	4.06	11.73
Cultivate & Post	8R-38	MFWD 190	35,800	150	10	0.086	1.67	1.30	0.83	0.52	4.32	2.11	3.21	9.65
Cultivate & Post	8R-38 2x1	MFWD 190	45,400	150	10	0.057	1.11	0.86	0.70	0.35	3.03	1.78	2.13	6.95
Cultivate & Post	12R-30	MFWD 225	49,800	150	10	0.073	1.40	1.29	0.97	0.53	4.21	2.48	3.25	9.95
Cultivate & Post	12R-38	MFWD 225	54,000	150	10	0.057	1.11	1.02	0.83	0.42	3.39	2.12	2.56	8.08
Cultivate & Post	16R-30	MFWD 225	68,600	150	10	0.055	1.05	0.97	1.00	0.40	3.43	2.56	2.44	8.44
Disk & Incorporate	14'	2WD 130	33,700	200	10	0.149	2.87	1.53	1.51	0.52	6.44	2.57	3.07	12.09
Disk & Incorporate	20'	MFWD 190	52,400	200	10	0.092	1.77	1.38	1.45	0.56	5.17	2.46	3.41	11.05
Disk & Incorporate	24'	MFWD 190	53,600	200	10	0.087	1.67	1.30	1.40	0.52	4.91	2.38	3.22	10.52
Disk & Incorporate	28'	MFWD 225	63,300	200	10	0.074	1.43	1.32	1.42	0.54	4.72	2.41	3.32	10.46
Disk & Incorporate	32'	MFWD 225	68,700	200	10	0.065	1.25	1.16	1.34	0.47	4.24	2.29	2.90	9.44
Disk Harrow	14'	2WD 130	26,400	180	10	0.140	2.05	1.43	1.02	0.49	5.02	2.09	2.87	9.99
Disk Harrow	20'	MFWD 190	45,000	180	10	0.098	1.44	1.46	1.22	0.59	4.73	2.50	3.62	10.86
Disk Harrow	24'	MFWD 190	46,200	180	10	0.081	1.20	1.22	1.05	0.49	3.97	2.14	3.02	9.13
Disk Harrow	28'	MFWD 225	56,000	180	10	0.070	1.02	1.24	1.09	0.51	3.87	2.22	3.11	9.21
Disk Harrow	32'	MFWD 225	61,400	180	10	0.061	0.90	1.08	1.04	0.44	3.48	2.13	2.72	8.34
Disk Harrow	42'	MFWD 225	107,000	180	10	0.046	0.68	0.82	1.39	0.34	3.24	2.83	2.07	8.15
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.05	0.82	0.65	0.16	3.70	1.32	0.97	6.01
Disk Heavy	14'	MFWD 150	26,400	180	10	0.145	2.14	1.72	1.07	0.65	5.58	2.18	3.79	11.56
Disk Heavy	20'	MFWD 190	45,000	180	10	0.097	1.42	1.45	1.21	0.58	4.69	2.48	3.59	10.76
Disk Heavy	28'	MFWD 225	56,000	180	10	0.075	1.11	1.34	1.17	0.55	4.18	2.40	3.35	9.94
Disk Ripper	15'	MFWD 225	50,800	180	10	0.136	1.99	2.41	1.92	0.99	7.32	3.91	6.04	17.29
Ditcher		2WD 130	6,120	200	10	0.020	0.29	0.20	0.04	0.07	0.61	0.06	0.41	1.09
Ditcher (1m/160a)		2WD 130	6,120	200	10	0.009	0.13	0.09	0.02	0.03	0.28	0.02	0.19	0.51
Fert Appl (Liquid)	4R-38	MFWD 150	15,200	150	8	0.154	2.97	1.82	1.56	0.69	7.05	1.70	4.01	12.78
Fert Appl (Liquid)	6R-30	MFWD 170	17,900	150	8	0.130	2.51	1.75	1.56	0.65	6.48	1.70	3.99	12.18
Fert Appl (Liquid)	6R-38	MFWD 170	17,900	150	8	0.103	1.98	1.38	1.23	0.51	5.12	1.34	3.15	9.61
Fert Appl (Liquid)	8R-30	MFWD 190	18,600	150	8	0.098	1.88	1.46	1.21	0.59	5.16	1.32	3.62	10.12
Fert Appl (Liquid)	8R-38	MFWD 190	20,600	150	8	0.077	1.49	1.16	1.06	0.47	4.19	1.16	2.86	8.22
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	21,000	150	8	0.051	0.99	0.77	0.72	0.31	2.80	0.78	1.91	5.50
Fert Appl (Liquid)	12R-30	MFWD 225	24,700	150	8	0.078	1.50	1.39	1.29	0.57	4.76	1.40	3.48	9.66
Fert Appl (Liquid)	12R-38	MFWD 225	19,300	150	8	0.051	0.99	0.91	0.66	0.37	2.95	0.72	2.29	5.96
Field Cult & Inc	42'	MFWD 225	69,500	100	10	0.037	0.72	0.66	0.65	0.27	2.32	2.67	1.67	6.67
Field Cult & Inc	50'	MFWD 225	82,200	100	10	0.031	0.60	0.56	0.65	0.23	2.05	2.65	1.40	6.12
Field Cult & Inc Fld	24'	MFWD 170	38,500	100	10	0.066	1.26	0.88	0.63	0.33	3.12	2.59	2.01	7.73
Field Cult & Inc Fld	32'	MFWD 190	50,900	100	10	0.049	0.95	0.74	0.63	0.30	2.62	2.57	1.83	7.03
Field Cult & Inc Rdg	12'	2WD 150	19,600	100	10	0.132	2.53	1.56	0.64	0.45	5.20	2.64	2.66	10.51
Field Cultivate Fld	24'	MFWD 170	31,100	100	10	0.062	0.91	0.83	0.48	0.31	2.54	1.97	1.89	6.41
Field Cultivate Fld	32'	MFWD 190	43,500	100	10	0.046	0.68	0.69	0.50	0.28	2.17	2.06	1.72	5.96
Field Cultivate Fld	42'	MFWD 225	59,400	100	10	0.035	0.52	0.62	0.52	0.25	1.93	2.15	1.57	5.66
Field Cultivate Fld	50'	MFWD 225	69,000	100	10	0.029	0.43	0.52	0.51	0.21	1.69	2.10	1.32	5.12
Field Cultivate Rdg	12'	2WD 150	12,300	100	10	0.124	1.82	1.46	0.38	0.43	4.11	1.56	2.50	8.17
Grain Cart Corn	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.37	0.18	0.15	1.09	0.31	0.93	2.33
Grain Cart Corn	700 bu	MFWD 190	44,000	200	12	0.025	0.37	0.37	0.30	0.15	1.20	0.50	0.93	2.64
Grain Cart Corn	1000 bu	MFWD 225	57,900	200	12	0.025	0.37	0.44	0.39	0.18	1.40	0.66	1.12	3.18
Grain Cart Rice	500 bu	MFWD 190	27,300	200	12	0.062	0.91	0.93	0.46	0.37	2.69	0.77	2.30	5.77
Grain Cart Rice	700 bu	MFWD 190	44,000	200	12	0.055	0.80	0.82	0.65	0.33	2.61	1.09	2.03	5.74
Grain Cart Rice	1000 bu	MFWD 190	57,900	200	12	0.045	0.67	0.68	0.71	0.27	2.35	1.19	1.69	5.24
Grain Cart Soybean	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.38	0.18	0.15	1.09	0.31	0.94	2.35
Grain Cart Soybean	700 bu	MFWD 190	44,000	200	12	0.021	0.31	0.31	0.25	0.12	1.01	0.42	0.78	2.21
Grain Cart Soybean	1000 bu	MFWD 190	57,900	200	12	0.021	0.31	0.31	0.33	0.12	1.09	0.55	0.78	2.43
Grain Cart Wht/Sor	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.38	0.18	0.15	1.09	0.31	0.94	2.35
Grain Cart Wht/Sor	700 bu	MFWD 190	44,000	200	12	0.021	0.31	0.31	0.25	0.12	1.01	0.42	0.78	2.21
Grain Cart Wht/Sor	1000 bu	MFWD 190	57,900	200	12	0.021	0.31	0.33	0.12	0.10	1.09	0.55	0.78	2.43
Grain Drill	10'	2WD 130	28,000	150	8	0.188	4.47	1.93	1.97	0.66	9.05	3.64	3.86	16.57
Grain Drill	12'	2WD 130	28,100	150	8	0.157	3.73	1.60	1.65	0.55	7.55	3.05	3.22	13.82
Grain Drill	15'	MFWD 150	33,900	150	8	0.125	2.98	1.48	1.59	0.56	6.62	2.94	3.26	12.83
Grain Drill	20'	MFWD 170	41,400	150	8	0.094	2.23	1.26	1.46	0.47	5.43	2.69	2.87	11.00
Grain Drill	24'	MFWD 190	66,800	150	8	0.078	1.86	1.17	1.96	0.47	5.48	3.62	2.90	12.01
Grain Drill	30'	MFWD 225	68,500	150	8	0.062	1.49	1.11	1.61	0.45	4.67	2.97	2.79	10.44
Grain Drill	35'	MFWD 225	91,900	150	8	0.053	1.27	0.95	1.85	0.39	4.48	3.42	2.39	10.29
Grain Drill & Pre	10'	2WD 130	35,400	150	8	0.203	4.82	2.07	2.69	0.71	10.31	4.96	4.16	19.44
Grain Drill & Pre	12'	2WD 130	35,400	150	8	0.169	4.01	1.73	2.24	0.59	8.59	4.13	3.47	16.20
Grain Drill & Pre	15'	MFWD 150	41,200	150	8	0.135	3.21	1.59	2.09	0.60	7.50	3.85	3.51	14.87
Grain Drill & Pre	20'	MFWD 170	48,800	150	8	0.101	2.41	1.35	1.85	0.50	6.13	3.42	3.09	12.65
Grain Drill & Pre	24'	MFWD 190	74,200	150	8	0.084	2.00	1.26	2.35	0.51	6.14	4.33	3.12	13.60
Grain Drill & Pre	30'	MFWD 225	75,800	150	8	0.067	1.60	1.19	1.92	0.49	5.22	3.54	3.00</td	

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	--Fixed--	Total Cost
									Imp.	P.U.	Direct			
				dollars	hours	years	hr/ac		\$/acre					
Grain Drill & Pre	35'	MFWD 225	101,000	150	8	0.058	1.37	1.02	2.19	0.42	5.02	4.04	2.57	11.64
Grain Drill & Pre T	8R-38	MFWD 225	59,000	150	8	0.062	1.49	1.11	1.39	0.45	4.45	2.56	2.79	9.80
Harrow - Folding	24'	MFWD 190	13,800	200	10	0.064	0.94	0.96	0.31	0.39	2.62	0.45	2.39	5.46
Harrow - Folding	30'	MFWD 190	15,300	200	10	0.051	0.75	0.77	0.27	0.31	2.12	0.40	1.91	4.44
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.56	0.58	0.28	0.23	1.67	0.42	1.43	3.53
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.47	0.57	0.29	0.23	1.57	0.42	1.43	3.44
Header - Corn	6R-30	265 hp	51,400	300	8	0.170	2.49	3.55	2.18	6.93	15.17	3.17	26.54	44.90
Header - Corn	6R-38	265 hp	52,300	300	8	0.134	1.97	2.80	1.75	5.47	12.01	2.55	20.95	35.52
Header - Corn	8R-30	265 hp	66,800	300	8	0.127	1.87	2.66	2.13	5.20	11.87	3.09	19.91	34.88
Header - Corn	8R-38	325 hp	67,900	300	8	0.100	1.48	2.58	1.71	4.15	9.93	2.48	15.90	28.32
Header - Corn	12R-20	325 hp	102,000	300	8	0.127	1.87	3.26	3.25	5.25	13.65	4.73	20.11	38.50
Header - Corn	12R-30	325 hp	112,000	300	8	0.085	1.24	2.17	2.38	3.50	9.31	3.46	13.41	26.19
Header - Draper (CL)	25' Rigid	265 hp	61,400	300	8	0.203	2.98	4.23	2.85	8.27	18.34	4.30	31.66	54.31
Header - Draper (CL)	30' Rigid	325 hp	73,700	300	8	0.169	2.48	4.33	2.85	6.96	16.63	4.30	26.65	47.60
Header - Draper (CL)	36' Rigid	355 hp	77,300	300	8	0.141	2.07	3.94	2.49	5.89	14.40	3.76	22.55	40.71
Header - Draper (CL)	40' Rigid	425 hp	82,700	300	8	0.126	1.86	4.24	2.40	5.76	14.28	3.62	22.06	39.97
Header - Draper (SL)	25' Rigid	325 hp	61,400	300	8	0.176	2.58	4.50	2.47	7.24	16.80	3.73	27.72	48.26
Header - Draper (SL)	30' Rigid	325 hp	73,700	300	8	0.146	2.15	3.75	2.47	6.03	14.41	3.73	23.10	41.25
Header - Draper (SL)	36' Rigid	355 hp	77,300	300	8	0.122	1.79	3.41	2.16	5.10	12.48	3.26	19.54	35.28
Header - Draper (SL)	40' Rigid	425 hp	82,700	300	8	0.110	1.61	3.68	2.08	4.99	12.37	3.14	19.12	34.64
Header - RiceStrp(CL)	20'	265 hp	50,600	300	8	0.253	3.72	5.29	3.21	10.33	22.57	4.66	39.57	66.81
Header - RiceStrp(CL)	24'	325 hp	54,000	300	8	0.211	3.10	5.41	2.85	8.70	20.07	4.14	33.31	57.54
Header - RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.32	4.06	2.41	6.52	15.32	3.50	24.98	43.82
Header - RiceStrp(SL)	20'	265 hp	50,600	300	8	0.220	3.22	4.59	2.78	8.96	19.56	4.04	34.30	57.90
Header - RiceStrp(SL)	24'	325 hp	54,000	300	8	0.183	2.69	4.69	2.47	7.54	17.40	3.59	28.87	49.87
Header - RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	2.01	3.51	2.09	5.65	13.28	3.03	21.65	37.97
Header - Soybean	22' Flex	265 hp	33,500	300	8	0.116	1.76	3.64	0.97	4.25	10.63	1.58	18.06	30.29
Header - Soybean	25' Flex	325 hp	35,900	300	8	0.102	1.55	3.93	0.91	4.07	10.47	1.49	17.29	29.27
Header - Soybean	30' Flex	325 hp	42,400	300	8	0.085	1.29	3.27	0.90	3.39	8.87	1.47	14.41	24.75
Header - Soybean	35' Flex	355 hp	48,700	300	8	0.072	1.11	3.06	0.88	3.00	8.06	1.45	12.74	22.26
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.76	3.64	0.57	4.25	10.24	0.93	18.06	29.24
Header Wheat/Sorghum	25' Rigid	325 hp	21,000	300	8	0.102	1.55	3.93	0.53	4.07	10.09	0.87	17.29	28.27
Header Wheat/Sorghum	30' Rigid	325 hp	25,700	300	8	0.085	1.29	3.27	0.54	3.39	8.51	0.89	14.41	23.82
Land Plane	50'x16'	MFWD 190	10,800	200	10	0.151	2.30	3.41	0.32	0.89	6.94	0.94	6.09	13.97
Levee Pull & Seed	8 Blade	MFWD 170	9,000	100	10	0.003	0.05	0.07	0.00	0.01	0.14	0.03	0.11	0.30
Levee Pull (1m/80a)	8 blade	MFWD 170	8,160	100	10	0.003	0.05	0.07	0.00	0.01	0.14	0.03	0.11	0.30
Levee Splitter (1/80)	32"	MFWD 150	8,160	100	10	0.004	0.06	0.07	0.00	0.01	0.16	0.03	0.11	0.32
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	6.25	5.79	2.23	1.52	15.81	4.97	10.36	31.15
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	6.25	5.79	2.23	1.52	15.81	4.97	10.36	31.15
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	4.18	3.87	1.49	1.01	10.57	3.32	6.92	20.82
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	5.29	4.90	1.89	1.28	13.39	4.21	8.77	26.37
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	4.18	3.87	1.49	1.01	10.57	3.32	6.92	20.82
NT Grain Drill	10'	2WD 130	34,400	150	8	0.235	5.59	2.41	3.04	0.83	11.88	5.60	4.83	22.32
NT Grain Drill	12'	2WD 130	46,600	150	8	0.163	3.88	1.67	2.86	0.57	9.00	5.27	3.35	17.62
NT Grain Drill	15'	MFWD 150	56,000	150	8	0.130	3.10	1.54	2.74	0.58	7.99	5.06	3.40	16.45
NT Grain Drill	20'	MFWD 170	67,400	150	8	0.098	2.33	1.31	2.48	0.49	6.61	4.57	2.99	14.18
NT Grain Drill	24'	MFWD 190	98,000	150	8	0.081	1.94	1.22	3.00	0.49	6.67	5.54	3.02	15.23
NT Grain Drill	30'	MFWD 225	104,300	150	8	0.065	1.55	1.16	2.56	0.47	5.75	4.71	2.90	13.37
NT Grain Drill & Pre	10'	2WD 130	41,800	150	8	0.211	5.02	2.16	3.31	0.74	11.25	6.10	4.34	21.70
NT Grain Drill & Pre	12'	2WD 130	54,000	150	8	0.176	4.18	1.80	3.56	0.62	10.18	6.57	3.61	20.37
NT Grain Drill & Pre	15'	MFWD 150	63,300	150	8	0.141	3.34	1.66	3.34	0.63	8.99	6.16	3.66	18.82
NT Grain Drill & Pre	20'	MFWD 170	74,700	150	8	0.105	2.51	1.41	2.96	0.52	7.41	5.45	3.22	16.10
NT Grain Drill & Pre	24'	MFWD 190	105,000	150	8	0.088	2.09	1.31	3.47	0.53	7.41	6.39	3.25	17.06
NT Grain Drill & Pre	30'	MFWD 225	112,000	150	8	0.070	1.67	1.24	2.96	0.51	6.39	5.45	3.12	14.98
NT Plant&Pre-Folding	8R-38	MFWD 170	67,700	150	8	0.083	1.98	1.11	2.12	0.41	5.64	3.91	2.54	12.10
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	103,000	150	8	0.055	1.32	0.74	2.15	0.27	4.49	3.96	1.69	10.15
NT Plant&Pre-Folding	12R-20	MFWD 190	82,600	150	8	0.105	2.51	1.58	3.27	0.64	8.01	6.03	3.90	17.95
NT Plant&Pre-Folding	12R-30	MFWD 190	91,000	150	8	0.070	1.67	1.05	2.40	0.42	5.56	4.43	2.60	12.60
NT Plant&Pre-Folding	12R-38	MFWD 190	103,000	150	8	0.055	1.32	0.83	2.15	0.33	4.64	3.96	2.05	10.66
NT Plant&Pre-Folding	16R-30	MFWD 190	137,000	150	8	0.052	1.25	0.79	2.71	0.32	5.08	5.00	1.95	12.04
NT Plant&Pre-Folding	23R-15	MFWD 190	186,000	150	8	0.073	1.74	1.09	5.12	0.44	8.41	9.43	2.71	20.56
NT Plant&Pre-Folding	24R-20	MFWD 190	207,000	150	8	0.052	1.25	0.79	4.10	0.32	6.47	7.56	1.95	15.98
NT Plant&Pre-Folding	24R-30	MFWD 190	217,000	150	8	0.035	0.83	0.52	2.86	0.21	4.44	5.28	1.30	11.03
NT Plant&Pre-Folding	31R-15	MFWD 225	222,000	150	8	0.054	1.29	0.96	4.55	0.39	7.21	8.38	2.42	18.02
NT Plant&Pre-Folding	32R-15	MFWD 225	216,200	150	8	0.052	1.25	0.93	4.28	0.38	6.86	7.89	2.34	17.11
NT Plant&Pre-Rigid	4R-30	2WD 130	34,600	150	8	0.211	5.02	2.16	2.74	0.74	10.67	5.05	4.34	20.07
NT Plant&Pre-Rigid	4R-38	2WD 130	36,000	150	8	0.166	3.95	1.70	2.24	0.58	8.49	4.14	3.41	16.05
NT Plant&Pre-Rigid	6R-30	MFWD 150	44,300	150	8	0.141	3.34	1.66	2.34	0.63	7.98	4.31	3.66	15.96
NT Plant&Pre-Rigid	6R-38	MFWD 150	43,500	150	8	0.111	2.64	1.31	1.81	0.49	6.27	3.34	2.89	12.51
NT Plant&Pre-Rigid	8R-30	MFWD 170	54,500	150	8	0.105	2.51	1.41	2.16	0.52	6.61	3.98	3.22	13.82
NT Plant&Pre-Rigid	8R-38	MFWD 170	52,400	150	8	0.083	1.98	1.11	1.64	0.41	5.16	3.02	2.54	10.74
NT Plant&Pre-Rigid	11R-15	MFWD 170	63,900	150	8	0.143	3.41	1.92	3.44	0.71	9.51	6.35	4.38	20.24
NT Plant&Pre-Rigid	11R-20	MFWD 170	63,200	150	8	0.115	2.74	1.54	2.73	0.57	7.60	5.04	3.52	16.17

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	--Fixed-- Imp.	Total P.U.	Total Cost
									Imp.	P.U.	Direct				
				dollars	hours	years	hr/ac		-----\$/acre-----						
NT Plant&Pre-Rigid	12R-30	MFWD 190	82,800	150	8	0.070	1.67	1.05	2.18	0.42	5.34	4.03	2.60	11.98	
NT Plant&Pre-Rigid	15R-15	MFWD 190	82,000	150	8	0.113	2.68	1.69	3.47	0.68	8.54	6.40	4.18	19.13	
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	170,000	150	8	0.055	1.32	0.98	3.54	0.40	6.26	6.53	2.47	15.27	
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	135,000	150	8	0.083	1.98	1.48	4.23	0.60	8.30	7.79	3.71	19.81	
NT Plant-Folding	8R-38	MFWD 170	60,400	150	8	0.077	1.84	1.03	1.75	0.38	5.02	3.23	2.36	10.63	
NT Plant-Folding	8R-38 2x1	MFWD 170	93,400	150	8	0.051	1.22	0.69	1.81	0.25	3.98	3.33	1.57	8.89	
NT Plant-Folding	12R-20	MFWD 190	75,200	150	8	0.098	2.33	1.46	2.76	0.59	7.16	5.10	3.62	15.89	
NT Plant-Folding	12R-30	MFWD 190	81,700	150	8	0.065	1.55	0.97	2.00	0.39	4.93	3.69	2.41	11.05	
NT Plant-Folding	12R-38	MFWD 190	93,400	150	8	0.051	1.22	0.77	1.81	0.31	4.12	3.33	1.91	9.37	
NT Plant-Folding	16R-30	MFWD 190	128,000	150	8	0.049	1.16	0.73	2.35	0.29	4.55	4.34	1.81	10.71	
NT Plant-Folding	23R-15	MFWD 190	176,000	150	8	0.068	1.61	1.02	4.50	0.41	7.55	8.29	2.52	18.36	
NT Plant-Folding	24R-20	MFWD 190	197,000	150	8	0.049	1.16	0.73	3.62	0.29	5.82	6.68	1.81	14.32	
NT Plant-Folding	24R-30	MFWD 190	204,000	150	8	0.032	0.77	0.48	2.50	0.19	3.97	4.61	1.20	9.79	
NT Plant-Folding	31R-15	MFWD 225	213,000	150	8	0.050	1.20	0.89	4.05	0.36	6.52	7.46	2.25	16.25	
NT Plant-Folding	32R-15	MFWD 225	207,000	150	8	0.049	1.16	0.87	3.81	0.35	6.20	7.02	2.17	15.40	
NT Plant-Rigid	4R-30	2WD 130	27,200	150	8	0.196	4.66	2.01	2.00	0.69	9.37	3.69	4.03	17.09	
NT Plant-Rigid	4R-38	2WD 130	28,600	150	8	0.154	3.67	1.58	1.65	0.54	7.46	3.05	3.17	13.69	
NT Plant-Rigid	6R-30	MFWD 150	37,000	150	8	0.130	3.10	1.54	1.81	0.58	7.05	3.34	3.40	13.80	
NT Plant-Rigid	6R-38	MFWD 150	36,100	150	8	0.103	2.45	1.22	1.39	0.46	5.53	2.57	2.68	10.80	
NT Plant-Rigid	8R-30	MFWD 170	47,100	150	8	0.098	2.33	1.31	1.73	0.49	5.87	3.19	2.99	12.06	
NT Plant-Rigid	8R-38	MFWD 170	45,000	150	8	0.077	1.84	1.03	1.31	0.38	4.58	2.41	2.36	9.36	
NT Plant-Rigid	11R-15	MFWD 170	56,500	150	8	0.133	3.17	1.78	2.83	0.66	8.46	5.21	4.07	17.74	
NT Plant-Rigid	11R-20	MFWD 170	55,800	150	8	0.107	2.54	1.43	2.24	0.53	6.76	4.13	3.27	14.17	
NT Plant-Rigid	12R-20	MFWD 190	58,400	150	8	0.098	2.33	1.46	2.15	0.59	6.54	3.96	3.62	14.13	
NT Plant-Rigid	12R-30	MFWD 190	73,500	150	8	0.065	1.55	0.97	1.80	0.39	4.73	3.32	2.41	10.48	
NT Plant-Rigid	15R-15	MFWD 190	72,700	150	8	0.105	2.49	1.57	2.86	0.63	7.56	5.27	3.88	16.72	
NT Plant-TwinRow	12R-30/40	MFWD 225	160,000	150	8	0.051	1.22	0.91	3.10	0.37	5.62	5.71	2.29	13.62	
NT Plant-TwinRow	8R-30/40	MFWD 225	128,000	150	8	0.077	1.84	1.37	3.72	0.56	7.51	6.86	3.44	17.82	
Peanut Cond. & Lifter	6-Row	MFWD 190	14,800	300	20	0.100	1.46	1.49	0.24	0.60	3.81	0.34	3.69	7.86	
Peanut Conditioner	6-Row	MFWD 190	17,500	300	20	0.100	1.46	1.49	0.35	0.60	3.92	0.35	3.69	7.97	
Peanut Dig/Invertor	4R-30	MFWD 190	33,500	300	15	0.235	3.46	3.52	1.96	1.42	10.38	2.26	8.71	21.36	
Peanut Dig/Invertor	4R-38	MFWD 190	33,500	300	15	0.186	2.73	2.78	1.55	1.12	8.20	1.78	6.88	16.86	
Peanut Dig/Invertor	6R-38	MFWD 190	47,900	300	15	0.124	1.82	1.85	1.04	0.75	5.47	1.70	4.58	11.75	
Peanut Dump Cart	6-Row	MFWD 190	55,800	300	20	0.310	4.55	4.63	1.00	1.87	12.07	3.88	11.45	27.41	
Peanut Harvester	4R-30	MFWD 225	155,000	300	20	0.849	12.47	15.06	7.46	6.18	41.19	26.76	37.72	105.68	
Peanut Harvester	4R-38	MFWD 225	155,000	300	20	0.934	13.71	16.56	8.20	6.80	45.29	30.96	41.48	117.73	
Peanut Harvester	6R-38	MFWD 225	172,000	300	20	0.625	9.17	11.07	5.19	4.55	29.99	22.97	27.74	80.71	
Peanut Lifter	6-Row	MFWD 225	7,440	300	20	0.100	1.46	1.77	0.15	0.72	4.12	0.15	4.43	8.71	
Peanut Plt&Pre Fold.	12R-38	MFWD 190	92,700	150	8	0.080	1.90	1.20	2.79	0.48	6.39	5.14	2.97	14.51	
Peanut Plt&Pre Rigid	8R-30	MFWD 190	47,800	150	8	0.152	3.62	2.28	2.73	0.92	9.57	5.04	5.64	20.26	
Peanut Plt&Pre Rigid	8R-38	MFWD 190	45,700	150	8	0.120	2.86	1.80	2.06	0.73	7.47	3.81	4.46	15.75	
Peanut Plt&Pre Twin	8R-30/40	MFWD 190	129,000	150	8	0.120	2.86	1.80	5.84	0.73	11.24	10.76	4.46	26.47	
Pipe Spool 160ac	1/4m roll	2WD 130	5,400	15	12	0.003	0.10	0.03	0.00	0.01	0.15	0.10	0.06	0.32	
Pipe Trailer 1m/160a	30'	2WD 130	2,700	100	15	0.003	0.19	0.03	0.00	0.01	0.24	0.00	0.07	0.32	
Plant & Pre-Folding	8R-38	MFWD 170	61,000	150	8	0.080	1.90	1.07	1.83	0.40	5.21	3.38	2.44	11.04	
Plant & Pre-Folding	8R-38 2x1	MFWD 170	92,700	150	8	0.053	1.26	0.71	1.85	0.26	4.10	3.42	1.62	9.16	
Plant & Pre-Folding	12R-20	MFWD 190	72,600	150	8	0.101	2.41	1.51	2.76	0.61	7.30	5.09	3.75	16.15	
Plant & Pre-Folding	12R-30	MFWD 190	81,000	150	8	0.067	1.60	1.01	2.05	0.41	5.08	3.78	2.50	11.37	
Plant & Pre-Folding	12R-38	MFWD 190	92,700	150	8	0.053	1.26	0.79	1.85	0.32	4.24	3.42	1.97	9.64	
Plant & Pre-Folding	16R-30	MFWD 190	124,000	150	8	0.050	1.20	0.75	2.36	0.30	4.63	4.34	1.87	10.85	
Plant & Pre-Folding	23R-15	MFWD 190	166,000	150	8	0.070	1.67	1.05	4.38	0.42	7.54	8.08	2.60	18.23	
Plant & Pre-Folding	24R-20	MFWD 190	187,000	150	8	0.050	1.20	0.75	3.56	0.30	5.83	6.55	1.87	14.26	
Plant & Pre-Folding	24R-30	MFWD 190	197,000	150	8	0.033	0.80	0.50	2.50	0.20	4.01	4.60	1.25	9.87	
Plant & Pre-Folding	31R-15	MFWD 225	196,000	150	8	0.052	1.24	0.92	3.85	0.38	6.41	7.10	2.32	15.84	
Plant & Pre-Folding	32R-15	MFWD 225	189,000	150	8	0.050	1.20	0.89	3.59	0.36	6.07	6.62	2.25	14.95	
Plant & Pre-Rigid	4R-30	2WD 130	31,600	150	8	0.203	4.82	2.07	2.40	0.71	10.02	4.43	4.16	18.62	
Plant & Pre-Rigid	4R-38	2WD 130	32,600	150	8	0.159	3.79	1.63	1.95	0.56	7.95	3.60	3.28	14.83	
Plant & Pre-Rigid	6R-30	MFWD 150	39,300	150	8	0.135	3.21	1.59	1.99	0.60	7.41	3.67	3.51	14.60	
Plant & Pre-Rigid	6R-38	MFWD 150	38,500	150	8	0.106	2.53	1.26	1.54	0.47	5.82	2.84	2.77	11.43	
Plant & Pre-Rigid	8R-30	MFWD 170	47,800	150	8	0.101	2.41	1.35	1.82	0.50	6.09	3.35	3.09	12.54	
Plant & Pre-Rigid	8R-38	MFWD 170	45,700	150	8	0.080	1.90	1.07	1.37	0.40	4.75	2.53	2.44	9.73	
Plant & Pre-Rigid	11R-15	MFWD 170	54,700	150	8	0.148	3.51	1.98	3.04	0.74	9.28	5.60	4.51	19.40	
Plant & Pre-Rigid	11R-20	MFWD 170	54,000	150	8	0.110	2.63	1.48	2.24	0.55	6.92	4.14	3.38	14.44	
Plant & Pre-Rigid	12R-20	MFWD 190	55,700	150	8	0.101	2.41	1.51	2.12	0.61	6.66	3.90	3.75	14.32	
Plant & Pre-Rigid	12R-30	MFWD 190	72,700	150	8	0.067	1.60	1.01	1.84	0.41	4.87	3.39	2.50	10.77	
Plant & Pre-Rigid	15R-15	MFWD 190	69,500	150	8	0.108	2.57	1.62	2.83	0.65	7.69	5.21	4.01	16.92	
Plant & Pre-TwinRow	12R-30/40	MFWD 225	160,000	150	8	0.053	1.26	0.94	3.20	0.38	5.81	5.90	2.37	14.09	
Plant & Pre-TwinRow	8R-30/40	MFWD 225	129,000	150	8	0.080	1.90	1.42	3.88	0.58	7.79	7.15	3.56	18.51	
Plant - Folding	8R-38	MFWD 170	53,700	150	8	0.074	1.76	0.99	1.50	0.37	4.64	2.76	2.27	9.67	
Plant - Folding	8R-38 2x1	MFWD 170	83,400	150	8	0.049	1.17	0.66	1.55	0.24	3.64	2.85	1.51	8.01	
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.23	1.41	2.30	0.57	6.52	4.24	3.48	14.25	
Plant - Folding	12R-30	MFWD 190	71,700	150	8	0.062	1.49	0.94	1						

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--		Total
			Price	Use	Life	Rate		Imp.	P.U.	Direct	Imp.	P.U.	Cost	
			dollars	hours	years	hr/ac			\$/acre					
Plant - Folding	23R-15	MFWD 190	157,000	150	8	0.065	1.55	0.97	3.85	0.39	6.78	7.10	2.41	16.30
Plant - Folding	24R-20	MFWD 190	177,000	150	8	0.047	1.11	0.70	3.12	0.28	5.23	5.76	1.74	12.74
Plant - Folding	24R-30	MFWD 190	184,000	150	8	0.031	0.74	0.47	2.16	0.19	3.57	3.99	1.16	8.73
Plant - Folding	31R-15	MFWD 225	187,000	150	8	0.048	1.15	0.86	3.41	0.35	5.79	6.29	2.16	14.25
Plant - Folding	32R-15	MFWD 225	180,000	150	8	0.047	1.11	0.83	3.18	0.34	5.47	5.86	2.09	13.43
Plant - Rigid	4R-30	2WD 130	24,200	150	8	0.188	4.47	1.93	1.71	0.66	8.78	3.15	3.86	15.80
Plant - Rigid	4R-38	2WD 130	25,300	150	8	0.148	3.52	1.52	1.40	0.52	6.97	2.59	3.04	12.62
Plant - Rigid	6R-30	MFWD 150	32,000	150	8	0.125	2.98	1.48	1.50	0.56	6.53	2.77	3.26	12.58
Plant - Rigid	6R-38	MFWD 150	31,100	150	8	0.099	2.35	1.17	1.15	0.44	5.12	2.13	2.57	9.83
Plant - Rigid	8R-30	MFWD 170	40,500	150	8	0.094	2.23	1.26	1.43	0.47	5.40	2.63	2.87	10.91
Plant - Rigid	8R-38	MFWD 170	38,400	150	8	0.074	1.76	0.99	1.07	0.37	4.21	1.97	2.27	8.46
Plant - Rigid	11R-15	MFWD 170	47,300	150	8	0.137	3.26	1.84	2.44	0.68	8.23	4.49	4.19	16.93
Plant - Rigid	11R-20	MFWD 170	46,600	150	8	0.103	2.44	1.37	1.80	0.51	6.14	3.31	3.14	12.59
Plant - Rigid	12R-20	MFWD 190	48,300	150	8	0.094	2.23	1.41	1.70	0.57	5.92	3.14	3.48	12.55
Plant - Rigid	12R-30	MFWD 190	63,400	150	8	0.062	1.49	0.94	1.49	0.38	4.30	2.75	2.32	9.38
Plant - Rigid	15R-15	2WD 150	60,200	150	8	0.094	2.23	1.11	2.12	0.32	5.80	3.92	1.90	11.63
Plant - TwinRow	12R-30/40	MFWD 225	150,000	150	8	0.049	1.17	0.87	2.79	0.36	5.20	5.14	2.20	12.55
Plant - TwinRow	8R-30/40	MFWD 225	121,000	150	8	0.074	1.76	1.32	3.38	0.54	7.01	6.23	3.30	16.55
Roller/Cultipacker	12'	2WD 130	6,720	300	12	0.124	1.82	1.27	0.19	0.43	3.73	0.26	2.55	6.55
Roller/Cultipacker	20'	MFWD 150	10,900	300	12	0.074	1.09	0.88	0.19	0.33	2.50	0.25	1.93	4.69
Roller/Cultipacker	30'	MFWD 170	14,300	300	12	0.049	0.73	0.66	0.16	0.24	1.81	0.22	1.51	3.55
Roller/Cultipacker	38'	MFWD 225	19,600	300	12	0.039	0.57	0.69	0.18	0.28	1.74	0.24	1.74	3.72
Roller/Stubble	20'	2WD 50	12,700	300	12	0.074	1.09	0.29	0.22	0.05	1.66	0.29	0.29	2.25
Roller/Stubble	32'	MFWD 225	22,200	300	12	0.046	0.68	0.82	0.24	0.33	2.09	0.32	2.07	4.48
Rotary Cutter	7'	MFWD 130	4,500	185	10	0.168	2.47	1.72	0.61	0.66	5.47	0.41	3.85	9.74
Rotary Cutter	12'	2WD 150	13,100	185	10	0.098	1.44	1.16	1.04	0.34	3.98	0.70	1.97	6.67
Rotary Cutter-Flex	15'	MFWD 150	22,100	185	10	0.078	1.15	0.92	1.40	0.35	3.84	0.95	2.04	6.83
Rotary Cutter-Flex	20'	MFWD 150	30,000	185	10	0.058	0.86	0.69	1.43	0.26	3.25	0.97	1.53	5.76
Row Cond & Inc-Fold.	26'	MFWD 190	28,500	100	10	0.063	1.21	0.94	0.45	0.38	3.00	1.84	2.34	7.19
Row Cond & Inc-Fold.	38'	MFWD 225	38,000	100	10	0.043	0.83	0.76	0.41	0.31	2.33	1.68	1.92	5.94
Row Cond & Inc-Rigid	13'	2WD 130	16,000	100	10	0.126	2.43	1.29	0.50	0.44	4.69	2.07	2.60	9.36
Row Cond & Inc-Rigid	21'	2WD 170	21,600	100	10	0.078	1.50	1.05	0.42	0.29	3.27	1.73	1.78	6.78
Row Cond & Inc-Rigid	26'	MFWD 190	24,700	100	10	0.026	0.51	0.39	0.16	0.16	1.23	0.67	0.98	2.88
Row Cond Folding	26'	MFWD 225	21,100	100	10	0.059	0.87	1.05	0.31	0.43	2.68	1.28	2.65	6.62
Row Cond Folding	38'	MFWD 225	27,800	100	10	0.040	0.59	0.72	0.28	0.29	1.90	1.15	1.81	4.87
Row Cond Rigid	13'	2WD 130	8,670	100	10	0.119	1.75	1.22	0.25	0.42	3.65	1.05	2.45	7.16
Row Cond Rigid	21'	2WD 170	14,200	100	10	0.073	1.08	0.99	0.26	0.27	2.61	1.07	1.67	5.36
Row Cond Rigid	26'	MFWD 190	17,300	100	10	0.059	0.87	0.89	0.25	0.36	2.39	1.05	2.20	5.65
Row Cond./Roll-Fol.	30'	MFWD 190	46,200	160	10	0.062	0.91	0.93	0.72	0.37	2.95	1.84	2.30	7.10
Row Cond./Roll-Fold.	26'	MFWD 190	26,500	160	10	0.072	1.05	1.07	0.47	0.43	3.05	1.21	2.66	6.93
Row Cond./Roll-Fold.	40'	MFWD 225	34,000	160	10	0.046	0.68	0.83	0.39	0.34	2.25	1.01	2.08	5.35
Row Cond./Roll-Rig	21'	MFWD 190	25,800	160	10	0.089	1.31	1.33	0.57	0.54	3.76	1.46	3.29	8.53
Row Cond./Roll-Rig	26'	MFWD 190	28,400	160	10	0.072	1.05	1.07	0.51	0.43	3.08	1.30	2.66	7.05
Spirn Spreader	5 ton	MFWD 190	11,600	100	8	0.042	0.99	0.62	0.27	0.25	2.15	0.53	1.55	4.24
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.00	0.34	0.08	0.49	5.92	0.10	1.89	7.93
Spray (ATV)	20'	800 CC	1,690	200	8	0.084	1.62	0.11	0.06	0.16	1.96	0.07	0.61	2.66
Spray (Band)	27' Fold	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Band)	40' Fold	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Band)	50' Fold	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Band)	60' Fold	MFWD 170	13,200	200	8	0.028	0.54	0.37	0.17	0.14	1.23	0.20	0.85	2.29
Spray (Bcast/HB)	13' Rigid	MFWD 150	7,860	200	8	0.130	2.50	1.53	0.47	0.58	5.09	0.55	3.38	9.03
Spray (Bcast/HB)	20' Rigid	MFWD 150	9,400	200	8	0.084	1.62	0.99	0.37	0.37	3.37	0.43	2.19	6.00
Spray (Bcast/HB)	27' Fold	MFWD 170	16,200	200	8	0.062	1.20	0.83	0.47	0.31	2.83	0.55	1.91	5.29
Spray (Bcast/HB)	27' Rigid	MFWD 170	10,900	200	8	0.062	1.20	0.83	0.32	0.31	2.67	0.37	1.91	4.95
Spray (Bcast/HB)	30' Fold	MFWD 170	18,900	200	8	0.056	1.08	0.75	0.49	0.28	2.62	0.58	1.71	4.92
Spray (Bcast/HB)	40' Fold	MFWD 170	19,100	200	8	0.042	0.81	0.56	0.37	0.21	1.96	0.44	1.28	3.69
Spray (Broadcast)	27'	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Broadcast)	40'	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Broadcast)	50'	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Broadcast)	60'	MFWD 170	13,200	200	8	0.028	0.54	0.37	0.17	0.14	1.23	0.20	0.85	2.29
Spray (Direct/Hood)	8R-30	MFWD 170	17,000	200	8	0.084	1.62	1.13	0.67	0.42	3.85	0.78	2.57	7.21
Spray (Direct/Hood)	8R-38	MFWD 170	17,900	200	8	0.066	1.28	0.89	0.56	0.33	3.07	0.65	2.03	5.76
Spray (Direct/Hood)	12R-30	MFWD 170	23,900	200	8	0.056	1.08	0.75	0.63	0.28	2.75	0.73	1.71	5.20
Spray (Direct/Hood)	12R-38	MFWD 170	25,100	200	8	0.044	0.85	0.59	0.52	0.22	2.19	0.60	1.35	4.16
Spray (Direct/Layby)	8R-30	MFWD 170	15,500	200	8	0.084	1.62	1.13	0.61	0.42	3.79	0.71	2.57	7.09
Spray (Direct/Layby)	8R-38	MFWD 170	15,500	200	8	0.066	1.28	0.89	0.48	0.33	3.00	0.56	2.03	5.60
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	19,400	200	8	0.044	0.85	0.59	0.40	0.22	2.07	0.47	1.35	3.90
Spray (Direct/Layby)	12R-30	MFWD 170	19,400	200	8	0.056	1.08	0.75	0.51	0.28	2.63	0.59	1.71	4.94
Spray (Direct/Layby)	12R-38	MFWD 170	19,400	200	8	0.044	0.85	0.59	0.40	0.22	2.07	0.47	1.35	3.90
Spray (Direct/Layby)	16R-20/30	MFWD 225	22,500	200	8	0.062	1.20	1.11	0.66	0.45	3.43	0.76	2.78	6.98
Spray (Levee Leaper)	50'	MFWD 225	12,800	200	8	0.033	0.65	0.59	0.20	0.24	1.69	0.23	1.50	3.43
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.54	0.49	0.53	0.20	1.78	0.62	1.25	3.66
Spray (Pull Type)	80'	MFWD 225	52,000	200	8	0.021	0.40	0.37	0.51	0.15	1.45	0.59	0.93	2.98
Spray (Pull Type)	90'	MFWD 225	52,900	200	8	0.018	0.36	0.33	0.46	0.13	1.29	0.54	0.83	2.67

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---			Total	--Fixed--	Total
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost
			dollars	hours	years	hr/ac			\$/acre					
Spray (Pull Type)	120'	MFWD 225	80,900	200	8	0.014	0.27	0.24	0.53	0.10	1.15	0.62	0.62	2.40
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.62	1.26	0.16	0.51	3.56	0.18	3.12	6.88
Spray (Spot)	27'	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Spot)	40'	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Spot)	50'	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Spot)	60'	MFWD 225	13,200	200	8	0.028	0.54	0.49	0.17	0.20	1.42	0.20	1.25	2.87
Stalk Shredder	14'	MFWD 150	14,900	200	10	0.117	1.73	1.39	1.53	0.52	5.18	0.89	3.06	9.14
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.21	0.97	2.38	0.36	4.94	1.39	2.14	8.47
Stalk Shredder-Flail	12'	MFWD 150	21,700	200	10	0.137	2.01	1.62	2.61	0.61	6.86	1.52	3.57	11.96
Stalk Shredder-Flail	15'	MFWD 150	24,500	200	10	0.110	1.61	1.29	2.35	0.49	5.76	1.37	2.85	9.99
Stalk Shredder-Flail	18'	MFWD 150	28,900	200	10	0.091	1.34	1.08	2.31	0.40	5.15	1.35	2.38	8.88
Stalk Shredder-Flail	20'	MFWD 150	30,400	200	10	0.082	1.21	0.97	2.19	0.36	4.74	1.27	2.14	8.17
Stalk Shredder-Flail	25'	MFWD 150	46,400	200	10	0.066	0.96	0.77	2.67	0.29	4.72	1.56	1.71	7.99
Strip Till	8R-38	MFWD 225	28,100	150	10	0.061	0.90	1.09	0.75	0.44	3.19	1.17	2.73	7.10
Strip Till	12R-30	MFWD 225	68,900	150	10	0.061	0.90	1.09	1.83	0.44	4.28	2.88	2.73	9.90
Strip Till	12R-40	MFWD 225	67,200	150	10	0.046	0.67	0.81	1.34	0.33	3.17	2.11	2.05	7.34
Subsoiler	3 shank	MFWD 190	6,360	100	15	0.204	2.99	3.05	0.43	1.23	7.72	1.02	7.55	16.30
Subsoiler	4 shank	MFWD 225	11,210	100	15	0.153	2.25	2.72	0.57	1.11	6.67	1.35	6.81	14.84
Subsoiler	5 shank	MFWD 225	14,300	100	15	0.122	1.79	2.16	0.58	0.89	5.43	1.37	5.43	12.24
Subsoiler low-till	6 shank	MFWD 225	19,400	100	15	0.102	1.49	1.81	0.66	0.74	4.71	1.55	4.53	10.80
Subsoiler low-till	8 shank	MFWD 225	21,400	100	15	0.076	1.12	1.35	0.54	0.55	3.58	1.28	3.39	8.26

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, 2021

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
dollars					dollars
ADJUVANTS			Approach Prima	pt	28.11
Agri-Dex	pt	2.42	Apron Maxx RTA	oz	1.69
AMS SuperMax	pt	3.81	Artisan	oz	0.23
Class Act NG	pt	1.75	Avaris	oz	0.35
Crop Oil Conc. (Pet.)	pt	2.86	Avicta Complete Bean	oz	3.91
Crop Oil Conc. (Veg.)	pt	2.90	Bravo Weather Stick	pt	5.30
Dyne-A-Pak	pt	5.16	Captan 50 WP	lb	5.94
Fire-Zone	pt	3.40	Convoy	oz	0.95
Herbimax	pt	3.99	Cotton Seed Trt.	acre	20.00
Induce	pt	3.48	CruiserMaxx Vibrance	oz	4.75
MSO	pt	2.40	Elatus	oz	2.94
Penetrator Plus	pt	2.90	Flint Extra	oz	8.88
Surfactant	pt	3.30	Headline EC	oz	1.83
CLEANING			Miravis Top	oz	1.44
Cleaning Peanuts	ton	18.00	Prior Xemium	oz	4.53
CROP CONSULTANT			Propimax EC	pt	11.10
Corn Consultant	acre	6.00	Prosaro	oz	2.42
Cotton Consultant	acre	8.00	Provost Optimum	oz	2.43
Peanut Consultant	acre	9.25	Quadrис	oz	1.50
Rice Consultant	acre	8.00	Quadrис Top	oz	2.37
Sorghum Consultant	acre	6.00	Quadrис Top SBX	oz	1.99
Soybeans Consultant	acre	6.50	Quilt	pt	16.63
Wheat Consultant	acre	5.50	Quilt XCEL	pt	19.82
CUSTOM FERTILIZE			Stratego	pt	21.97
App Fert by Air	cwt	7.50	Stratego YLD	oz	3.46
App Fert by Air (Mi)	appl	7.50	Tilt 3.6 EC	oz	0.76
Custom Apply Fert	acre	7.50	Tilt/ Bravo SE	oz	0.76
CUSTOM LIME			Trivapro	oz	1.53
Lime (Spread)	ton	47.45	GINNING		
CUSTOM PLANT			Gin & Haul	lb	0.11
Custom Plant	acre	7.50	GROWTH REGULATORS		
Custom Plant Air	cwt	7.50	Mepex	oz	0.06
CUSTOM SPRAY			Mepichlor 4.2%	oz	0.06
App by Air ( 3 gal)	appl	5.50	Mepiquat	oz	0.06
App by Air ( 5 gal)	appl	7.00	Mepstar 6	oz	0.08
App by Air (10 gal)	appl	9.00	Palisade	oz	1.13
Custom Spray Ground	acre	7.00	Pentia	oz	0.45
DRYING			Pix WSB	oz	1.37
Dry Corn	bu	0.19	Stance	oz	1.24
Dry Grain Sorghum	cwt	0.25	Veto	oz	0.06
Dry Peanuts	ton	24.00	HARVEST AIDS		
Dry Rice	bu	0.40	Adios	oz	0.99
ERADICATION FEE			Boll Buster	oz	0.24
Eradication	acre	1.00	Def/Folex	pt	10.21
FERTILIZERS			Defol 5	gal	6.77
Agrotain Ultra	pt	11.30	Display	oz	9.63
Amm Sulfate (21% N)	cwt	18.66	Ethephon 6E	pt	4.00
Boron Plus	pt	2.56	Finish 6	pt	8.00
DAP	cwt	20.99	Folex 6EC	pt	10.21
Fert 10-34-0	cwt	24.08	Freefall SC	oz	1.59
Fert 10-34-0	gal	2.80	Ginstar EC	pt	26.68
Fert 11-37-0	cwt	28.53	Gramoxone SL	oz	0.19
Fert 41-0-0-4	cwt	18.22	Sharpen	oz	6.04
Lime	ton	37.45	Sodium Chlorate 5L	gal	6.77
NBPT	pt	11.06	SuperBoll	oz	0.27
Phosphorus (46% P2O5)	cwt	17.31	Thidiazuron 4lb	oz	1.49
Potash (60% K2O)	cwt	22.11	Tribufos 6lb	pt	10.21
Sulfur Plus	pt	2.62	Vacate	oz	1.39
UAN (32% N)	cwt	12.03	HAULING		
UAN (32%)	gal	1.34	Haul Corn	bu	0.23
UAN + Sulfur (28%)	cwt	14.49	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	gal	1.61	Haul Rice	bu	0.35
Urea, Solid (46% N)	cwt	19.74	Haul Sorghum	bu	0.25
Zinc Plus	pt	2.99	Haul Soybeans	bu	0.27
FUNGICIDES			Haul Wheat	bu	0.26
Abound	oz	1.83	HERBICIDES		
Alfa Guard	lb	1.31	2,4-D Amine 4	pt	2.25
Allegiance Flowabl	oz	5.27	2,4-D Ester	pt	2.68
Ameristar Top	oz	2.51	AAatrex 4L	pt	2.23

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
dollars					dollars
Accent Q	oz	19.09	Halomax	oz	19.93
Acuron	oz	0.53	Harmony Extra SG	oz	11.06
Aim	oz	5.67	Helmet	oz	0.26
Anthem Flex	oz	2.67	Huskie	oz	0.78
Anthem Maxx	oz	4.94	Impact	oz	17.60
Armezon Pro	oz	1.22	Intimidator	oz	0.59
Atrazine 4L	pt	1.91	Leadoff	oz	5.61
Atrazine 90DF	lb	3.59	League	oz	3.83
Authority First	lb	73.87	Lexar	pt	7.55
Authority Elite	pt	16.43	Liberty 280	oz	0.44
Authority Maxx	lb	58.84	Loyant	oz	2.21
Authority MTZ	lb	43.24	Makaze	oz	0.14
Avatar	pt	8.50	Metolachlor	pt	5.59
Avenger	pt	4.52	Metribuzin 4L	pt	9.04
Axial XL	oz	1.15	Metribuzin 75	lb	18.30
Axiom	oz	1.94	MSMA	pt	3.86
Banvel	pt	6.67	Newpath	oz	3.83
Barrage	pt	4.15	Obey	oz	0.98
Basagran	pt	5.43	Osprey	oz	3.50
Boundary	pt	11.07	Outlook	pt	17.66
Brake	oz	1.46	Panther Pro	oz	1.60
Broadaxe	pt	16.31	Parallel	pt	5.65
Broadhead	lb	58.21	Parquat	oz	0.18
Bucaneer Plus	pt	2.90	Parazone 3SL	oz	0.18
Buctril	pt	4.28	Permit	oz	21.99
Butyrac 200 (2,4-DB)	pt	3.64	Permit Plus	oz	21.18
Cadre	oz	2.90	PowerFlex	oz	6.99
Canopy	oz	2.32	Preface	oz	4.05
Caparol	pt	4.67	Prefix	pt	6.64
Capreno	oz	4.93	Provisia	oz	0.85
Cinch	pt	14.18	Prowl 3.3 EC	pt	6.49
Cinch ATZ	pt	5.20	Quelex	oz	7.85
Clarity	pt	10.73	RealmQ	oz	5.08
Classic	oz	16.86	RebelEx	oz	2.13
Clearpath	lb	60.12	Reflex	pt	6.20
Clethodim 2E	oz	0.50	Regiment	oz	43.56
Clincher SF	oz	2.26	Resicore	oz	0.48
Cobra	oz	1.70	Resource	oz	1.82
Command 3ME	pt	18.17	RiceBeaux	pt	5.95
Corvus	oz	6.48	Riceshot	pt	4.69
Cotoran	pt	6.01	Ricestar HT	pt	24.49
Cotton Pro	pt	3.45	Ringside	pt	4.88
Dicamba	pt	5.50	Roundup Power Max	oz	0.20
Direx	pt	3.02	Roundup PowerMax	pt	3.25
Diuron	pt	3.03	Roundup PowerMax ii	oz	0.19
Dual II Magnum	pt	13.98	Roundup Pro	pt	0.20
Dual Magnum	pt	13.33	Scepter 70 DG	oz	4.82
Duet	pt	5.63	Select Max	pt	12.74
Engenia	oz	0.89	Sencor/Tricor.Metrib	lb	19.00
Envive	oz	4.76	Sequence	pt	5.45
Envoke	oz	0.80	Sharpen	oz	6.04
Facet L	pt	14.57	Sinister	pt	14.96
Fierce	oz	7.40	Sonic	oz	5.48
Fierce XLT	oz	6.64	Stalwart	pt	3.95
Finesse	oz	15.79	Stam 80 EDF	lb	9.45
Firestorm	pt	3.44	Stam M4	qt	7.72
First Rate	oz	42.57	Staple LX	oz	0.74
Flexstar	pt	8.33	Storm	pt	11.91
Flexstar GT	pt	4.66	Strada	oz	7.34
Fusilade DX	oz	1.15	Strada Pro	oz	7.70
Gambit	oz	16.32	Strada XT2	pt	3.20
Glyphosate 3lbs a.e	pt	2.11	Superwham	qt	8.61
Glyphosate 3lbs a.e	oz	0.13	Suprend	lb	13.52
Goal 2XL	pt	7.52	SureStart II	oz	0.56
Gramoxone SL 2.0	oz	0.19	Surveil	oz	6.32
Grandstand R	pt	15.39	Synchrony XP	oz	11.99
Grasp	oz	12.07	Tempest	pt	29.82
Grasp Xtra	oz	1.58	Touchdown Total	qt	10.21
Halex GT	pt	7.13	Treflan	pt	3.49

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE		
dollars					dollars		
Trifluralin	pt	3.68	Malathion 8E	pt	10.56		
Triflurex	pt	3.30	Mustang Max	oz	1.10		
Ultra Blazer	pt	8.58	Nuprid 4F	oz	0.88		
Valor EZ	oz	5.04	Oberon	oz	3.09		
Valor SX	oz	4.51	Orthene 90	lb	7.45		
Valor XLT	oz	5.28	Permethrin	oz	0.48		
Vamos	pt	6.49	Portal XLO	oz	0.74		
Verdict	oz	1.73	Pounce 25WP	lb	16.50		
Veritas	pt	7.49	Prevathon	oz	1.05		
Villain	pt	5.24	Python WDG	oz	14.32		
Volunteer	pt	10.63	Radiant	oz	5.74		
Warrant	pt	4.39	Sevin 4F	pt	6.97		
XtendiMax	oz	0.56	Sevin XLR Plus	qt	15.43		
Zidua DF	oz	8.72	Sivanto Prime	oz	2.67		
Zidua SC	oz	5.55	Tempest	oz	1.86		
INCULCANT			Transform WG	oz	7.35		
Inoculant-Soybean	acre	1.55	Up-Cyde	oz	0.44		
Optimize LIFT	oz	0.53	Warrior ZT	oz	2.43		
INSECTICIDES			Zeal	oz	17.67		
Abamectin .15EC	oz	1.89	IRRIGATION SUPPLIES				
Acephate 90%	lb	6.94	Roll-Out Pipe				
Acephate 90SP	lb	6.42	ft				
Admire Pro	oz	1.80	0.24				
Agri-Mek	oz	2.72	SEED/PLANTS				
Asana .66 XL	oz	0.55	Corn Seed BtRR	thous	3.99		
Avenger	oz	0.28	Corn Seed Conv.	thous	2.76		
Baythroid XL	oz	2.38	Corn Seed Op Leptra	thous	3.66		
Belt	oz	7.50	Corn Seed RR2	thous	3.03		
Besiege	oz	2.31	Corn Seed VT2P	thous	3.98		
Bidrin 8EC	oz	1.16	Cot. Seed B3XF/W3FE	thous	2.58		
Bifenthrin	oz	0.94	Cotton Seed B3XF	thous	2.66		
Bifenture 2EC	oz	0.91	Cotton Seed GLB2	thous	2.05		
Brigade EC	pt	16.30	Cotton Seed W3FE	thous	2.49		
Capture LFR	oz	2.32	Cotton Seed W3RF	thous	1.98		
Centric 40WG	oz	5.08	Peanut Seed	lb	0.87		
Cypermethrin	oz	0.44	Rice Conv Hyb Trt	lb	6.19		
Declare	oz	1.89	Rice Fullpage Hyb Tr	lb	6.97		
Diamond .83EC	oz	1.28	Rice Seed CF(Levees)	lb	0.96		
Dimethoate 4E	pt	5.44	Rice Seed Clearfield	lb	0.96		
Dimilin 2L	oz	2.16	Rice Seed Conv.	lb	0.32		
Endigo	oz	1.48	Rice Seed Cv(Levees)	lb	0.32		
Force 3G	lb	7.28	Rice Seed CvH(Levee)	lb	1.93		
Hero	oz	1.30	Rice Seed FPH(Levee)	lb	2.67		
Imidacloprid 4F	oz	1.31	Rice Seed Provisia	lb	1.23		
Imidan 70 WSB	oz	0.89	Rice Seed Trt/Insect	lbseed	0.29		
IncidentalPestTrt \$8 acre	acre	8.00	Sorghum Concept	lb	2.64		
IncidentalPestTrt\$15 acre	acre	15.00	Sorghum Concept+ Po	lb	3.82		
IncidentalPestTrt\$22 acre	acre	22.00	Soybean Enlist E3	lb	1.20		
IncidentalPestTrt\$30 acre	acre	30.00	Soybean Seed LL	lb	1.16		
Intrepid 2F	oz	1.94	Soybean Seed RR2	lb	1.16		
Intruder 70WSP	oz	1.13	Soybean Seed RR2X	lb	1.34		
Karate Z	oz	2.52	Wheat Seed Private	lb	0.28		
Lambda	oz	0.95	SOIL TEST				
Lannate LV	pt	9.00	Soil Test	acre	10.00		
Macho	oz	0.78	SURVEY & MARK LEVEES				
			Survey & Mark Levees	acre	4.50		
			Survey & Mark Levees	acre	4.50		

Appendix Table 5. Estimated fuel prices  
and interest rates, Mississippi, 2021

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	1.53
Gasoline	gal	1.89
INTEREST RATES		
Short-term	%	4.00
Intermediate-term	%	4.50

Appendix Table 6. Labor types, wage rates and unallocated labor  
Multipliers for crop enterprises, Mississippi, 2021

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	14.68
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, 2021

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 '21	3.93	-0.20	3.73	2.35	3.73
Cotton Lint	lb	Dec '21	0.66	-	0.6442	0.52	0.6442
Cottonseed	lb						0.08f
Grain Sorghum	bu				3.55	4.08	3.55
Peanuts	ton				400.00	354.5	400.00
Soybeans	bu	Nov '21	9.69	-0.02	9.67	6.41	9.67
Rice	bu	Nov '21	5.47	-0.37	5.10	3.21	5.10
Wheat	bu	Jul '21	5.90	-0.15	5.75	3.35	5.75

<sup>a</sup> Average of the daily closing futures contract prices during the first 5 trading days in October 2020 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 2019 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 2020 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2020 Farm-stored Loan Rate for long grain rough rice. National 2020 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 2008-2020.

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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE				
-----dollars-----										
Land Plane	50'x16'		0.57	0.30	0.56		1.43	1.59	3.02	
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.23		0.23	
Ditcher (1m/160a)			0.13	0.07	0.14		0.01	0.35	0.32	0.67
Roll-Out Pipe	ft	7.92					0.13	8.05		8.05
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.17	0.10	0.41		0.01	0.69	0.79	1.48
IRRIGATE LABOR	hour				1.81		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.15	0.62		0.01	1.03	1.18	2.21
Land Forming (\$450)	each								30.35	30.35
Well & Pump, Furrow	each				2.96		0.05	3.01	8.30	11.31
Main Line Pipe	each								4.59	4.59
Engine, RPF, 75	each								8.60	8.60
June Irrigation	ac-in		4.36	1.40			0.10	5.86		5.86
July Irrigation	ac-in		4.36	1.40			0.08	5.84		5.84
August Irrigation	ac-in		4.36	1.40			0.06	5.82		5.82
TOTALS		7.92	14.20	7.78	4.46	0.00	0.48	34.84	55.72	90.56

Note: Cost of production estimates are based on 2020 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, 2021

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE				
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour			0.27		0.01	0.28	0.28		
Maintenance										
IRRIGATE LABOR	hour			1.07		0.02	1.09	1.09		
Apply Water										
IRRIGATE LABOR	hour			0.15			0.15	0.15		
Apply Water										
IRRIGATE LABOR	hour			0.20			0.20	0.20		
Apply Water										
IRRIGATE LABOR	hour			0.15			0.15	0.15		
Pivot, 1/4 CP	each		13.48			0.22	13.70	51.82	65.52	
Well & Pump, 1/4 CP	each		3.50			0.06	3.56	9.84	13.40	
Engine, 1/4 CP, 65	each							10.19	10.19	
June Irr. 3app@.75"	ac-in	5.14	1.49			0.11	6.74		6.74	
July Irr. 4app@.75"	ac-in	6.86	1.99			0.12	8.97		8.97	
Aug Irr. 3app@.75"	ac-in	5.14	1.49			0.07	6.70		6.70	
TOTALS		0.00	17.14	21.95	1.84	0.00	0.61	41.54	71.85	113.39

Note: Cost of production estimates are based on 2020 input prices.

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