

COTTON 2020 PLANNING BUDGETS

**Mississippi State University
Department of Agricultural Economics
Budget Report 2019-01**

October 2019

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 2020 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

Acknowledgments

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

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

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

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

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2020 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 2019. (Appendix Tables 1, 2, and 3).

A performance rate reflects the time required to perform a given task or operation and is expressed as that part of an hour per acre.

Previous studies and expert knowledge of the equipment committee members are used to estimate performance rates for new and larger equipment (1, 4, 5, 6, 7, 9, and 13).

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

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

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

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

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

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2019 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, 2020

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	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	34.3582	51.88	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Select Max	pt	10.87	1.0000	10.87	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
Warrant	pt	4.02	3.0000	12.06	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	5.2000	6.66	
Centric 40WG	oz	4.89	2.0000	9.78	
Diamond .83EC	oz	1.31	6.0000	7.86	
Imidacloprid 4F	oz	0.81	2.0000	1.62	
Bifenthrin	oz	0.82	12.8000	10.50	
Lambda	oz	1.71	1.0000	1.71	
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	
Transform WG	oz	7.38	1.5000	11.07	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	48.0000	4.80	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.3993	6.10	
Self-Propelled	hour	15.22	0.2075	3.16	
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR	hour	15.17	0.4855	7.37	
DIESEL FUEL					
Tractors	gal	2.30	4.6248	10.65	
Self-Propelled	gal	2.30	4.8836	11.22	
REPAIR & MAINTENANCE					
Implements	acre	7.30	1.0000	7.30	
Tractors	acre	2.85	1.0000	2.85	
Self-Propelled	acre	22.35	1.0000	22.35	
INTEREST ON OP. CAP.	acre	15.66	1.0000	15.66	
TOTAL DIRECT EXPENSES				723.91	
FIXED EXPENSES					
Implements	acre	11.35	1.0000	11.35	
Tractors	acre	19.29	1.0000	19.29	
Self-Propelled	acre	96.53	1.0000	96.53	
TOTAL FIXED EXPENSES				127.17	
TOTAL SPECIFIED EXPENSES				851.08	

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 1.B Summary of estimated costs and returns per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1200.0000	754.68	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				916.68	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	93.13	1.0000	93.13	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	91.75	1.0000	91.75	_____
INSECTICIDES	acre	76.75	1.0000	76.75	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	4.80	1.0000	4.80	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	0.6069	9.26	_____
UNALLOCATED LABOR	hour	15.17	0.4855	7.37	_____
DIESEL FUEL	gal	2.30	9.5084	21.87	_____
REPAIR & MAINTENANCE	acre	32.50	1.0000	32.50	_____
INTEREST ON OP. CAP.	acre	15.66	1.0000	15.66	_____

TOTAL DIRECT EXPENSES				723.91	_____
RETURNS ABOVE DIRECT EXPENSES				192.77	_____
TOTAL FIXED EXPENSES				127.17	_____

TOTAL SPECIFIED EXPENSES				851.08	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				65.60	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 1.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

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	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			1.00	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							0.60	0.39	0.92	0.48

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 1.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		0.66	0.41	0.68		0.09	1.84	1.85	3.69
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	25.94					0.79	26.73		26.73
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	25.94					0.57	26.51		26.51
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Warrant	pt	12.06					0.26	12.32		12.32
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
IncidentalPestTrt\$15	acre	15.00					0.26	15.26		15.26
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	132.00					0.58	132.58		132.58
Stalk Shredder-Flail	20'		2.20	2.76	2.26		0.03	7.25	5.41	12.66
TOTALS		634.43	21.87	32.50	19.45	0.00	15.66	723.91	127.17	851.08

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 1.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

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	916.68
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	13.73	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	41.25	0.00	0.00	0.00	0.00	25.94	0.00	25.94	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	44.33	26.27	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	39.38	21.70	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	3.20	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	2.15	0.00	0.00	0.00	0.00	1.65	3.67	3.44	0.00	0.00	0.00	8.54
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.09	0.00	0.00	0.00	0.00	1.38	3.09	2.91	0.00	0.00	0.00	12.40
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.00	1.11	2.83	1.94	0.00	0.00	0.00	24.51
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	1.03	0.92	5.01	1.66	1.06	0.43	0.21	0.78
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	30.24	31.00	196.08	77.64	61.52	33.13	24.44	178.23
NET INCOME	-91.63	0.00	0.00	0.00	-30.24	-31.00	-196.08	-77.64	-61.52	-33.13	-24.44	738.45
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-121.87	-152.87	-348.95	-426.59	-488.11	-521.24	-545.68	192.77

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Delta Area, Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-212 -339	-193 -320	-174 -302	-156 -283	-137 -264	-118 -245	-99 -226	-80 -207	-61 -188	-42 -169	-23 -151
60	720.00	lb	-169 -296	-146 -273	-123 -251	-101 -228	-78 -205	-56 -183	-33 -160	-10 -137	11 -115	34 -92	57 -70
70	840.00	lb	-125 -253	-99 -226	-73 -200	-46 -173	-20 -147	6 -121	32 -94	58 -68	85 -41	111 -15	138 11
80	960.00	lb	-82 -209	-52 -179	-22 -149	7 -119	38 -89	68 -58	98 -28	128 1	158 31	189 61	219 92
90	1080.00	lb	-39 -166	-5 -132	28 -98	62 -64	96 -30	130 3	164 37	198 71	232 105	266 139	300 173
100	1200.00	lb	4 -123	41 -85	79 -47	117 -9	155 27	192 65	230 103	268 141	305 178	343 216	381 254
110	1320.00	lb	47 -79	88 -38	130 3	171 44	213 86	254 127	296 169	337 210	379 252	421 293	462 335
120	1440.00	lb	90 -36	136 8	181 54	226 99	271 144	317 190	362 235	407 280	453 325	498 371	543 416
130	1560.00	lb	134 6	183 56	232 105	281 154	330 203	379 252	428 301	477 350	526 399	575 448	624 497
140	1680.00	lb	177 50	230 103	283 155	335 208	388 261	441 314	494 367	547 420	600 472	652 525	705 578
150	1800.00	lb	220 93	277 150	334 206	390 263	447 320	503 376	560 433	617 489	673 546	730 603	786 659

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 2019 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, 2020

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	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	34.3582	51.88	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Select Max	pt	10.87	1.0000	10.87	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
Warrant	pt	4.02	3.0000	12.06	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	5.2000	6.66	
Diamond .83EC	oz	1.31	6.0000	7.86	
Imidacloprid 4F	oz	0.81	2.0000	1.62	
Centric 40WG	oz	4.89	2.0000	9.78	
Bifenthrin	oz	0.82	12.8000	10.50	
Lambda	oz	1.71	1.0000	1.71	
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	
Transform WG	oz	7.38	1.5000	11.07	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	51.0000	5.10	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.5025	7.67	
Self-Propelled	hour	15.22	0.2075	3.16	
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	15.18	0.5052	7.67	
DIESEL FUEL					
Tractors	gal	2.30	5.6368	12.97	
Self-Propelled	gal	2.30	4.8836	11.22	
Roll-Out Pipe Irr.	gal	2.30	8.5535	19.68	
REPAIR & MAINTENANCE					
Implements	acre	7.73	1.0000	7.73	
Tractors	acre	3.44	1.0000	3.44	
Self-Propelled	acre	22.35	1.0000	22.35	
Roll-Out Pipe Irr.	acre	6.89	1.0000	6.89	
INTEREST ON OP. CAP.	acre	16.64	1.0000	16.64	
TOTAL DIRECT EXPENSES				811.44	
FIXED EXPENSES					
Implements	acre	13.46	1.0000	13.46	
Tractors	acre	23.34	1.0000	23.34	
Self-Propelled	acre	96.53	1.0000	96.53	
Roll-Out Pipe Irr.	acre	60.69	1.0000	60.69	
TOTAL FIXED EXPENSES				194.02	
TOTAL SPECIFIED EXPENSES				1005.46	

Note: Cost of production estimates are based on 2019 input prices.
Fertilization decisions should be based on soil tests.
Soil test cost is prorated for a test every 3rd year.
Lime cost prorated for application every 3rd year.

Table 2.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1500.0000	943.35	_____
Cotton Seed	lb	0.10	2025.0000	202.50	_____

TOTAL INCOME				1145.85	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.13	1.0000	49.13	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	93.13	1.0000	93.13	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	91.75	1.0000	91.75	_____
INSECTICIDES	acre	84.25	1.0000	84.25	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	5.10	1.0000	5.10	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	0.7101	10.83	_____
UNALLOCATED LABOR	hour	15.18	0.5052	7.67	_____
DIESEL FUEL	gal	2.30	19.0740	43.87	_____
REPAIR & MAINTENANCE	acre	40.41	1.0000	40.41	_____
INTEREST ON OP. CAP.	acre	16.64	1.0000	16.64	_____

TOTAL DIRECT EXPENSES				811.44	_____
RETURNS ABOVE DIRECT EXPENSES				334.41	_____
TOTAL FIXED EXPENSES				194.02	_____

TOTAL SPECIFIED EXPENSES				1005.46	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				140.39	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 2.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

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	0.04
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	1.00	Nov		0.04	0.04	0.04	0.03
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	May		0.04	0.04	0.09	0.03
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				
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	0.03
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	0.06
Roll-Out Pipe Irr.	acre				Jan	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 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 2.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
 B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		1.31	0.81	1.35		0.18	3.65	3.71	7.36
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	25.94					0.79	26.73		26.73
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	25.94					0.57	26.51		26.51
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.06	3.30	2.56	5.86
Warrant	pt	12.06					0.21	12.27		12.27
Liberty 280	oz	14.21					0.25	14.46		14.46
Mepiquat Chloride	oz	1.90					0.03	1.93		1.93
Centric 40WG	oz	9.78					0.17	9.95		9.95
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	8.25					0.14	8.39		8.39
IncidentalPestTrt\$15	acre	22.50					0.39	22.89		22.89
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	165.00					0.72	165.72		165.72
Stalk Shredder-Flail	20'		2.20	2.76	2.26		0.03	7.25	5.41	12.66
Roll-Out Pipe Irr.	acre	7.92	21.35	7.51	4.50		0.75	42.03	64.99	107.02
TOTALS		685.90	43.87	40.41	24.62	0.00	16.64	811.44	194.02	1005.46

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 2.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

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	1145.85
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	13.73	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	41.25	0.00	0.00	0.00	0.00	25.94	0.00	25.94	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	44.33	0.00	26.27	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	4.10	56.66	21.70	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	105.30	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	5.10	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	2.82	0.00	0.00	0.00	0.00	1.65	3.90	4.62	1.65	0.23	0.63	9.12
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	2.74	0.00	0.00	0.00	0.00	1.38	3.09	8.72	7.75	6.56	0.38	13.25
REPAIR & MAINTENANCE	2.51	0.00	0.00	0.00	0.00	1.11	2.83	5.75	1.94	1.31	0.15	24.81
INTEREST ON OP. CAP.	4.65	0.00	0.00	0.00	1.03	0.92	5.02	1.25	2.09	0.53	0.22	0.93
TOTAL DIRECT EXPENSES	93.44	0.00	0.00	0.00	30.24	31.00	196.32	58.30	122.09	41.33	25.61	213.11
NET INCOME	-93.44	0.00	0.00	0.00	-30.24	-31.00	-196.32	-58.30	-122.09	-41.33	-25.61	932.74
NET INCOME TO DATE	-93.44	-93.44	-93.44	-93.44	-123.68	-154.68	-351.00	-409.30	-531.39	-572.72	-598.33	334.41

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,
B3XF/W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2020

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	-----dollars-----										
50	750.00	lb	-172 -366	-148 -342	-125 -319	-101 -295	-77 -272	-54 -248	-30 -224	-7 -201	16 -177	39 -154	63 -130
60	900.00	lb	-118 -312	-89 -283	-61 -255	-33 -227	-4 -198	23 -170	51 -142	79 -114	108 -85	136 -57	164 -29
70	1050.00	lb	-63 -257	-30 -224	2 -191	35 -158	68 -125	101 -92	134 -59	167 -26	200 6	233 39	266 72
80	1200.00	lb	-9 -203	27 -166	65 -128	103 -90	141 -52	178 -15	216 22	254 60	292 98	329 135	367 173
90	1350.00	lb	44 -149	86 -107	129 -64	171 -22	214 20	256 62	299 105	341 147	383 189	426 232	468 274
100	1500.00	lb	98 -95	145 -48	192 -1	240 46	287 93	334 140	381 187	428 234	475 281	523 329	570 376
110	1650.00	lb	152 -41	204 10	256 62	308 114	360 166	412 218	464 270	515 321	567 373	619 425	671 477
120	1800.00	lb	206 12	263 69	320 126	376 182	433 239	489 295	546 352	603 409	659 465	716 522	772 578
130	1950.00	lb	261 67	322 128	383 189	445 251	506 312	567 373	629 434	690 496	751 557	812 618	874 680
140	2100.00	lb	315 121	381 187	447 253	513 319	579 385	645 451	711 517	777 583	843 649	909 715	975 781
150	2250.00	lb	369 175	440 246	510 316	581 387	652 458	723 529	793 599	864 670	935 741	1006 812	1076 882

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 2019 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, 2020

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	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	34.3582	51.88	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Select Max	pt	10.87	1.0000	10.87	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
Warrant	pt	4.02	3.0000	12.06	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	5.2000	6.66	
Centric 40WG	oz	4.89	2.0000	9.78	
Diamond .83EC	oz	1.31	6.0000	7.86	
Imidacloprid 4F	oz	0.81	2.0000	1.62	
Bifenthrin	oz	0.82	12.8000	10.50	
Lambda	oz	1.71	1.0000	1.71	
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	
Transform WG	oz	7.38	1.5000	11.07	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	48.0000	4.80	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.3993	6.10	
Self-Propelled	hour	15.22	0.2075	3.16	
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	15.17	0.4855	7.37	
DIESEL FUEL					
Tractors	gal	2.30	4.6248	10.65	
Self-Propelled	gal	2.30	4.8836	11.22	
1/4-mi. Pivot Irr.	gal	2.30	11.2011	25.77	
REPAIR & MAINTENANCE					
Implements	acre	7.30	1.0000	7.30	
Tractors	acre	2.85	1.0000	2.85	
Self-Propelled	acre	22.35	1.0000	22.35	
1/4-mi. Pivot Irr.	acre	21.65	1.0000	21.65	
INTEREST ON OP. CAP.	acre	16.91	1.0000	16.91	
TOTAL DIRECT EXPENSES				817.67	
FIXED EXPENSES					
Implements	acre	11.35	1.0000	11.35	
Tractors	acre	19.29	1.0000	19.29	
Self-Propelled	acre	96.53	1.0000	96.53	
1/4-mi. Pivot Irr.	acre	82.73	1.0000	82.73	
TOTAL FIXED EXPENSES				209.90	
TOTAL SPECIFIED EXPENSES				1027.57	

Note: Cost of production estimates are based on 2019 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, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1500.0000	943.35	_____
Cotton Seed	lb	0.10	2025.0000	202.50	_____

TOTAL INCOME				1145.85	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	49.13	1.0000	49.13	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	93.13	1.0000	93.13	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	91.75	1.0000	91.75	_____
INSECTICIDES	acre	84.25	1.0000	84.25	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	4.80	1.0000	4.80	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	0.6069	9.26	_____
UNALLOCATED LABOR	hour	15.17	0.4855	7.37	_____
DIESEL FUEL	gal	2.30	20.7096	47.64	_____
REPAIR & MAINTENANCE	acre	54.15	1.0000	54.15	_____
INTEREST ON OP. CAP.	acre	16.91	1.0000	16.91	_____

TOTAL DIRECT EXPENSES				817.67	_____
RETURNS ABOVE DIRECT EXPENSES				328.18	_____
TOTAL FIXED EXPENSES				209.90	_____

TOTAL SPECIFIED EXPENSES				1027.57	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				118.28	_____

Note: Cost of production estimates are based on 2019 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, 2020

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	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			1.00	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 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 3.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		0.66	0.41	0.68		0.09	1.84	1.85	3.69
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	25.94					0.79	26.73		26.73
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	25.94					0.57	26.51		26.51
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Warrant	pt	12.06					0.26	12.32		12.32
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	8.25					0.14	8.39		8.39
IncidentalPestTrt\$15	acre	22.50					0.39	22.89		22.89
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	165.00					0.72	165.72		165.72
Stalk Shredder-Flail	20'		2.20	2.76	2.26		0.03	7.25	5.41	12.66
1/4-mi. Pivot Irr.	acre		25.77	21.65	1.84		0.94	50.20	82.73	132.93
TOTALS		677.68	47.64	54.15	21.29	0.00	16.91	817.67	209.90	1027.57

Note: Cost of production estimates are based on 2019 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, 2020

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	1145.85
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	13.73	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	41.25	0.00	0.00	0.00	0.00	25.94	0.00	25.94	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.15	0.00	44.33	26.27	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	46.88	21.70	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	3.20	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	2.15	0.00	0.00	0.00	0.00	1.65	5.01	3.59	0.20	0.15	0.00	8.54
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.09	0.00	0.00	0.00	0.00	1.38	3.09	10.64	10.31	7.73	0.00	12.40
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.00	1.11	2.83	20.32	1.87	1.40	0.00	24.51
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	1.03	0.92	5.05	2.23	1.44	0.55	0.21	0.92
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	30.24	31.00	197.46	104.47	84.53	42.53	24.44	211.37
NET INCOME	-91.63	0.00	0.00	0.00	-30.24	-31.00	-197.46	-104.47	-84.53	-42.53	-24.44	934.48
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-121.87	-152.87	-350.33	-454.80	-539.33	-581.86	-606.30	328.18

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, cons. tillage, pivot irr.,
B3XF/W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2020

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT YIELD UNIT			-----dollars-----										
50	750.00	lb	-178	-154	-131	-107	-84	-60	-37	-13	10	33	57
			-388	-364	-341	-317	-294	-270	-246	-223	-199	-176	-152
60	900.00	lb	-124	-96	-67	-39	-11	17	45	73	102	130	158
			-334	-305	-277	-249	-221	-192	-164	-136	-107	-79	-51
70	1050.00	lb	-70	-37	-4	28	61	94	127	160	193	226	259
			-280	-247	-214	-181	-148	-115	-81	-48	-15	17	50
80	1200.00	lb	-16	21	59	97	134	172	210	248	285	323	361
			-225	-188	-150	-112	-74	-37	0	38	75	113	151
90	1350.00	lb	38	80	123	165	207	250	292	335	377	420	462
			-171	-129	-86	-44	-1	40	82	125	167	210	252
100	1500.00	lb	92	139	186	233	281	328	375	422	469	516	564
			-117	-70	-23	23	71	118	165	212	259	306	354
110	1650.00	lb	146	198	250	302	354	405	457	509	561	613	665
			-63	-11	40	92	144	196	247	299	351	403	455
120	1800.00	lb	200	257	313	370	427	483	540	596	653	710	766
			-9	47	104	160	217	273	330	387	443	500	556
130	1950.00	lb	254	316	377	438	500	561	622	684	745	806	868
			44	106	167	228	290	351	412	474	535	596	658
140	2100.00	lb	309	375	441	507	573	639	705	771	837	903	969
			99	165	231	297	363	429	495	561	627	693	759
150	2250.00	lb	363	433	504	575	646	716	787	858	929	1000	1070
			153	224	294	365	436	507	577	648	719	790	860

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 2019 input prices.

Table 4.A Estimated costs per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2020

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	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	25.4000	38.35	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Select Max	pt	10.87	1.0000	10.87	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
Warrant	pt	4.02	3.0000	12.06	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	5.2000	6.66	
Centric 40WG	oz	4.89	2.0000	9.78	
Diamond .83EC	oz	1.31	6.0000	7.86	
Imidacloprid 4F	oz	0.81	2.0000	1.62	
Bifenthrin	oz	0.82	12.8000	10.50	
Lambda	oz	1.71	1.0000	1.71	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
Transform WG	oz	7.38	1.5000	11.07	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	48.0000	4.80	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.2712	4.14	
Self-Propelled	hour	15.22	0.2075	3.16	
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR	hour	15.19	0.3830	5.82	
DIESEL FUEL					
Tractors	gal	2.30	3.1417	7.24	
Self-Propelled	gal	2.30	4.8836	11.22	
REPAIR & MAINTENANCE					
Implements	acre	5.28	1.0000	5.28	
Tractors	acre	1.94	1.0000	1.94	
Self-Propelled	acre	22.35	1.0000	22.35	
INTEREST ON OP. CAP.	acre	14.69	1.0000	14.69	
TOTAL DIRECT EXPENSES				699.35	
FIXED EXPENSES					
Implements	acre	7.83	1.0000	7.83	
Tractors	acre	13.10	1.0000	13.10	
Self-Propelled	acre	96.53	1.0000	96.53	
TOTAL FIXED EXPENSES				117.46	
TOTAL SPECIFIED EXPENSES				816.81	

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3FE variety, Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1200.0000	754.68	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				916.68	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	79.60	1.0000	79.60	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	91.75	1.0000	91.75	_____
INSECTICIDES	acre	76.75	1.0000	76.75	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	4.80	1.0000	4.80	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	0.4788	7.30	_____
UNALLOCATED LABOR	hour	15.19	0.3830	5.82	_____
DIESEL FUEL	gal	2.30	8.0253	18.46	_____
REPAIR & MAINTENANCE	acre	29.57	1.0000	29.57	_____
INTEREST ON OP. CAP.	acre	14.69	1.0000	14.69	_____

TOTAL DIRECT EXPENSES				699.35	_____
RETURNS ABOVE DIRECT EXPENSES				217.33	_____
TOTAL FIXED EXPENSES				117.46	_____

TOTAL SPECIFIED EXPENSES				816.81	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				99.87	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
App by Air (5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.10	0.04
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 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
NT Plant-Folding	12R-38		1.38	2.13	1.89		0.14	5.54	6.19	11.73
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	38.35					0.84	39.19		39.19
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Warrant	pt	12.06					0.26	12.32		12.32
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
IncidentalPestTrt\$15	acre	15.00					0.26	15.26		15.26
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	132.00					0.58	132.58		132.58
Stalk Shredder-Flail	20'		2.20	2.76	2.26		0.03	7.25	5.41	12.66
TOTALS		620.90	18.46	29.57	15.73	0.00	14.69	699.35	117.46	816.81

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 4.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2020

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	916.68
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	13.73	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	41.25	0.00	0.00	0.00	0.00	0.00	0.00	38.35	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	21.15	0.00	44.33	26.27	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	39.38	21.70	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	3.20	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	3.75	3.44	0.00	0.00	0.00	8.54
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	3.15	2.91	0.00	0.00	0.00	12.40
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.12	1.94	0.00	0.00	0.00	24.51
INTEREST ON OP. CAP.	4.23	0.00	0.00	0.00	1.03	0.00	5.02	1.93	1.06	0.43	0.21	0.78
TOTAL DIRECT EXPENSES	84.95	0.00	0.00	0.00	30.24	0.00	196.52	90.32	61.52	33.13	24.44	178.23
NET INCOME	-84.95	0.00	0.00	0.00	-30.24	0.00	-196.52	-90.32	-61.52	-33.13	-24.44	738.45
NET INCOME TO DATE	-84.95	-84.95	-84.95	-84.95	-115.19	-115.19	-311.71	-402.03	-463.55	-496.68	-521.12	217.33

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Delta Area, Mississippi, 2020

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	-----dollars-----										
50	600.00	lb	-188 -305	-169 -286	-150 -267	-131 -248	-112 -230	-93 -211	-74 -192	-55 -173	-37 -154	-18 -135	0 -116
60	720.00	lb	-144 -262	-122 -239	-99 -216	-76 -194	-54 -171	-31 -148	-8 -126	13 -103	36 -81	59 -58	81 -35
70	840.00	lb	-101 -218	-74 -192	-48 -166	-22 -139	4 -113	30 -86	57 -60	83 -33	109 -7	136 18	162 45
80	960.00	lb	-58 -175	-27 -145	2 -115	32 -84	62 -54	92 -24	123 5	153 35	183 66	213 96	243 126
90	1080.00	lb	-14 -132	19 -98	53 -64	87 -30	121 3	155 37	189 71	223 105	257 139	290 173	324 207
100	1200.00	lb	28 -88	66 -51	104 -13	141 24	179 62	217 99	255 137	292 175	330 213	368 250	406 288
110	1320.00	lb	72 -45	113 -3	155 37	196 79	238 120	279 162	321 203	362 245	404 286	445 328	487 369
120	1440.00	lb	115 -2	160 43	205 88	251 133	296 179	341 224	387 269	432 314	477 360	522 405	568 450
130	1560.00	lb	158 41	207 90	256 139	305 188	354 237	403 286	453 335	502 384	551 433	600 482	649 531
140	1680.00	lb	202 84	254 137	307 190	360 243	413 295	466 348	518 401	571 454	624 507	677 560	730 612
150	1800.00	lb	245 127	301 184	358 241	415 297	471 354	528 410	584 467	641 524	698 580	754 637	811 693

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 2019 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, 2020

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	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	811.0000	89.21	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	32.5498	49.15	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	0.6700	13.40	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Select Max	pt	10.87	1.0000	10.87	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
Warrant	pt	4.02	2.0000	8.04	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	5.2000	6.66	
Centric 40WG	oz	4.89	1.3400	6.55	
Diamond .83EC	oz	1.31	6.0000	7.86	
Imidacloprid 4F	oz	0.81	2.0000	1.62	
Bifenthrin	oz	0.82	12.8000	10.50	
Lambda	oz	1.71	1.0000	1.71	
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	
Transform WG	oz	7.38	1.5000	11.07	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	30.0000	70.20	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	42.7200	4.27	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.8159	12.43	
Self-Propelled	hour	15.22	0.1958	2.98	
HAND LABOR					
Implements	hour	9.06	0.3181	2.87	
Self-Propelled	hour	9.06	0.1840	1.66	
UNALLOCATED LABOR	hour	15.20	0.8094	12.31	
DIESEL FUEL					
Tractors	gal	2.30	9.4502	21.75	
Self-Propelled	gal	2.30	3.4035	7.82	
REPAIR & MAINTENANCE					
Implements	acre	10.53	1.0000	10.53	
Tractors	acre	5.80	1.0000	5.80	
Self-Propelled	acre	10.01	1.0000	10.01	
INTEREST ON OP. CAP.	acre	14.23	1.0000	14.23	
TOTAL DIRECT EXPENSES				641.83	
FIXED EXPENSES					
Implements	acre	18.09	1.0000	18.09	
Tractors	acre	39.41	1.0000	39.41	
Self-Propelled	acre	43.60	1.0000	43.60	
TOTAL FIXED EXPENSES				101.10	
TOTAL SPECIFIED EXPENSES				742.93	

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 5.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	811.0000	510.04	_____
Cotton Seed	lb	0.10	1095.0000	109.50	_____

TOTAL INCOME				619.54	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	46.38	1.0000	46.38	_____
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	90.41	1.0000	90.41	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	87.73	1.0000	87.73	_____
INSECTICIDES	acre	73.52	1.0000	73.52	_____
SEED/PLANTS	acre	70.20	1.0000	70.20	_____
GROWTH REGULATORS	acre	4.27	1.0000	4.27	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	1.0118	15.41	_____
UNALLOCATED LABOR	hour	15.20	0.8094	12.31	_____
DIESEL FUEL	gal	2.30	12.8538	29.57	_____
REPAIR & MAINTENANCE	acre	26.34	1.0000	26.34	_____
INTEREST ON OP. CAP.	acre	14.23	1.0000	14.23	_____

TOTAL DIRECT EXPENSES				641.83	_____
RETURNS ABOVE DIRECT EXPENSES				-22.29	_____
TOTAL FIXED EXPENSES				101.10	_____

TOTAL SPECIFIED EXPENSES				742.93	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-123.39	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 5.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

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	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 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 5.D Estimated costs for field operations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	8R-38 2x1		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	8R-38 2x1		0.66	0.41	0.68		0.09	1.84	1.85	3.69
App by Air (5 gal)	appl	7.00					0.25	7.25		7.25
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Select Max	pt	10.87					0.38	11.25		11.25
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	8R-38 2x1		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	24.58					0.75	25.33		25.33
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	8R-38 2x1		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	70.20					1.84	72.04		72.04
Cotton Seed Trt.	acre	13.40					0.35	13.75		13.75
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-825gal	90' 250hp		0.34	0.20	0.37		0.02	0.93	1.41	2.34
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Spray (Direct/Layby)	8R-38 2x1		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	8R-38 2x1		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	24.58					0.54	25.12		25.12
Spray (Direct/Layby)	8R-38 2x1		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Warrant	pt	8.04					0.18	8.22		8.22
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.07					0.02	1.09		1.09
Centric 40WG	oz	6.55					0.14	6.69		6.69
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Diamond .83EC	oz	7.86					0.14	8.00		8.00
Imidacloprid 4F	oz	1.62					0.03	1.65		1.65
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
Acephate 90%	lb	5.38					0.09	5.47		5.47
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Bifenthrin	oz	5.25					0.09	5.34		5.34
App by Air (3 gal)	appl	1.38					0.02	1.40		1.40
Lambda	oz	1.71					0.03	1.74		1.74
Bidrin 8EC	oz	2.56					0.04	2.60		2.60
Incidental Pest										
App by Air (3 gal)	appl	5.50					0.10	5.60		5.60
IncidentalPestTrt\$15	acre	15.00					0.26	15.26		15.26
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Bifenthrin	oz	5.25					0.07	5.32		5.32
App by Air (3 gal)	appl	5.50					0.07	5.57		5.57
Transform WG	oz	11.07					0.15	11.22		11.22
App by Air (5 gal)	appl	7.00					0.06	7.06		7.06
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
App by Air (5 gal)	appl	3.50					0.03	3.53		3.53
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Cotton Picker	4R2x1 (350)		7.14	9.61	6.28		0.10	23.13	40.78	63.91
Boll Buggy	4R2x1 (350)		4.59	2.53	4.72		0.05	11.89	11.24	23.13
Module Builder	4R2x1 (350)		4.59	2.71	6.28		0.06	13.64	11.65	25.29
Gin & Haul	lb	89.21					0.39	89.60		89.60
Stalk Shredder-Flail	15'		2.93	3.07	3.01		0.04	9.05	6.82	15.87
TOTALS		539.44	29.57	26.34	32.25	0.00	14.23	641.83	101.10	742.93

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 5.E Estimated monthly income and expense flows per acre
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)
 Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

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	619.54
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	13.73	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	41.25	0.00	0.00	0.00	0.00	24.58	0.00	24.58	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	21.15	0.00	44.33	22.25	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	10.65	39.38	21.70	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	70.20	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	3.20	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	2.15	0.00	0.00	0.00	0.00	1.65	3.67	4.49	0.00	0.00	0.00	20.29
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	2.09	0.00	0.00	0.00	0.00	1.38	3.09	3.76	0.00	0.00	0.00	19.25
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.00	1.11	2.83	2.37	0.00	0.00	0.00	17.92
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	1.03	0.88	3.91	1.51	1.06	0.43	0.21	0.64
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	30.24	29.60	153.28	70.68	61.52	33.13	24.44	147.31
NET INCOME	-91.63	0.00	0.00	0.00	-30.24	-29.60	-153.28	-70.68	-61.52	-33.13	-24.44	472.23
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-121.87	-151.47	-304.75	-375.43	-436.95	-470.08	-494.52	-22.29

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" 2X1 full-skip (8 rows planted)
Cons. till., B3XF/W3FE variety, Delta, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-296	-283	-270	-258	-245	-232	-219	-207	-194	-181	-168
			-397	-384	-371	-359	-346	-333	-320	-308	-295	-282	-269
60	486.60	lb	-266	-251	-236	-221	-205	-190	-175	-159	-144	-129	-113
			-368	-352	-337	-322	-306	-291	-276	-260	-245	-230	-215
70	567.70	lb	-237	-219	-201	-184	-166	-148	-130	-112	-94	-77	-59
			-338	-320	-303	-285	-267	-249	-231	-213	-195	-178	-160
80	648.80	lb	-208	-187	-167	-147	-126	-106	-85	-65	-45	-24	-4
			-309	-289	-268	-248	-227	-207	-187	-166	-146	-125	-105
90	729.90	lb	-179	-156	-133	-110	-87	-64	-41	-18	4	27	50
			-280	-257	-234	-211	-188	-165	-142	-119	-96	-73	-50
100	811.00	lb	-149	-124	-98	-73	-47	-22	3	28	54	79	105
			-250	-225	-199	-174	-148	-123	-97	-72	-46	-21	4
110	892.10	lb	-120	-92	-64	-36	-8	19	47	75	103	131	160
			-221	-193	-165	-137	-109	-81	-53	-25	2	30	58
120	973.20	lb	-91	-60	-30	0	31	61	92	123	153	184	214
			-192	-161	-131	-100	-69	-39	-8	21	52	83	113
130	1054.30	lb	-61	-28	4	37	70	103	136	170	203	236	269
			-163	-129	-96	-63	-30	2	35	69	102	135	168
140	1135.40	lb	-32	3	38	74	110	145	181	217	252	288	324
			-133	-98	-62	-26	9	44	80	116	151	187	223
150	1216.50	lb	-3	34	73	111	149	187	226	264	302	340	379
			-104	-66	-27	10	48	86	125	163	201	239	278

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 2019 input prices.

Table 6.A Estimated costs per acre
 Cotton, 8R-38" solid, conservation tillage
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	28.9332	43.69	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	3.2000	4.10	
Centric 40WG	oz	4.89	2.0000	9.78	
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.9288	14.12	
Self-Propelled	hour	15.22	0.3221	4.91	
HAND LABOR					
Implements	hour	9.06	0.3579	3.24	
Self-Propelled	hour	9.06	0.2472	2.24	
UNALLOCATED LABOR	hour	15.19	1.0008	15.21	
DIESEL FUEL					
Tractors	gal	2.30	9.0841	20.90	
Self-Propelled	gal	2.30	4.4973	10.30	
REPAIR & MAINTENANCE					
Implements	acre	10.73	1.0000	10.73	
Tractors	acre	5.50	1.0000	5.50	
Self-Propelled	acre	14.22	1.0000	14.22	
INTEREST ON OP. CAP.	acre	13.77	1.0000	13.77	
TOTAL DIRECT EXPENSES				613.14	
FIXED EXPENSES					
Implements	acre	18.13	1.0000	18.13	
Tractors	acre	37.35	1.0000	37.35	
Self-Propelled	acre	65.36	1.0000	65.36	
TOTAL FIXED EXPENSES				120.84	
TOTAL SPECIFIED EXPENSES				733.98	

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 6.B Summary of estimated costs and returns per acre
 Cotton, 8R-38" solid, conservation tillage
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1000.0000	628.90	_____
Cotton Seed	lb	0.10	1350.0000	135.00	_____

TOTAL INCOME				763.90	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	84.93	1.0000	84.93	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	68.82	1.0000	68.82	_____
INSECTICIDES	acre	41.43	1.0000	41.43	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	1.2510	19.03	_____
UNALLOCATED LABOR	hour	15.19	1.0008	15.21	_____
DIESEL FUEL	gal	2.30	13.5814	31.20	_____
REPAIR & MAINTENANCE	acre	30.45	1.0000	30.45	_____
INTEREST ON OP. CAP.	acre	13.77	1.0000	13.77	_____

TOTAL DIRECT EXPENSES				613.14	_____
RETURNS ABOVE DIRECT EXPENSES				150.76	_____
TOTAL FIXED EXPENSES				120.84	_____

TOTAL SPECIFIED EXPENSES				733.98	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				29.92	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 6.C Estimated resource use for field operations, per acre
Cotton, 8R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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	8R-38	MFWD 190	0.080	1.00	Nov		0.08	0.08	0.08	0.06
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	0.074	0.50	Nov		0.03	0.03	0.03	0.02
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38	MFWD 190	0.077	1.00	Apr		0.07	0.07	0.11	0.06
UAN (32%)	gal					14.4666				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	May		0.05	0.05	0.05	0.04
Plant - Folding	8R-38	MFWD 190	0.074	1.00	May		0.07	0.07	0.14	0.05
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 190	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32%)	gal					14.4666				
Spray (Direct/Layby)	8R-38	MFWD 190	0.066	1.00	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 190	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38(355)	MFWD 190	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1000.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.25	0.92	1.85	1.00

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 6.D Estimated costs for field operations, per acre
Cotton, 8R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	8R-38		1.82	1.90	2.21		0.31	6.24	5.96	12.20
Bed/Disk (Hipper)Rd	8R-38		0.83	0.41	1.01		0.12	2.37	2.05	4.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	8R-38		1.75	1.44	2.48		0.17	5.84	4.33	10.17
UAN (32%)	gal	21.84					0.67	22.51		22.51
Row Cond Rigid	26'		1.34	0.60	1.64		0.09	3.67	3.55	7.22
Plant - Folding	8R-38		1.68	1.91	2.72		0.17	6.48	6.07	12.55
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	8R-38		1.75	1.44	2.48		0.12	5.79	4.33	10.12
UAN (32%)	gal	21.84					0.48	22.32		22.32
Spray (Direct/Layby)	8R-38		1.50	0.75	2.13		0.10	4.48	3.15	7.63
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
IncidentalPestTrt\$15	acre	15.00					0.26	15.26		15.26
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker	6R-38(355)		7.24	12.52	6.28		0.11	26.15	53.12	79.27
Boll Buggy	6R-38(355)		3.88	2.33	4.72		0.05	10.98	9.85	20.83
Module Builder	6R-38(355)		3.88	2.51	6.28		0.06	12.73	10.26	22.99
Gin & Haul	lb	110.00					0.48	110.48		110.48
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
TOTALS		498.00	31.20	30.45	39.72	0.00	13.77	613.14	120.84	733.98

Note: Cost of production estimates are based on 2019 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, 2020

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	763.90
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	21.84	0.00	21.84	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	20.38	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	3.22	0.00	0.00	0.00	0.56	2.48	5.48	5.17	1.12	0.56	0.84	20.29
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	2.65	0.00	0.00	0.00	0.36	1.75	3.74	3.61	0.72	0.36	0.54	17.47
REPAIR & MAINTENANCE	2.31	0.00	0.00	0.00	0.20	1.44	2.91	2.39	0.40	0.20	0.30	20.30
INTEREST ON OP. CAP.	4.66	0.00	0.00	0.00	0.44	0.84	5.09	1.37	0.42	0.08	0.13	0.74
TOTAL DIRECT EXPENSES	93.56	0.00	0.00	0.00	12.90	28.35	198.70	64.07	24.64	6.58	15.54	168.80
NET INCOME	-93.56	0.00	0.00	0.00	-12.90	-28.35	-198.70	-64.07	-24.64	-6.58	-15.54	595.10
NET INCOME TO DATE	-93.56	-93.56	-93.56	-93.56	-106.46	-134.81	-333.51	-397.58	-422.22	-428.80	-444.34	150.76

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre
Cotton, 8R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT YIELD UNIT			-----dollars-----										
50	500.00	lb	-187	-171	-155	-139	-124	-108	-92	-77	-61	-45	-29
			-307	-292	-276	-260	-245	-229	-213	-197	-182	-166	-150
60	600.00	lb	-150	-132	-113	-94	-75	-56	-37	-18	-0	18	37
			-271	-252	-234	-215	-196	-177	-158	-139	-120	-101	-83
70	700.00	lb	-114	-92	-70	-48	-26	-4	17	39	61	83	105
			-235	-213	-191	-169	-147	-125	-103	-81	-59	-37	-15
80	800.00	lb	-78	-53	-28	-3	21	47	72	97	122	147	172
			-199	-174	-149	-124	-98	-73	-48	-23	1	26	52
90	900.00	lb	-42	-14	14	42	70	98	127	155	183	212	240
			-163	-135	-106	-78	-50	-21	6	34	62	91	119
100	1000.00	lb	-6	24	56	87	119	150	182	213	245	276	307
			-127	-95	-64	-32	-1	29	61	92	124	155	187
110	1100.00	lb	29	64	98	133	168	202	237	271	306	340	375
			-91	-56	-22	12	47	81	116	150	185	220	254
120	1200.00	lb	65	103	141	178	216	254	292	329	367	405	443
			-55	-17	20	58	95	133	171	209	246	284	322
130	1300.00	lb	101	142	183	224	265	306	347	388	428	469	510
			-18	21	62	103	144	185	226	267	308	348	389
140	1400.00	lb	138	182	226	270	314	358	402	446	490	534	578
			17	61	105	149	193	237	281	325	369	413	457
150	1500.00	lb	174	221	268	315	362	409	457	504	551	598	645
			53	100	147	194	241	289	336	383	430	477	524

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 2019 input prices.

Table 7.A Estimated costs per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	18.4000	27.78	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	3.2000	4.10	
Centric 40WG	oz	4.89	2.0000	9.78	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.7365	11.20	
Self-Propelled	hour	15.22	0.3221	4.91	
HAND LABOR					
Implements	hour	9.06	0.3222	2.91	
Self-Propelled	hour	9.06	0.2472	2.24	
UNALLOCATED LABOR	hour	15.19	0.8469	12.87	
DIESEL FUEL					
Tractors	gal	2.30	7.2030	16.57	
Self-Propelled	gal	2.30	4.4973	10.30	
REPAIR & MAINTENANCE					
Implements	acre	8.41	1.0000	8.41	
Tractors	acre	4.36	1.0000	4.36	
Self-Propelled	acre	14.22	1.0000	14.22	
INTEREST ON OP. CAP.	acre	12.59	1.0000	12.59	
TOTAL DIRECT EXPENSES				571.68	
FIXED EXPENSES					
Implements	acre	14.21	1.0000	14.21	
Tractors	acre	29.61	1.0000	29.61	
Self-Propelled	acre	65.36	1.0000	65.36	
TOTAL FIXED EXPENSES				109.18	
TOTAL SPECIFIED EXPENSES				680.86	

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 7.B Summary of estimated costs and returns per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	900.0000	566.01	_____
Cotton Seed	lb	0.10	1215.0000	121.50	_____

TOTAL INCOME				687.51	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	69.03	1.0000	69.03	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	68.82	1.0000	68.82	_____
INSECTICIDES	acre	41.43	1.0000	41.43	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	1.0586	16.11	_____
UNALLOCATED LABOR	hour	15.19	0.8469	12.87	_____
DIESEL FUEL	gal	2.30	11.7003	26.87	_____
REPAIR & MAINTENANCE	acre	26.99	1.0000	26.99	_____
INTEREST ON OP. CAP.	acre	12.59	1.0000	12.59	_____

TOTAL DIRECT EXPENSES				571.68	_____
RETURNS ABOVE DIRECT EXPENSES				115.83	_____
TOTAL FIXED EXPENSES				109.18	_____

TOTAL SPECIFIED EXPENSES				680.86	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				6.65	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 7.C Estimated resource use for field operations, per acre
Cotton, 8R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Mar			0.01	0.02	0.01
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Surfactant	pt					0.2000				
Row Cond Rigid	26'	MFWD 190	0.059	1.00	May		0.05	0.05	0.05	0.04
NT Plant-Folding	8R-38	MFWD 190	0.077	1.00	May		0.07	0.07	0.15	0.06
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 190	0.077	1.00	Jun		0.07	0.07	0.11	0.06
UAN (32%)	gal					18.4000				
Spray (Direct/Layby)	8R-38	MFWD 190	0.066	1.00	Jun		0.06	0.06	0.10	0.05
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				
Mepiquat Chloride	oz					16.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Mepiquat Chloride	oz					16.0000				
Acephate 90%	lb					0.7500				
Incidental Pest				1.00	Jul					
Sprayer 600-750gal	60' 175hp		0.017					0.01	0.02	0.01
IncidentalPestTrt\$15	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker	6R-38(355)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	6R-38(355)	MFWD 190	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	6R-38(355)	MFWD 190	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	900.0000				
Stalk Shredder-Flail	15'	MFWD 190	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 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 7.D Estimated costs for field operations, per acre
 Cotton, 8R-38" solid, no-till
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Row Cond Rigid	26'		1.34	0.60	1.64		0.09	3.67	3.55	7.22
NT Plant-Folding	8R-38		1.75	2.20	2.83		0.18	6.96	6.75	13.71
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	8R-38		1.75	1.44	2.48		0.12	5.79	4.33	10.12
UAN (32%)	gal	27.78					0.61	28.39		28.39
Spray (Direct/Layby)	8R-38		1.50	0.75	2.13		0.10	4.48	3.15	7.63
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
IncidentalPestTrt\$15	acre	15.00					0.26	15.26		15.26
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker	6R-38(355)		7.24	12.52	6.28		0.11	26.15	53.12	79.27
Boll Buggy	6R-38(355)		3.88	2.33	4.72		0.05	10.98	9.85	20.83
Module Builder	6R-38(355)		3.88	2.51	6.28		0.06	12.73	10.26	22.99
Gin & Haul	lb	99.00					0.43	99.43		99.43
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
TOTALS		471.10	26.87	26.99	34.13	0.00	12.59	571.68	109.18	680.86

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 7.E Estimated monthly income and expense flows per acre
Cotton, 8R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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	687.51
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	0.00	0.00	27.78	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	20.38	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	0.56	0.00	5.59	5.17	1.12	0.56	0.84	20.29
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	0.36	0.00	3.81	3.61	0.72	0.36	0.54	17.47
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.20	2.39	0.40	0.20	0.30	20.30
INTEREST ON OP. CAP.	4.23	0.00	0.00	0.00	0.44	0.00	5.10	1.50	0.42	0.08	0.13	0.69
TOTAL DIRECT EXPENSES	84.95	0.00	0.00	0.00	12.90	0.00	199.18	70.14	24.64	6.58	15.54	157.75
NET INCOME	-84.95	0.00	0.00	0.00	-12.90	0.00	-199.18	-70.14	-24.64	-6.58	-15.54	529.76
NET INCOME TO DATE	-84.95	-84.95	-84.95	-84.95	-97.85	-97.85	-297.03	-367.17	-391.81	-398.39	-413.93	115.83

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre
Cotton, 8R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	450.00	lb	-188 -297	-174 -283	-159 -269	-145 -254	-131 -240	-117 -226	-103 -212	-89 -198	-75 -184	-60 -170	-46 -155
60	540.00	lb	-155 -264	-138 -247	-121 -230	-104 -213	-87 -196	-70 -179	-53 -163	-36 -146	-19 -129	-2 -112	14 -95
70	630.00	lb	-123 -232	-103 -212	-83 -192	-63 -172	-43 -153	-24 -133	-4 -113	15 -93	35 -73	55 -54	74 -34
80	720.00	lb	-90 -199	-68 -177	-45 -154	-22 -131	-0 -109	22 -86	45 -64	67 -41	90 -18	113 3	135 26
90	810.00	lb	-58 -167	-32 -141	-7 -116	18 -90	43 -65	69 -40	94 -14	120 10	145 36	171 61	196 87
100	900.00	lb	-25 -134	2 -106	30 -78	59 -49	87 -21	115 6	144 34	172 63	200 91	229 119	257 148
110	990.00	lb	6 -102	37 -71	69 -40	100 -8	131 22	162 53	193 84	224 115	255 146	287 177	318 208
120	1080.00	lb	39 -69	73 -35	107 -1	141 32	175 66	209 99	243 133	277 167	311 201	344 235	378 269
130	1170.00	lb	71 -37	108 -0	145 36	182 73	219 109	255 146	292 183	329 220	366 256	402 293	439 330
140	1260.00	lb	104 -4	143 34	183 74	223 114	262 153	302 193	342 232	381 272	421 312	460 351	500 391
150	1350.00	lb	136 27	179 70	221 112	264 155	306 197	349 239	391 282	434 324	476 367	518 409	561 452

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 2019 input prices.

Table 8.A Estimated costs per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	1000.0000	110.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	28.9332	43.69	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	3.2000	4.10	
Centric 40WG	oz	4.89	2.0000	9.78	
IncidentalPestTrt\$15	acre	15.00	1.0000	15.00	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.4268	6.51	
Self-Propelled	hour	15.22	0.3221	4.91	
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.2472	2.24	
UNALLOCATED LABOR	hour	15.15	0.5992	9.08	
DIESEL FUEL					
Tractors	gal	2.30	4.7451	10.92	
Self-Propelled	gal	2.30	5.7832	13.26	
REPAIR & MAINTENANCE					
Implements	acre	7.42	1.0000	7.42	
Tractors	acre	2.91	1.0000	2.91	
Self-Propelled	acre	23.45	1.0000	23.45	
INTEREST ON OP. CAP.	acre	13.46	1.0000	13.46	
TOTAL DIRECT EXPENSES				593.27	
FIXED EXPENSES					
Implements	acre	11.43	1.0000	11.43	
Tractors	acre	19.73	1.0000	19.73	
Self-Propelled	acre	104.54	1.0000	104.54	
TOTAL FIXED EXPENSES				135.70	
TOTAL SPECIFIED EXPENSES				728.97	

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 8.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1000.0000	628.90	_____
Cotton Seed	lb	0.10	1350.0000	135.00	_____

TOTAL INCOME				763.90	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	110.00	1.0000	110.00	_____
FERTILIZERS	acre	84.93	1.0000	84.93	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	68.82	1.0000	68.82	_____
INSECTICIDES	acre	41.43	1.0000	41.43	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	0.7490	11.42	_____
UNALLOCATED LABOR	hour	15.15	0.5992	9.08	_____
DIESEL FUEL	gal	2.30	10.5284	24.18	_____
REPAIR & MAINTENANCE	acre	33.78	1.0000	33.78	_____
INTEREST ON OP. CAP.	acre	13.46	1.0000	13.46	_____

TOTAL DIRECT EXPENSES				593.27	_____
RETURNS ABOVE DIRECT EXPENSES				170.63	_____
TOTAL FIXED EXPENSES				135.70	_____

TOTAL SPECIFIED EXPENSES				728.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				34.93	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 8.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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	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				1.00	Jul					
Sprayer 600-750gal	60' 175hp		0.017					0.01	0.02	0.01
IncidentalPestTrt\$15	acre					1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Acephate 90%	lb					0.7500				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1000.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							0.74	0.42	1.11	0.59

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 8.D Estimated costs for field operations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12	9.96
Bed/Disk (Hipper)	12R-38		0.66	0.41	0.68		0.09	1.84	1.85	3.69
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41	7.68
UAN (32%)	gal	21.84					0.67	22.51		22.51
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52	10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	21.84					0.48	22.32		22.32
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
IncidentalPestTrt\$15	acre	15.00					0.26	15.26		15.26
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	110.00					0.48	110.48		110.48
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
TOTALS		498.00	24.18	33.78	23.85	0.00	13.46	593.27	135.70	728.97

Note: Cost of production estimates are based on 2019 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, 2020

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	763.90
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	21.84	0.00	21.84	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	20.38	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	2.15	0.00	0.00	0.00	0.56	1.65	4.05	3.63	1.12	0.56	0.84	9.29
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	2.09	0.00	0.00	0.00	0.36	1.38	3.13	2.93	0.72	0.36	0.54	12.67
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.20	1.11	2.83	1.94	0.40	0.20	0.30	24.69
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	0.44	0.80	5.03	1.31	0.42	0.08	0.13	0.69
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	12.90	26.78	196.52	61.34	24.64	6.58	15.54	157.34
NET INCOME	-91.63	0.00	0.00	0.00	-12.90	-26.78	-196.52	-61.34	-24.64	-6.58	-15.54	606.56
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-104.53	-131.31	-327.83	-389.17	-413.81	-420.39	-435.93	170.63

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	dollars										
50	500.00	lb	-167 -302	-151 -287	-135 -271	-120 -255	-104 -240	-88 -224	-72 -208	-57 -192	-41 -177	-25 -161	-9 -145
60	600.00	lb	-131 -266	-112 -247	-93 -229	-74 -210	-55 -191	-36 -172	-17 -153	0 -134	19 -115	38 -96	57 -78
70	700.00	lb	-94 -230	-72 -208	-50 -186	-28 -164	-6 -142	15 -120	37 -98	59 -76	81 -54	103 -32	125 -10
80	800.00	lb	-58 -194	-33 -169	-8 -144	16 -119	41 -93	66 -68	92 -43	117 -18	142 6	167 31	192 57
90	900.00	lb	-22 -158	5 -130	33 -101	62 -73	90 -45	118 -16	147 11	175 39	203 67	231 96	260 124
100	1000.00	lb	13 -122	44 -90	76 -59	107 -27	139 3	170 34	202 66	233 97	264 129	296 160	327 192
110	1100.00	lb	49 -86	84 -51	118 -16	153 17	187 52	222 86	257 121	291 155	326 190	360 225	395 259
120	1200.00	lb	85 -50	123 -12	161 25	198 63	236 100	274 138	312 176	349 214	387 251	425 289	462 327
130	1300.00	lb	121 -13	162 26	203 67	244 108	285 149	326 190	367 231	407 272	448 313	489 353	530 394
140	1400.00	lb	157 22	201 66	245 110	289 154	333 198	377 242	422 286	466 330	510 374	554 418	598 462
150	1500.00	lb	194 58	241 105	288 152	335 199	382 246	429 294	477 341	524 388	571 435	618 482	665 529

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 2019 input prices.

Table 9.A Estimated costs per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	900.0000	99.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	18.4000	27.78	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	3.2000	4.10	
Centric 40WG	oz	4.89	2.0000	9.78	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.2987	4.55	
Self-Propelled	hour	15.22	0.3221	4.91	
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	
Self-Propelled	hour	9.06	0.2472	2.24	
UNALLOCATED LABOR	hour	15.15	0.4967	7.53	
DIESEL FUEL					
Tractors	gal	2.30	3.2620	7.51	
Self-Propelled	gal	2.30	5.7832	13.26	
REPAIR & MAINTENANCE					
Implements	acre	5.40	1.0000	5.40	
Tractors	acre	2.00	1.0000	2.00	
Self-Propelled	acre	23.45	1.0000	23.45	
INTEREST ON OP. CAP.	acre	12.42	1.0000	12.42	
TOTAL DIRECT EXPENSES				555.27	
FIXED EXPENSES					
Implements	acre	7.91	1.0000	7.91	
Tractors	acre	13.54	1.0000	13.54	
Self-Propelled	acre	104.54	1.0000	104.54	
TOTAL FIXED EXPENSES				125.99	
TOTAL SPECIFIED EXPENSES				681.26	

Note: Cost of production estimates are based on 2019 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, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	900.0000	566.01	_____
Cotton Seed	lb	0.10	1215.0000	121.50	_____

TOTAL INCOME				687.51	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	99.00	1.0000	99.00	_____
FERTILIZERS	acre	69.03	1.0000	69.03	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	68.82	1.0000	68.82	_____
INSECTICIDES	acre	41.43	1.0000	41.43	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	0.6209	9.46	_____
UNALLOCATED LABOR	hour	15.15	0.4967	7.53	_____
DIESEL FUEL	gal	2.30	9.0453	20.77	_____
REPAIR & MAINTENANCE	acre	30.85	1.0000	30.85	_____
INTEREST ON OP. CAP.	acre	12.42	1.0000	12.42	_____

TOTAL DIRECT EXPENSES				555.27	_____
RETURNS ABOVE DIRECT EXPENSES				132.24	_____
TOTAL FIXED EXPENSES				125.99	_____

TOTAL SPECIFIED EXPENSES				681.26	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				6.25	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 9.C Estimated resource use for field operations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	900.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							0.62	0.29	0.96	0.49

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 9.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, no-till
 B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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					0.17	3.50		3.50
Lime (Spread)	ton	28.64					1.50	30.14		30.14
Custom Apply Fert	acre	7.50					0.39	7.89		7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42		43.42
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44	2.60
Clarity	pt	5.80					0.20	6.00		6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64		4.64
Surfactant	pt	1.06					0.04	1.10		1.10
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36	6.23
NT Plant-Folding	12R-38		1.38	2.13	1.89		0.14	5.54	6.19	11.73
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06		108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53		20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37		8.37
Cotoran	pt	11.70					0.31	12.01		12.01
Surfactant	pt	1.06					0.03	1.09		1.09
Cotton Consultant	acre	8.00					0.21	8.21		8.21
Eradication	acre	1.00					0.03	1.03		1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44	2.59
Dual Magnum	pt	10.26					0.27	10.53		10.53
Liberty 280	oz	14.21					0.37	14.58		14.58
Acephate 90%	lb	1.79					0.05	1.84		1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Bidrin 8EC	oz	4.10					0.09	4.19		4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41	7.64
UAN (32%)	gal	27.78					0.61	28.39		28.39
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56	5.87
Liberty 280	oz	14.21					0.31	14.52		14.52
Mepiquat Chloride	oz	1.60					0.04	1.64		1.64
Centric 40WG	oz	9.78					0.21	9.99		9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
Mepiquat Chloride	oz	1.60					0.03	1.63		1.63
Acephate 90%	lb	5.38					0.09	5.47		5.47
Incidental Pest										
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44	2.58
IncidentalPestTrt\$15	acre	15.00					0.26	15.26		15.26
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Acephate 90%	lb	5.38					0.07	5.45		5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44	2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73		2.73
Ethephon 6E	pt	5.80					0.05	5.85		5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72	1.28
Tribufos 6lb	pt	4.31					0.04	4.35		4.35
Ethephon 6E	pt	0.91					0.01	0.92		0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30	130.70
Gin & Haul	lb	99.00					0.43	99.43		99.43
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93	14.39
TOTALS		471.10	20.77	30.85	20.13	0.00	12.42	555.27	125.99	681.26

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 9.E Estimated monthly income and expense flows per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

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	687.51
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	0.00	0.00	27.78	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	20.38	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	0.56	0.00	4.13	3.63	1.12	0.56	0.84	9.29
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	0.36	0.00	3.19	2.93	0.72	0.36	0.54	12.67
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.20	0.00	3.12	1.94	0.40	0.20	0.30	24.69
INTEREST ON OP. CAP.	4.23	0.00	0.00	0.00	0.44	0.00	5.04	1.44	0.42	0.08	0.13	0.64
TOTAL DIRECT EXPENSES	84.95	0.00	0.00	0.00	12.90	0.00	196.96	67.41	24.64	6.58	15.54	146.29
NET INCOME	-84.95	0.00	0.00	0.00	-12.90	0.00	-196.96	-67.41	-24.64	-6.58	-15.54	541.22
NET INCOME TO DATE	-84.95	-84.95	-84.95	-84.95	-97.85	-97.85	-294.81	-362.22	-386.86	-393.44	-408.98	132.24

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, no-till
B3XF/W3FE variety, Non-Delta Area, Mississippi, 2020

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	-----dollars-----										
50	450.00	lb	-171	-157	-143	-129	-115	-101	-86	-72	-58	-44	-30
			-297	-283	-269	-255	-241	-227	-212	-198	-184	-170	-156
60	540.00	lb	-139	-122	-105	-88	-71	-54	-37	-20	-3	13	30
			-265	-248	-231	-214	-197	-180	-163	-146	-129	-112	-95
70	630.00	lb	-106	-86	-67	-47	-27	-7	12	31	51	71	91
			-232	-212	-193	-173	-153	-133	-113	-94	-74	-54	-34
80	720.00	lb	-74	-51	-28	-6	16	38	61	84	106	129	152
			-200	-177	-154	-132	-109	-87	-64	-41	-19	3	26
90	810.00	lb	-41	-16	9	34	60	85	111	136	161	187	212
			-167	-142	-116	-91	-65	-40	-14	10	36	61	86
100	900.00	lb	-9	19	47	75	103	132	160	188	217	245	273
			-135	-106	-78	-50	-22	6	34	62	91	119	147
110	990.00	lb	23	54	85	116	147	178	210	241	272	303	334
			-102	-71	-40	-9	21	52	84	115	146	177	208
120	1080.00	lb	55	89	123	157	191	225	259	293	327	361	395
			-70	-36	-2	31	65	99	133	167	201	235	269
130	1170.00	lb	88	125	161	198	235	272	309	345	382	419	456
			-37	-0	35	72	109	146	183	219	256	293	330
140	1260.00	lb	120	160	200	239	279	318	358	398	437	477	516
			-5	34	74	113	153	192	232	272	311	351	390
150	1350.00	lb	153	195	238	280	323	365	407	450	492	535	577
			27	69	112	154	197	239	281	324	366	409	451

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 2019 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, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
HARVEST AIDS					
Thidiazuron 4lb	oz	1.18	2.3000	2.71	
Ethephon 6E	pt	2.90	2.3125	6.71	
Tribufos 6lb	pt	8.61	0.5000	4.31	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	27.50	1.5000	41.25	
UAN (32%)	gal	1.51	28.9332	43.69	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	11.60	0.5000	5.80	
Glyphosate 3lbs a.e	oz	0.14	32.0000	4.48	
Gramoxone SL 2.0	oz	0.17	48.0000	8.16	
Cotoran	pt	5.85	2.0000	11.70	
Dual Magnum	pt	10.26	1.0000	10.26	
Liberty 280	oz	0.49	58.0000	28.42	
INSECTICIDES					
Acephate 90%	lb	7.17	1.7500	12.55	
Bidrin 8EC	oz	1.28	3.2000	4.10	
Centric 40WG	oz	4.89	2.0000	9.78	
IncidentalPestTrt\$15	acre	15.00	1.5000	22.50	
SEED/PLANTS					
Cot. Seed B3XF/W3FE	thous	2.34	45.0000	105.30	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.10	32.0000	3.20	
ADJUVANTS					
Surfactant	pt	5.31	0.4000	2.12	
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	43.00	0.6660	28.64	
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	15.22	0.4268	6.51	
Self-Propelled	hour	15.22	0.3309	5.04	
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	0.2516	2.28	
UNALLOCATED LABOR	hour	15.15	0.6062	9.19	
DIESEL FUEL					
Tractors	gal	2.30	4.7451	10.92	
Self-Propelled	gal	2.30	5.8626	13.45	
1/4-mi. Pivot Irr.	gal	2.30	11.2011	25.77	
REPAIR & MAINTENANCE					
Implements	acre	7.42	1.0000	7.42	
Tractors	acre	2.91	1.0000	2.91	
Self-Propelled	acre	23.56	1.0000	23.56	
1/4-mi. Pivot Irr.	acre	21.65	1.0000	21.65	
INTEREST ON OP. CAP.	acre	14.64	1.0000	14.64	
TOTAL DIRECT EXPENSES				673.79	
FIXED EXPENSES					
Implements	acre	11.43	1.0000	11.43	
Tractors	acre	19.73	1.0000	19.73	
Self-Propelled	acre	105.26	1.0000	105.26	
1/4-mi. Pivot Irr.	acre	82.73	1.0000	82.73	
TOTAL FIXED EXPENSES				219.15	
TOTAL SPECIFIED EXPENSES				892.94	

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 10.B Summary of estimated costs and returns per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2020

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Cotton Lint	lb	0.62	1200.0000	754.68	_____
Cotton Seed	lb	0.10	1620.0000	162.00	_____

TOTAL INCOME				916.68	_____
DIRECT EXPENSES					
HARVEST AIDS	acre	13.73	1.0000	13.73	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	84.93	1.0000	84.93	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	68.82	1.0000	68.82	_____
INSECTICIDES	acre	48.93	1.0000	48.93	_____
SEED/PLANTS	acre	105.30	1.0000	105.30	_____
GROWTH REGULATORS	acre	3.20	1.0000	3.20	_____
ADJUVANTS	acre	2.12	1.0000	2.12	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	28.64	1.0000	28.64	_____
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	15.22	0.7578	11.55	_____
UNALLOCATED LABOR	hour	15.15	0.6062	9.19	_____
DIESEL FUEL	gal	2.30	21.8089	50.14	_____
REPAIR & MAINTENANCE	acre	55.54	1.0000	55.54	_____
INTEREST ON OP. CAP.	acre	14.64	1.0000	14.64	_____

TOTAL DIRECT EXPENSES				673.79	_____
RETURNS ABOVE DIRECT EXPENSES				242.89	_____
TOTAL FIXED EXPENSES				219.15	_____

TOTAL SPECIFIED EXPENSES				892.94	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				23.74	_____

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 10.C Estimated resource use for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2020

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	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
IncidentalPestTrt\$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				
Ethephon 6E	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.50	Sep			0.00	0.01	0.00
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000				
Stalk Shredder-Flail	15'	MFWD 190	0.110	1.00	Oct		0.11	0.11	0.11	0.08
1/4-mi. Pivot Irr.	acre				Jan	1.0000			0.20	
TOTALS							0.75	0.42	1.33	0.60

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 10.D Estimated costs for field operations, per acre
 Cotton, 12R-38" solid, conservation tillage
 B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2020

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					0.17	3.50			3.50
Lime (Spread)	ton	28.64					1.50	30.14			30.14
Custom Apply Fert	acre	7.50					0.39	7.89			7.89
Potash (60% K2O)	cwt	41.25					2.17	43.42			43.42
Bed-Subsoil Fold	12R-38		1.43	1.70	1.47		0.24	4.84	5.12		9.96
Bed/Disk (Hipper)	12R-38		0.66	0.41	0.68		0.09	1.84	1.85		3.69
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.04	1.16	1.44		2.60
Clarity	pt	5.80					0.20	6.00			6.00
Glyphosate 3lbs a.e	oz	4.48					0.16	4.64			4.64
Surfactant	pt	1.06					0.04	1.10			1.10
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.13	4.27	3.41		7.68
UAN (32%)	gal	21.84					0.67	22.51			22.51
Row Cond Folding	38'		1.09	0.59	1.12		0.07	2.87	3.36		6.23
Plant - Folding	12R-38		1.32	1.84	1.81		0.13	5.10	5.52		10.62
Cot. Seed B3XF/W3FE	thous	105.30					2.76	108.06			108.06
Cotton Seed Trt.	acre	20.00					0.53	20.53			20.53
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44		2.59
Gramoxone SL 2.0	oz	8.16					0.21	8.37			8.37
Cotoran	pt	11.70					0.31	12.01			12.01
Surfactant	pt	1.06					0.03	1.09			1.09
Cotton Consultant	acre	8.00					0.21	8.21			8.21
Eradication	acre	1.00					0.03	1.03			1.03
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.03	1.15	1.44		2.59
Dual Magnum	pt	10.26					0.27	10.53			10.53
Liberty 280	oz	14.21					0.37	14.58			14.58
Acephate 90%	lb	1.79					0.05	1.84			1.84
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44		2.58
Bidrin 8EC	oz	4.10					0.09	4.19			4.19
Fert Appl (Liquid)	12R-38		1.38	1.11	1.65		0.09	4.23	3.41		7.64
UAN (32%)	gal	21.84					0.48	22.32			22.32
Spray (Direct/Layby)	12R-38		1.19	0.63	1.42		0.07	3.31	2.56		5.87
Liberty 280	oz	14.21					0.31	14.52			14.52
Mepiquat Chloride	oz	1.60					0.04	1.64			1.64
Centric 40WG	oz	9.78					0.21	9.99			9.99
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.02	1.14	1.44		2.58
Mepiquat Chloride	oz	1.60					0.03	1.63			1.63
Acephate 90%	lb	5.38					0.09	5.47			5.47
Incidental Pest											
Sprayer 600-750gal	60' 175hp		0.55	0.31	0.84		0.03	1.73	2.16		3.89
IncidentalPestTrt\$15	acre	22.50					0.39	22.89			22.89
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44		2.57
Acephate 90%	lb	5.38					0.07	5.45			5.45
Sprayer 600-750gal	60' 175hp		0.36	0.20	0.56		0.01	1.13	1.44		2.57
Thidiazuron 4lb	oz	2.71					0.02	2.73			2.73
Ethephon 6E	pt	5.80					0.05	5.85			5.85
Sprayer 600-750gal	60' 175hp		0.18	0.10	0.28			0.56	0.72		1.28
Tribufos 6lb	pt	4.31					0.04	4.35			4.35
Ethephon 6E	pt	0.91					0.01	0.92			0.92
Cotton Picker/Module	6R-38(500)		10.20	21.75	6.28		0.17	38.40	92.30		130.70
Gin & Haul	lb	132.00					0.58	132.58			132.58
Stalk Shredder-Flail	15'		2.47	2.94	3.01		0.04	8.46	5.93		14.39
1/4-mi. Pivot Irr.	acre		25.77	21.65	1.84		0.94	50.20	82.73		132.93
TOTALS		527.50	50.14	55.54	25.97	0.00	14.64	673.79	219.15		892.94

Note: Cost of production estimates are based on 2019 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, 2020

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	916.68
DIRECT EXPENSES												
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.73	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	41.25	0.00	0.00	0.00	0.00	21.84	0.00	21.84	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	10.28	0.00	44.33	14.21	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	1.79	13.88	27.88	5.38	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.30	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	1.60	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.06	0.00	1.06	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	28.64	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	2.15	0.00	0.00	0.00	0.56	1.65	5.39	3.78	1.60	0.71	0.84	9.29
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	2.09	0.00	0.00	0.00	0.36	1.38	3.13	10.66	11.22	8.09	0.54	12.67
REPAIR & MAINTENANCE	2.11	0.00	0.00	0.00	0.20	1.11	2.83	20.32	2.38	1.60	0.30	24.69
INTEREST ON OP. CAP.	4.56	0.00	0.00	0.00	0.44	0.80	5.07	1.88	0.77	0.20	0.13	0.79
TOTAL DIRECT EXPENSES	91.63	0.00	0.00	0.00	12.90	26.78	197.90	88.17	45.45	15.98	15.54	179.44
NET INCOME	-91.63	0.00	0.00	0.00	-12.90	-26.78	-197.90	-88.17	-45.45	-15.98	-15.54	737.24
NET INCOME TO DATE	-91.63	-91.63	-91.63	-91.63	-104.53	-131.31	-329.21	-417.38	-462.83	-478.81	-494.35	242.89

Note: Cost of production estimates are based on 2019 input prices.

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

* Lease costs are based on hourly usage costs.

Table 10.F Estimated returns for various price/yield combinations, per acre
Cotton, 12R-38" solid, conservation tillage
B3XF/W3FE pivot irrigated, 7.5 ac.-in., Non-Delta, Mississippi, 2020

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Cotton Lint			0.47	0.50	0.53	0.56	0.59	0.62	0.66	0.69	0.72	0.75	0.78
PERCENT	YIELD	UNIT	-----dollars-----										
50	600.00	lb	-162 -381	-143 -362	-124 -343	-105 -325	-87 -306	-68 -287	-49 -268	-30 -249	-11 -230	7 -211	26 -192
60	720.00	lb	-119 -338	-96 -315	-73 -293	-51 -270	-28 -247	-5 -225	16 -202	39 -179	61 -157	84 -134	107 -111
70	840.00	lb	-75 -294	-49 -268	-22 -242	3 -215	29 -189	56 -162	82 -136	109 -110	135 -83	161 -57	188 -30
80	960.00	lb	-32 -251	-2 -221	27 -191	58 -161	88 -130	118 -100	148 -70	178 -40	209 -10	239 20	269 50
90	1080.00	lb	10 -208	44 -174	78 -140	112 -106	146 -72	180 -38	214 -4	248 29	282 63	316 97	350 131
100	1200.00	lb	54 -164	91 -127	129 -89	167 -51	205 -13	242 23	280 61	318 99	356 136	393 174	431 212
110	1320.00	lb	97 -121	139 -80	180 -38	222 2	263 44	305 85	346 127	388 168	429 210	471 251	512 293
120	1440.00	lb	140 -78	186 -32	231 12	276 57	322 102	367 148	412 193	457 238	503 284	548 329	593 374
130	1560.00	lb	184 -34	233 14	282 63	331 112	380 161	429 210	478 259	527 308	576 357	625 406	674 455
140	1680.00	lb	227 8	280 61	333 114	386 166	438 219	491 272	544 325	597 378	650 431	703 483	755 536
150	1800.00	lb	270 51	327 108	384 164	440 221	497 278	553 334	610 391	667 447	723 504	780 561	836 617

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 2019 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, 2020

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (250-299 hp)	265 hp	352,000	300	8	13.64	15.22	31.37	36.66	83.25	155.57	238.83
Combine (300-349 hp)	325 hp	383,000	300	8	16.73	15.22	38.47	39.89	93.59	169.27	262.87
Combine (350-399 hp)	355 hp	395,000	300	8	18.27	15.22	42.02	41.14	98.38	174.58	272.96
Combine (400-449 hp)	425 hp	425,000	300	8	21.87	15.22	50.31	44.27	109.80	187.84	297.64
Combine (450-499hp)	475 hp	455,000	300	8	24.44	15.22	56.23	47.39	118.84	201.09	319.94
Tractor (20-39hp)CB	MFWD 30	30,000	600	8	1.54	15.22	3.55	0.93	19.70	6.12	25.83
Tractor (20-39hp)RB	MFWD 30	20,800	600	8	1.54	15.22	3.55	0.65	19.42	4.24	23.67
Tractor (40-59hp)CB	2WD 50	30,400	600	8	2.57	15.22	5.91	0.95	22.08	6.21	28.29
Tractor (40-59hp)CB	MFWD 50	40,300	600	8	2.57	15.22	5.91	1.25	22.39	8.23	30.63
Tractor (40-59hp)RB	2WD 50	21,600	600	8	2.57	15.22	5.91	0.67	21.81	4.41	26.22
Tractor (40-59hp)RB	MFWD 50	27,500	600	8	2.57	15.22	5.91	0.85	21.99	5.61	27.61
Tractor (60-89hp)CB	2WD 75	50,200	600	8	3.86	15.22	8.87	1.56	25.66	10.25	35.92
Tractor (60-89hp)CB	MFWD 75	56,800	600	8	3.86	15.22	8.87	1.77	25.87	11.60	37.47
Tractor (60-89hp)RB	2WD 75	35,800	600	8	3.86	15.22	8.87	1.11	25.21	7.31	32.53
Tractor (60-89hp)RB	MFWD 75	42,000	600	8	3.86	15.22	8.87	1.31	25.41	8.58	33.99
Tractor (90-119hp)CB	2WD 105	69,300	600	8	5.40	15.22	12.43	2.16	29.81	14.15	43.97
Tractor (90-119hp)CB	MFWD 105	88,100	600	8	5.40	15.22	12.43	2.75	30.40	17.99	48.40
Tractor (90-119hp)RB	2WD 105	62,300	600	8	5.40	15.22	12.43	1.94	29.59	12.72	42.32
Tractor (90-119hp)RB	MFWD 105	69,700	600	8	5.40	15.22	12.43	2.17	29.82	14.23	44.06
Tractor (120-139hp)CB	2WD 130	110,000	600	8	6.69	15.22	15.39	3.43	34.04	22.47	56.52
Tractor (120-139hp)CB	MFWD 130	125,000	600	8	6.69	15.22	15.39	3.90	34.51	25.53	60.05
Tractor (140-159hp)	2WD 150	108,000	600	8	7.72	15.22	17.75	3.37	36.35	22.06	58.41
Tractor (140-159hp)CB	MFWD 150	140,000	600	8	7.72	15.22	17.75	4.37	37.35	28.60	65.95
Tractor (160-179hp)CB	MFWD 170	155,000	600	8	8.75	15.22	20.12	4.84	40.18	32.95	73.14
Tractor (180-199hp)CB	MFWD 190	189,000	600	8	9.77	15.22	22.49	5.90	43.61	40.18	83.80
Tractor (200-249hp)CB	MFWD 225	227,000	600	8	11.58	15.22	26.63	7.09	48.95	48.27	97.22
Tractor (250-349hp)CB	4WD 300	298,000	600	8	15.44	15.22	35.51	9.31	60.04	63.36	123.41
Tractor (250-349hp)CB	MFWD 300	301,000	600	8	15.44	15.22	35.51	9.40	60.14	64.00	124.14
Tractor (250-349hp)CB	Track 300	327,000	600	8	15.44	15.22	35.51	10.21	60.95	69.53	130.48
Tractor (350-449hp)	Track 400	426,000	600	8	20.58	15.22	47.35	13.31	75.88	90.58	166.47
Tractor (350-449hp)CB	4WD 400	342,000	600	8	20.58	15.22	47.35	10.68	73.26	72.72	145.98
Tractor (450-550hp)CB	4WD 500	412,000	600	8	25.73	15.22	59.19	12.87	87.28	87.60	174.89
Tractor (450-550hp)CB	Track 500	466,000	600	8	25.73	15.22	59.19	14.56	88.97	99.09	188.06
Utility Vehicle	800 CC	12,200	200	8	0.70	15.22	1.54	1.90	18.66	8.08	26.75
Utility Vehicle	900 CC	15,800	200	8	1.00	15.22	2.20	2.46	19.88	10.47	30.36

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, 2020

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	6.25	7.62	10.79	24.68	45.80	70.48
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.25	10.68	14.13	31.07	59.98	91.06
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	4.18	7.13	9.61	20.93	40.78	61.71
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	5.29	9.17	15.85	30.32	67.28	97.61
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.18	7.24	12.51	23.94	53.11	77.06
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.25	12.20	21.58	40.05	91.60	131.65
Cotton Picker/Module	6R-30 (500)	776,000	200	8	25.73	0.218	5.29	12.91	26.46	44.68	112.28	156.96
Cotton Picker/Module	6R-38 (500)	808,000	200	8	25.73	0.172	4.18	10.19	21.75	36.13	92.30	128.43
Dry Applicator SP	70'300cuft	344,000	350	8	16.98	0.015	0.29	0.59	0.27	1.16	1.96	3.13
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.34	0.36	0.20	0.91	1.44	2.35
Sprayer 600-825gal	80' 175hp	215,000	350	8	11.81	0.013	0.26	0.35	0.15	0.77	1.07	1.84
Sprayer 600-825gal	90' 250hp	316,000	350	8	12.73	0.011	0.23	0.34	0.19	0.77	1.40	2.18
Sprayer 800gal	100' 250hp	317,000	350	8	14.15	0.010	0.20	0.34	0.17	0.73	1.27	2.00
Sprayer 800gal	80' 250hp	287,000	350	8	12.86	0.013	0.26	0.39	0.20	0.85	1.43	2.29
Sprayer 1000-1400gal	90' 275hp	316,000	350	8	14.15	0.010	0.20	0.34	0.17	0.73	1.26	1.99
Sprayer 1000gal	100' 300hp	357,000	350	8	15.44	0.010	0.20	0.37	0.20	0.78	1.43	2.21
Sprayer 1200+gal	120' 300hp	376,000	350	8	15.44	0.008	0.17	0.31	0.17	0.66	1.25	1.91

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 3. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.		Total Direct	--Fixed-- Imp. P.U.		Total Cost
			dollars	hours	years	hr/ac	-----\$/acre-----							
Bed-Rip/Disk Fold.	8R-38	MFWD 190	48,700	300	20	0.073	1.11	1.64	0.17	0.43	3.36	0.96	2.93	7.26
Bed-Rip/Disk Fold.	12R-30	MFWD 225	67,900	300	20	0.061	0.93	1.64	0.20	0.43	3.22	1.13	2.97	7.32
Bed-Rip/Disk Fold.	12R-38	MFWD 225	67,900	300	20	0.046	0.70	1.23	0.15	0.32	2.41	0.84	2.23	5.49
Bed-Rip/Disk Rigid	4R-30	MFWD 190	21,400	300	20	0.184	2.81	4.15	0.19	1.09	8.26	1.06	7.42	16.76
Bed-Rip/Disk Rigid	4R-38	MFWD 190	21,400	300	20	0.146	2.23	3.30	0.15	0.86	6.55	0.84	5.89	13.30
Bed-Rip/Disk Rigid	6R-30	MFWD 190	29,800	300	20	0.123	1.87	2.77	0.18	0.72	5.55	0.99	4.95	11.50
Bed-Rip/Disk Rigid	6R-38	MFWD 190	39,800	300	20	0.097	1.48	2.18	0.19	0.57	4.43	1.04	3.91	9.39
Bed-Rip/Disk Rigid	8R-30	MFWD 190	39,800	300	20	0.139	2.11	3.12	0.27	0.82	6.33	1.49	5.58	13.42
Bed-Rip/Disk Rigid	8R-38	MFWD 190	29,800	300	20	0.073	1.11	1.64	0.10	0.43	3.29	0.58	2.93	6.82
Bed-Subsoil Fold	8R-38	MFWD 225	48,700	150	12	0.080	1.22	2.15	1.42	0.57	5.37	2.71	3.89	11.98
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	67,900	150	12	0.053	0.81	1.43	1.31	0.38	3.95	2.51	2.59	9.06
Bed-Subsoil Fold	12R-38	MFWD 225	67,900	150	12	0.053	0.81	1.43	1.31	0.38	3.95	2.51	2.59	9.06
Bed-Subsoil Rigid	4R-30	MFWD 225	21,400	150	12	0.204	3.10	5.44	1.57	1.44	11.58	3.01	9.86	24.45
Bed-Subsoil Rigid	4R-38	MFWD 225	21,400	150	12	0.160	2.44	4.28	1.24	1.14	9.11	2.37	7.76	19.25
Bed-Subsoil Rigid	6R-30	MFWD 225	29,800	150	12	0.136	2.07	3.62	1.46	0.96	8.13	2.79	6.57	17.50
Bed-Subsoil Rigid	6R-38	MFWD 225	29,800	150	12	0.107	1.63	2.86	1.15	0.76	6.42	2.20	5.19	13.82
Bed-Subsoil Rigid	8R-30	MFWD 225	39,800	150	12	0.102	1.55	2.72	1.46	0.72	6.46	2.80	4.93	14.20
Bed-Subsoil Rigid	8R-38	MFWD 225	39,800	150	12	0.080	1.22	2.15	1.16	0.57	5.11	2.21	3.89	11.22
Bed/Disk (Hipper)	4R-38	MFWD 150	9,200	160	10	0.147	2.24	2.62	0.33	0.64	5.85	0.97	4.22	11.05
Bed/Disk (Hipper)	6R-38	MFWD 170	15,200	160	10	0.098	1.50	1.98	0.37	0.47	4.34	1.07	3.25	8.67
Bed/Disk (Hipper)	8R-30	MFWD 190	19,500	160	10	0.093	1.42	2.10	0.45	0.55	4.54	1.31	3.76	9.62
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	37,400	160	10	0.049	0.75	1.10	0.46	0.29	2.61	1.32	1.98	5.92
Bed/Disk (Hipper)	12R-30	MFWD 225	34,500	160	10	0.062	0.95	1.66	0.53	0.44	3.59	1.54	3.01	8.16
Bed/Disk (Hipper)	12R-38	MFWD 225	37,400	160	10	0.049	0.75	1.31	0.46	0.35	2.87	1.32	2.38	6.58
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	27,200	160	10	0.074	1.12	1.66	0.50	0.43	3.73	1.44	2.97	8.16
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	21,000	160	10	0.074	1.12	1.66	0.38	0.43	3.62	1.11	2.97	7.71
Bed/Lister-Roll-Fo	8R-38	MFWD 190	24,300	160	10	0.095	1.45	2.15	0.58	0.56	4.76	1.67	3.85	10.29
Bed/Lister-Roll-Fo	12R-30	MFWD 225	36,175	160	10	0.080	1.23	2.15	0.73	0.57	4.69	2.10	3.90	10.69
Bed/Lister-Roll-Fo	12R-38	MFWD 225	35,700	160	10	0.063	0.97	1.70	0.56	0.45	3.69	1.63	3.08	8.41
Bed/Lister-Roll-Fo	16R-30	MFWD 225	40,400	160	10	0.060	0.92	1.61	0.61	0.43	3.58	1.76	2.92	8.27
Bed/Lister-Roll-Ri	8R-38	MFWD 190	24,300	160	10	0.095	1.45	2.15	0.58	0.56	4.76	1.67	3.85	10.29
Blade-Box	6'-7'	MFWD 105	1,620	200	20	0.020	0.30	0.24	0.01	0.04	0.61	0.01	0.28	0.91
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-Scraper	6'-7'	MFWD 105	1,330	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	4,100	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	3.92	5.79	1.96	1.52	13.20	4.37	10.36	27.94
Boll Buggy	4R-38 (350)	MFWD 190	30,500	200	10	0.257	3.92	5.79	1.96	1.52	13.20	4.37	10.36	27.94
Boll Buggy	4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.62	3.87	1.31	1.01	8.82	2.92	6.92	18.67
Boll Buggy	6R-30 (355)	MFWD 190	30,500	200	10	0.218	3.32	4.90	1.66	1.28	11.18	3.70	8.77	23.65
Boll Buggy	6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.62	3.87	1.31	1.01	8.82	2.92	6.92	18.67
Chisel Plow-Folding	24'	MFWD 190	42,200	150	12	0.076	1.16	1.71	1.16	0.45	4.49	2.22	3.07	9.79
Chisel Plow-Folding	32'	MFWD 225	54,200	150	12	0.057	0.87	1.53	1.13	0.40	3.95	2.15	2.78	8.90
Chisel Plow-Folding	42'	MFWD 225	65,100	150	12	0.044	0.66	1.17	1.03	0.31	3.18	1.97	2.12	7.28
Chisel Plow-Folding	50'	MFWD 225	85,200	150	12	0.036	0.56	0.98	1.13	0.26	2.94	2.17	1.78	6.90
Chisel Plow-Folding	61'	MFWD 225	97,700	150	12	0.030	0.46	0.80	1.06	0.21	2.55	2.04	1.46	6.05
Chisel Plow-Rigid	10'	MFWD 170	7,790	150	12	0.184	2.81	3.72	0.52	0.89	7.94	0.99	6.09	15.03
Chisel Plow-Rigid	15'	2WD 130	14,700	150	12	0.123	1.87	1.89	0.65	0.42	4.85	1.24	2.76	8.86
Chisel Plow-Rigid	20'	MFWD 225	12,000	150	12	0.102	1.56	2.73	0.44	0.72	5.47	0.84	4.95	11.28
Cultivate	4R-30	2WD 105	14,600	150	10	0.206	3.13	2.56	0.80	0.44	6.95	2.30	2.92	12.18
Cultivate	4R-38	2WD 105	14,200	150	10	0.162	2.47	2.01	0.61	0.31	5.42	1.76	2.06	9.25
Cultivate	6R-30	MFWD 150	18,500	150	10	0.137	2.09	2.44	0.67	0.60	5.81	1.94	3.93	11.69
Cultivate	6R-38	MFWD 150	19,300	150	10	0.108	1.65	1.92	0.55	0.47	4.61	1.60	3.10	9.32
Cultivate	8R-30	MFWD 190	24,200	150	10	0.103	1.56	2.31	0.66	0.60	5.16	1.91	4.14	11.22
Cultivate	8R-38	MFWD 190	27,300	150	10	0.073	1.12	1.65	0.53	0.43	3.74	1.54	2.96	8.25
Cultivate	8R-38 2x1	MFWD 190	39,300	150	10	0.054	0.82	1.22	0.56	0.32	2.93	1.63	2.18	6.75
Cultivate	12R-30	MFWD 225	45,600	150	10	0.068	1.04	1.83	0.83	0.48	4.20	2.40	3.31	9.92
Cultivate	12R-38	MFWD 225	44,600	150	10	0.054	0.82	1.44	0.64	0.38	3.30	1.85	2.62	7.77
Cultivate	16R-30	MFWD 225	58,400	150	10	0.051	0.78	1.37	0.80	0.36	3.32	2.30	2.48	8.12
Cultivate & Post	4R-30	2WD 105	21,900	150	10	0.220	4.34	2.73	1.28	0.42	8.79	3.69	2.80	15.28
Cultivate & Post	4R-38	2WD 105	21,600	150	10	0.173	3.42	2.15	0.99	0.33	6.90	2.86	2.20	11.98
Cultivate & Post	6R-30	MFWD 150	25,900	150	10	0.146	2.89	2.60	1.01	0.64	7.15	2.91	4.19	14.26
Cultivate & Post	6R-38	MFWD 150	26,600	150	10	0.115	2.28	2.05	0.82	0.50	5.67	2.36	3.31	11.34
Cultivate & Post	8R-30	MFWD 190	31,500	150	10	0.110	2.17	2.47	0.92	0.64	6.22	2.65	4.42	13.29
Cultivate & Post	8R-38	MFWD 190	34,700	150	10	0.086	1.71	1.95	0.80	0.51	4.99	2.31	3.49	10.79
Cultivate & Post	8R-38 2x1	MFWD 190	47,900	150	10	0.057	1.14	1.30	0.73	0.34	3.52	2.12	2.32	7.97
Cultivate & Post	12R-30	MFWD 225	52,900	150	10	0.073	1.44	1.95	1.03	0.52	4.95	2.97	3.53	11.46
Cultivate & Post	12R-38	MFWD 225	53,200	150	10	0.057	1.14	1.54	0.82	0.41	3.91	2.36	2.79	9.07
Cultivate & Post	16R-30	MFWD 225	61,700	150	10	0.055	1.08	1.46	0.90	0.39	3.84	2.60	2.65	9.10
Disk & Incorporate	14'	2WD 130	33,200	200	10	0.149	2.95	2.30	1.49	0.51	7.26	2.85	3.36	13.48
Disk & Incorporate	20'	MFWD 190	75,700	200	10	0.092	1.40	2.07	2.09	0.54	6.13	4.02	3.71	13.86
Disk & Incorporate	24'	MFWD 190	51,800	200	10	0.087	1.72	1.96	1.35	0.51	5.56	2.59	3.50	11.66
Disk & Incorporate	28'	MFWD 225	61,200	200	10	0.074	1.47	1.99	1.37	0.53	5.37			

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost
			dollars	hours	years	hr/ac				\$/acre		
Disk Harrow	42'	MFWD 225	98,700	180	10	0.046	0.71	1.24	1.28 0.33	3.57	2.94 2.25	8.77
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.13	1.24	0.65 0.15	4.18	1.49 1.02	6.71
Disk Heavy	14'	MFWD 150	25,900	180	10	0.145	2.22	2.59	1.05 0.63	6.50	2.41 4.17	13.09
Disk Heavy	20'	MFWD 190	45,000	180	10	0.097	1.48	2.18	1.21 0.57	5.46	2.79 3.91	12.16
Disk Heavy	28'	MFWD 225	53,800	180	10	0.075	1.15	2.01	1.13 0.53	4.83	2.60 3.65	11.08
Disk Ripper	15'	MFWD 225	49,200	180	10	0.136	2.07	3.62	1.86 0.96	8.52	4.28 6.57	19.38
Ditcher		2WD 130	6,100	200	10	0.020	0.30	0.30	0.04 0.06	0.72	0.07 0.44	1.24
Ditcher (1m/160a)		2WD 130	6,100	200	10	0.009	0.14	0.14	0.02 0.03	0.34	0.03 0.21	0.58
Fert Appl (Liquid)	4R-38	MFWD 150	12,900	150	8	0.154	3.05	2.74	1.33 0.67	7.80	1.63 4.42	13.86
Fert Appl (Liquid)	6R-30	MFWD 170	18,500	150	8	0.130	2.58	2.63	1.61 0.63	7.47	1.97 4.31	13.76
Fert Appl (Liquid)	6R-38	MFWD 170	18,500	150	8	0.103	2.04	2.08	1.27 0.50	5.89	1.56 3.40	10.86
Fert Appl (Liquid)	8R-30	MFWD 190	18,400	150	8	0.098	1.93	2.20	1.20 0.58	5.93	1.47 3.94	11.35
Fert Appl (Liquid)	8R-38	MFWD 190	19,000	150	8	0.077	1.53	1.74	0.98 0.45	4.72	1.20 3.12	9.04
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	21,600	150	8	0.051	1.02	1.16	0.74 0.30	3.23	0.91 2.07	6.22
Fert Appl (Liquid)	12R-30	MFWD 225	23,100	150	8	0.078	1.55	2.09	1.20 0.55	5.41	1.48 3.79	10.68
Fert Appl (Liquid)	12R-38	MFWD 225	21,600	150	8	0.051	1.02	1.37	0.74 0.36	3.50	0.91 2.49	6.91
Field Cult & Inc	42'	MFWD 225	67,100	100	10	0.037	0.74	1.00	0.63 0.26	2.65	2.91 1.82	7.39
Field Cult & Inc	50'	MFWD 225	81,500	100	10	0.031	0.62	0.84	0.64 0.22	2.34	2.97 1.53	6.84
Field Cult & Inc Fld	24'	MFWD 170	37,900	100	10	0.066	1.30	1.33	0.62 0.32	3.58	2.88 2.17	8.64
Field Cult & Inc Fld	32'	MFWD 190	51,500	100	10	0.049	0.97	1.11	0.63 0.29	3.02	2.93 1.99	7.95
Field Cult & Inc Rdg	12'	2WD 150	19,600	100	10	0.132	2.61	2.34	0.64 0.44	6.05	2.97 2.91	11.94
Field Cultivate Fld	24'	MFWD 170	30,600	100	10	0.062	0.94	1.25	0.47 0.30	2.97	2.18 2.05	7.21
Field Cultivate Fld	32'	MFWD 190	42,900	100	10	0.046	0.71	1.04	0.50 0.27	2.53	2.30 1.87	6.71
Field Cultivate Fld	42'	MFWD 225	58,400	100	10	0.035	0.54	0.94	0.51 0.25	2.25	2.38 1.71	6.36
Field Cultivate Fld	50'	MFWD 225	67,800	100	10	0.029	0.45	0.79	0.50 0.21	1.96	2.32 1.44	5.73
Field Cultivate Rdg	12'	2WD 150	12,300	100	10	0.124	1.89	2.20	0.38 0.41	4.90	1.75 2.74	9.41
Grain Cart Corn	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.56	0.17 0.14	1.27	0.33 1.01	2.63
Grain Cart Corn	700 bu	MFWD 190	37,300	200	12	0.025	0.38	0.56	0.25 0.14	1.35	0.48 1.01	2.86
Grain Cart Corn	1000 bu	MFWD 225	54,700	200	12	0.025	0.38	0.67	0.37 0.17	1.61	0.71 1.22	3.54
Grain Cart Rice	500 bu	MFWD 190	25,700	200	12	0.062	0.95	1.40	0.43 0.36	3.16	0.83 2.51	6.50
Grain Cart Rice	700 bu	MFWD 190	37,300	200	12	0.055	0.83	1.23	0.55 0.32	2.95	1.06 2.21	6.22
Grain Cart Rice	1000 bu	MFWD 190	54,700	200	12	0.045	0.69	1.03	0.67 0.27	2.67	1.29 1.84	5.81
Grain Cart Soybean	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.57	0.17 0.15	1.28	0.33 1.02	2.65
Grain Cart Soybean	700 bu	MFWD 190	37,300	200	12	0.021	0.32	0.47	0.21 0.12	1.14	0.40 0.85	2.40
Grain Cart Soybean	1000 bu	MFWD 190	54,700	200	12	0.021	0.32	0.47	0.31 0.12	1.24	0.60 0.85	2.69
Grain Cart Wht/Sor	500 bu	MFWD 190	25,700	200	12	0.025	0.38	0.57	0.17 0.15	1.28	0.33 1.02	2.65
Grain Cart Wht/Sor	700 bu	MFWD 190	37,300	200	12	0.021	0.32	0.47	0.21 0.12	1.14	0.40 0.85	2.40
Grain Cart Wht/Sor	1000 bu	MFWD 190	54,700	200	12	0.021	0.32	0.47	0.31 0.12	1.24	0.60 0.85	2.69
Grain Drill	10'	2WD 130	28,000	150	8	0.188	4.57	2.90	1.97 0.64	10.10	4.13 4.23	18.48
Grain Drill	12'	2WD 130	27,500	150	8	0.157	3.81	2.41	1.62 0.54	8.39	3.38 3.53	15.31
Grain Drill	15'	MFWD 150	33,100	150	8	0.125	3.05	2.23	1.56 0.54	7.39	3.26 3.59	14.25
Grain Drill	20'	MFWD 170	39,400	150	8	0.094	2.28	1.89	1.39 0.45	6.03	2.91 3.10	12.05
Grain Drill	24'	MFWD 190	65,600	150	8	0.078	1.90	1.76	1.93 0.46	6.07	4.03 3.15	13.26
Grain Drill	30'	MFWD 225	63,800	150	8	0.062	1.52	1.67	1.50 0.44	5.15	3.14 3.03	11.32
Grain Drill	35'	MFWD 225	91,000	150	8	0.053	1.30	1.43	1.83 0.38	4.96	3.84 2.60	11.40
Grain Drill & Pre	10'	2WD 130	35,400	150	8	0.203	4.93	3.12	2.69 0.69	11.45	5.63 4.56	21.64
Grain Drill & Pre	12'	2WD 130	34,800	150	8	0.169	4.10	2.60	2.20 0.58	9.50	4.61 3.80	17.92
Grain Drill & Pre	15'	MFWD 150	40,400	150	8	0.135	3.28	2.40	2.05 0.59	8.33	4.28 3.87	16.49
Grain Drill & Pre	20'	MFWD 170	46,700	150	8	0.101	2.46	2.04	1.77 0.49	6.77	3.71 3.34	13.84
Grain Drill & Pre	24'	MFWD 190	73,000	150	8	0.084	2.05	1.90	2.31 0.49	6.77	4.84 3.40	15.01
Grain Drill & Pre	30'	MFWD 225	71,200	150	8	0.067	1.64	1.80	1.80 0.48	5.73	3.77 3.26	12.77
Grain Drill & Pre	35'	MFWD 225	98,300	150	8	0.058	1.40	1.54	2.13 0.41	5.50	4.47 2.80	12.77
Grain Drill & Pre T	8R-38	MFWD 225	51,900	150	8	0.062	1.52	1.67	1.22 0.44	4.86	2.55 3.03	10.46
Harrow - Folding	24'	MFWD 190	13,700	200	10	0.064	0.98	1.45	0.31 0.38	3.13	0.50 2.60	6.24
Harrow - Folding	30'	MFWD 190	14,800	200	10	0.051	0.78	1.16	0.26 0.30	2.52	0.44 2.08	5.04
Harrow - Folding	40'	MFWD 190	20,200	200	10	0.038	0.59	0.87	0.27 0.22	1.96	0.45 1.56	3.97
Harrow - Folding	48'	MFWD 225	24,900	200	10	0.032	0.49	0.86	0.28 0.22	1.86	0.46 1.56	3.89
Header - Corn	6R-30	265 hp	50,800	300	8	0.170	2.59	5.34	2.16 6.24	16.33	3.53 26.49	46.36
Header - Corn	6R-38	265 hp	51,400	300	8	0.134	2.04	4.21	1.72 4.92	12.91	2.82 20.91	36.65
Header - Corn	8R-30	265 hp	62,000	300	8	0.127	1.94	4.00	1.97 4.68	12.61	3.23 19.86	35.71
Header - Corn	8R-38	325 hp	67,000	300	8	0.100	1.53	3.88	1.69 4.02	11.14	2.76 17.09	30.99
Header - Corn	12R-20	325 hp	102,000	300	8	0.127	1.94	4.91	3.25 5.09	15.20	5.32 21.61	42.15
Header - Corn	12R-30	325 hp	103,000	300	8	0.085	1.29	3.27	2.19 3.39	10.16	3.58 14.41	28.15
Header - Draper (CL)	25' Rigid	265 hp	61,400	300	8	0.203	3.09	6.37	2.85 7.44	19.76	4.88 31.59	56.24
Header - Draper (CL)	30' Rigid	325 hp	71,500	300	8	0.169	2.57	6.51	2.77 6.75	18.61	4.74 28.64	52.00
Header - Draper (CL)	36' Rigid	355 hp	75,800	300	8	0.141	2.14	5.92	2.44 5.80	16.32	4.18 24.62	45.13
Header - Draper (CL)	40' Rigid	425 hp	80,300	300	8	0.126	1.93	6.38	2.33 5.61	16.27	3.99 23.84	44.10
Header - Draper (SL)	25' Rigid	325 hp	61,400	300	8	0.176	2.67	6.77	2.47 7.02	18.94	4.23 29.79	52.97
Header - Draper (SL)	30' Rigid	325 hp	71,500	300	8	0.146	2.23	5.64	2.40 5.85	16.13	4.10 24.82	45.06
Header - Draper (SL)	36' Rigid	355 hp	75,800	300	8	0.122	1.86	5.13	2.12 5.02	14.14	3.63 21.33	39.11
Header - Drapper	40' Rigid	425 hp	80,300	300	8	0.110	1.67	5.53	2.02 4.86	14.10	3.46 20.66	38.22
Header -RiceStrp(CL)	20'	265 hp	50,000	300	8	0.253	3.86	7.96	3.17 9.30	24.30	5.18 39.49	68.98
Header -RiceStrp(CL)	24'	325 hp	55,400	300	8	0.211	3.21	8.13	2.92 8.43	22.72	4.78 35.80	63.32
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.41	6.10	2.41 6.32	17.26	3.94 26.85	48.05
Header -RiceStrp(SL)	20'	265 hp	50,000	300	8	0.220	3.34	6.90	2.75 8.06	21.06	4.49 34.22	59.78
Header -RiceStrp(SL)	24'	325 hp	55,400	300	8	0.183	2.79	7.05	2.53 7.31	19.69	4.14 31.03	54.88
Header -RiceStrp(SL)	32'	325 hp	60,800	300	8	0.137	2.09	5.29	2.09 5.48	14.95	3.41 23.27	41.65

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost
			dollars	hours	years	hr/ac				\$/acre		
Header -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	34,100	150	8	0.235	5.72	3.62	3.01	0.81	13.17	6.30 5.29 24.77
NT Grain Drill	12'	2WD 130	46,100	150	8	0.163	3.97	2.51	2.82	0.56	9.88	5.91 3.67 19.47
NT Grain Drill	15'	MFWD 150	55,500	150	8	0.130	3.17	2.32	2.72	0.57	8.80	5.69 3.74 18.24
NT Grain Drill	20'	MFWD 170	65,100	150	8	0.098	2.38	1.97	2.39	0.47	7.23	5.01 3.23 15.48
NT Grain Drill	24'	MFWD 190	90,400	150	8	0.081	1.98	1.84	2.77	0.48	7.08	5.79 3.28 16.17
NT Grain Drill	30'	MFWD 225	103,000	150	8	0.065	1.58	1.74	2.52	0.46	6.32	5.28 3.16 14.77
NT Grain Drill & Pre	10'	2WD 130	41,500	150	8	0.211	5.13	3.25	3.29	0.72	12.41	6.88 4.75 24.04
NT Grain Drill & Pre	12'	2WD 130	53,400	150	8	0.176	4.28	2.71	3.53	0.60	11.12	7.37 3.96 22.46
NT Grain Drill & Pre	15'	MFWD 150	62,900	150	8	0.141	3.42	2.50	3.32	0.61	9.87	6.95 4.03 20.85
NT Grain Drill & Pre	20'	MFWD 170	72,500	150	8	0.105	2.56	2.12	2.87	0.51	8.08	6.01 3.48 17.58
NT Grain Drill & Pre	24'	MFWD 190	97,800	150	8	0.088	2.14	1.98	3.23	0.52	7.87	6.75 3.54 18.17
NT Grain Drill & Pre	30'	MFWD 225	110,700	150	8	0.070	1.71	1.87	2.92	0.50	7.01	6.11 3.40 16.53
NT Plant&Pre-Folding	8R-38	MFWD 170	67,100	150	8	0.083	2.03	1.68	2.10	0.40	6.22	4.39 2.75 13.37
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	99,600	150	8	0.055	1.35	1.12	2.07	0.26	4.82	4.34 1.83 11.00
NT Plant&Pre-Folding	12R-20	MFWD 190	83,300	150	8	0.105	2.56	2.37	3.30	0.62	8.87	6.90 4.25 20.03
NT Plant&Pre-Folding	12R-30	MFWD 190	89,600	150	8	0.070	1.71	1.58	2.36	0.41	6.08	4.95 2.83 13.86
NT Plant&Pre-Folding	12R-38	MFWD 190	99,600	150	8	0.055	1.35	1.25	2.07	0.32	5.01	4.34 2.23 11.59
NT Plant&Pre-Folding	16R-30	MFWD 190	129,000	150	8	0.052	1.28	1.18	2.55	0.31	5.34	5.34 2.12 12.81
NT Plant&Pre-Folding	23R-15	MFWD 190	163,000	150	8	0.073	1.78	1.65	4.48	0.43	8.35	9.38 2.95 20.69
NT Plant&Pre-Folding	24R-20	MFWD 190	182,000	150	8	0.052	1.28	1.18	3.60	0.31	6.39	7.54 2.12 16.06
NT Plant&Pre-Folding	24R-30	MFWD 190	208,000	150	8	0.035	0.85	0.79	2.75	0.20	4.60	5.74 1.41 11.77
NT Plant&Pre-Folding	31R-15	MFWD 225	194,000	150	8	0.054	1.32	1.45	3.97	0.38	7.14	8.31 2.63 18.09
NT Plant&Pre-Folding	32R-15	MFWD 225	210,000	150	8	0.052	1.28	1.40	4.16	0.37	7.23	8.70 2.55 18.48
NT Plant&Pre-Rigid	4R-30	2WD 130	34,600	150	8	0.211	5.13	3.25	2.74	0.72	11.86	5.73 4.75 22.35
NT Plant&Pre-Rigid	4R-38	2WD 130	35,600	150	8	0.166	4.04	2.56	2.22	0.57	9.40	4.64 3.74 17.79
NT Plant&Pre-Rigid	6R-30	MFWD 150	43,700	150	8	0.141	3.42	2.50	2.31	0.61	8.85	4.83 4.03 17.72
NT Plant&Pre-Rigid	6R-38	MFWD 150	42,900	150	8	0.111	2.70	1.97	1.79	0.48	6.95	3.74 3.18 13.88
NT Plant&Pre-Rigid	8R-30	MFWD 170	54,300	150	8	0.105	2.56	2.12	2.15	0.51	7.36	4.50 3.48 15.35
NT Plant&Pre-Rigid	8R-38	MFWD 170	51,700	150	8	0.083	2.03	1.68	1.62	0.40	5.73	3.38 2.75 11.88
NT Plant&Pre-Rigid	11R-15	MFWD 170	63,600	150	8	0.143	3.49	2.89	3.43	0.69	10.51	7.17 4.74 22.43
NT Plant&Pre-Rigid	11R-20	MFWD 170	62,900	150	8	0.115	2.80	2.32	2.72	0.55	8.41	5.69 3.80 17.92
NT Plant&Pre-Rigid	12R-20	MFWD 190	65,900	150	8	0.105	2.56	2.37	2.61	0.62	8.18	5.46 4.25 17.90
NT Plant&Pre-Rigid	12R-30	MFWD 190	79,300	150	8	0.070	1.71	1.58	2.09	0.41	5.81	4.38 2.83 13.02
NT Plant&Pre-Rigid	15R-15	MFWD 190	80,900	150	8	0.113	2.74	2.54	3.43	0.66	9.39	7.17 4.54 21.11
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	154,000	150	8	0.055	1.35	1.48	3.21	0.39	6.44	6.71 2.68 15.85
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	123,000	150	8	0.083	2.03	2.22	3.85	0.59	8.70	8.06 4.03 20.80
NT Plant-Folding	8R-38	MFWD 170	59,700	150	8	0.077	1.88	1.56	1.73	0.37	5.56	3.63 2.55 11.75
NT Plant-Folding	8R-38 2x1	MFWD 170	91,000	150	8	0.051	1.25	1.04	1.76	0.25	4.30	3.68 1.70 9.70
NT Plant-Folding	12R-20	MFWD 190	75,900	150	8	0.098	2.38	2.20	2.79	0.58	7.96	5.84 3.94 17.75
NT Plant-Folding	12R-30	MFWD 190	81,000	150	8	0.065	1.58	1.47	1.98	0.38	5.43	4.15 2.63 12.22
NT Plant-Folding	12R-38	MFWD 190	91,000	150	8	0.051	1.25	1.16	1.76	0.30	4.48	3.68 2.07 10.25
NT Plant-Folding	16R-30	MFWD 190	120,000	150	8	0.049	1.19	1.10	2.20	0.29	4.79	4.61 1.97 11.38
NT Plant-Folding	23R-15	MFWD 190	155,000	150	8	0.068	1.65	1.53	3.96	0.40	7.55	8.28 2.74 18.58
NT Plant-Folding	24R-20	MFWD 190	174,000	150	8	0.049	1.19	1.10	3.20	0.29	5.79	6.69 1.97 14.46
NT Plant-Folding	24R-30	MFWD 190	194,000	150	8	0.032	0.79	0.73	2.38	0.19	4.10	4.97 1.31 10.40
NT Plant-Folding	31R-15	MFWD 225	185,000	150	8	0.050	1.23	1.35	3.52	0.36	6.46	7.36 2.45 16.27
NT Plant-Folding	32R-15	MFWD 225	201,000	150	8	0.049	1.19	1.30	3.70	0.34	6.55	7.73 2.37 16.65
NT Plant-Rigid	4R-30	2WD 130	27,200	150	8	0.196	4.76	3.02	2.00	0.67	10.47	4.18 4.41 19.07
NT Plant-Rigid	4R-38	2WD 130	28,200	150	8	0.154	3.75	2.38	1.63	0.53	8.30	3.41 3.47 15.19
NT Plant-Rigid	6R-30	MFWD 150	36,300	150	8	0.130	3.17	2.32	1.78	0.57	7.86	3.72 3.74 15.33
NT Plant-Rigid	6R-38	MFWD 150	35,600	150	8	0.103	2.51	1.83	1.38	0.45	6.17	2.88 2.95 12.01
NT Plant-Rigid	8R-30	MFWD 170	46,900	150	8	0.098	2.38	1.97	1.72	0.47	6.56	3.61 3.23 13.41
NT Plant-Rigid	8R-38	MFWD 170	44,300	150	8	0.077	1.88	1.56	1.28	0.37	5.11	2.69 2.55 10.36
NT Plant-Rigid	11R-15	MFWD 170	56,200	150	8	0.133	3.24	2.68	2.81	0.64	9.39	5.88 4.40 19.68
NT Plant-Rigid	11R-20	MFWD 170	55,500	150	8	0.107	2.60	2.16	2.23	0.51	7.52	4.66 3.53 15.72
NT Plant-Rigid	12R-20	MFWD 190	58,600	150	8	0.098	2.38	2.20	2.15	0.58	7.33	4.51 3.94 15.78
NT Plant-Rigid	12R-30	MFWD 190	70,700	150	8	0.065	1.58	1.47	1.73	0.38	5.18	3.62 2.63 11.44
NT Plant-Rigid	15R-15	MFWD 190	72,300	150	8	0.105	2.55	2.36	2.84	0.62	8.38	5.95 4.22 18.55
NT Plant-TwinRow	12R-30/40	MFWD 225	145,000	150	8	0.051	1.25	1.37	2.81	0.36	5.80	5.87 2.49 14.17
NT Plant-TwinRow	8R-30/40	MFWD 225	115,000	150	8	0.077	1.88	2.06	3.34	0.55	7.85	6.99 3.74 18.59
Peanut Cond. & Lifter	6-Row	MFWD 190	14,400	300	20	0.100	1.52	2.24	0.24	0.59	4.60	0.40 4.01 9.02
Peanut Conditioner	6-Row	MFWD 190	16,900	300	20	0.100	1.52	2.24	0.33	0.59	4.69	0.42 4.01 9.14
Peanut Dig/Invertor	4R-30	MFWD 190	32,500	300	15	0.235	3.58	5.30	1.90	1.39	12.19	2.51 9.47 24.18
Peanut Dig/Invertor	4R-38	MFWD 190	32,500	300	15	0.186	2.83	4.18	1.50	1.09	9.62	1.98 7.48 19.09

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost
-----\$/acre-----												
Peanut Dig/Invertor	6R-38	MFWD 190	46,500	300	15	0.124	1.88	2.79	1.01 0.73	6.42	1.89 4.98	13.30
Peanut Dump Cart	6-Row	MFWD 190	52,400	300	20	0.310	4.71	6.97	0.94 1.83	14.46	4.38 12.45	31.31
Peanut Harvester	4R-30	MFWD 225	150,000	300	20	0.849	12.93	22.64	7.22 6.02	48.83	32.18 41.02	122.04
Peanut Harvester	4R-38	MFWD 225	150,000	300	20	0.934	14.22	24.89	7.94 6.62	53.69	36.62 45.11	135.42
Peanut Harvester	6R-38	MFWD 225	165,000	300	20	0.625	9.51	16.64	4.98 4.43	35.57	26.94 30.16	92.68
Peanut Lifter	6-Row	MFWD 225	7,160	300	20	0.100	1.52	2.66	0.14 0.70	5.04	0.18 4.82	10.05
Peanut Plt&Pre Fold.	12R-38	MFWD 190	88,900	150	8	0.080	1.95	1.80	2.68 0.47	6.91	5.60 3.23	15.75
Peanut Plt&Pre Rigid	8R-30	MFWD 190	47,100	150	8	0.152	3.70	3.43	2.69 0.90	10.74	5.64 6.14	22.52
Peanut Plt&Pre Rigid	8R-38	MFWD 190	44,600	150	8	0.120	2.93	2.71	2.01 0.71	8.38	4.22 4.85	17.45
Peanut Plt&Pre Twin	8R-30/40	MFWD 190	114,000	150	8	0.120	2.93	2.71	5.16 0.71	11.52	10.79 4.85	27.17
Pipe Spool 160ac	1/4m roll	2WD 130	5,400	15	12	0.003	0.10	0.04	0.00 0.01	0.17	0.11 0.07	0.35
Pipe Trailer 1m/160a	30'	2WD 130	2,700	100	15	0.003	0.19	0.05	0.00 0.01	0.26	0.00 0.08	0.35
Plant & Pre-Folding	8R-38	MFWD 170	59,900	150	8	0.080	1.94	1.61	1.80 0.38	5.75	3.76 2.64	12.17
Plant & Pre-Folding	8R-38 2x1	MFWD 170	88,900	150	8	0.053	1.29	1.07	1.78 0.25	4.41	3.72 1.76	9.89
Plant & Pre-Folding	12R-20	MFWD 190	72,600	150	8	0.101	2.46	2.28	2.76 0.59	8.11	5.77 4.08	17.97
Plant & Pre-Folding	12R-30	MFWD 190	78,900	150	8	0.067	1.64	1.52	2.00 0.39	5.56	4.18 2.72	12.47
Plant & Pre-Folding	12R-38	MFWD 190	88,900	150	8	0.053	1.29	1.20	1.78 0.31	4.59	3.72 2.14	10.46
Plant & Pre-Folding	16R-30	MFWD 190	115,000	150	8	0.050	1.23	1.14	2.18 0.29	4.86	4.57 2.04	11.48
Plant & Pre-Folding	23R-15	MFWD 190	143,000	150	8	0.070	1.71	1.58	3.78 0.41	7.49	7.90 2.83	18.23
Plant & Pre-Folding	24R-20	MFWD 190	161,000	150	8	0.050	1.23	1.14	3.06 0.29	5.73	6.40 2.04	14.18
Plant & Pre-Folding	24R-30	MFWD 190	186,000	150	8	0.033	0.82	0.76	2.36 0.19	4.14	4.93 1.36	10.43
Plant & Pre-Folding	31R-15	MFWD 225	166,000	150	8	0.052	1.27	1.39	3.26 0.37	6.31	6.82 2.53	15.66
Plant & Pre-Folding	32R-15	MFWD 225	181,000	150	8	0.050	1.23	1.35	3.44 0.36	6.39	7.20 2.45	16.04
Plant & Pre-Rigid	4R-30	2WD 130	31,000	150	8	0.203	4.93	3.12	2.36 0.69	11.11	4.93 4.56	20.61
Plant & Pre-Rigid	4R-38	2WD 130	32,000	150	8	0.159	3.88	2.46	1.91 0.54	8.81	4.01 3.59	16.41
Plant & Pre-Rigid	6R-30	MFWD 150	38,300	150	8	0.135	3.28	2.40	1.94 0.59	8.22	4.06 3.87	16.16
Plant & Pre-Rigid	6R-38	MFWD 150	37,600	150	8	0.106	2.59	1.89	1.50 0.46	6.46	3.14 3.05	12.67
Plant & Pre-Rigid	8R-30	MFWD 170	47,100	150	8	0.101	2.46	2.04	1.79 0.49	6.79	3.74 3.34	13.88
Plant & Pre-Rigid	8R-38	MFWD 170	44,600	150	8	0.080	1.94	1.61	1.34 0.38	5.29	2.80 2.64	10.74
Plant & Pre-Rigid	11R-15	MFWD 170	53,800	150	8	0.148	3.59	2.98	2.99 0.71	10.29	6.25 4.88	21.42
Plant & Pre-Rigid	11R-20	MFWD 170	53,000	150	8	0.110	2.69	2.23	2.20 0.53	7.67	4.60 3.65	15.93
Plant & Pre-Rigid	12R-20	MFWD 190	55,200	150	8	0.101	2.46	2.28	2.10 0.59	7.45	4.39 4.08	15.92
Plant & Pre-Rigid	12R-30	MFWD 190	68,600	150	8	0.067	1.64	1.52	1.74 0.39	5.30	3.63 2.72	11.66
Plant & Pre-Rigid	15R-15	MFWD 190	67,500	150	8	0.108	2.63	2.44	2.74 0.64	8.46	5.74 4.36	18.58
Plant & Pre-TwinRow	12R-30/40	MFWD 225	143,000	150	8	0.053	1.29	1.42	2.86 0.37	5.96	5.98 2.57	14.53
Plant & Pre-TwinRow	8R-30/40	MFWD 225	116,000	150	8	0.080	1.94	2.13	3.49 0.56	8.14	7.29 3.87	19.32
Plant - Folding	8R-38	MFWD 170	52,600	150	8	0.074	1.80	1.49	1.47 0.36	5.14	3.07 2.45	10.66
Plant - Folding	8R-38 2x1	MFWD 170	80,200	150	8	0.049	1.20	0.99	1.49 0.24	3.93	3.11 1.63	8.69
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.28	2.12	2.30 0.55	7.27	4.81 3.78	15.88
Plant - Folding	12R-30	MFWD 190	70,300	150	8	0.062	1.52	1.41	1.65 0.37	4.96	3.46 2.52	10.95
Plant - Folding	12R-38	MFWD 190	80,200	150	8	0.049	1.20	1.11	1.49 0.29	4.10	3.11 1.99	9.21
Plant - Folding	16R-30	MFWD 190	10,600	150	8	0.047	1.14	1.06	0.18 0.27	2.67	0.39 1.89	4.95
Plant - Folding	23R-15	MFWD 190	134,000	150	8	0.065	1.58	1.47	3.29 0.38	6.73	6.87 2.63	16.24
Plant - Folding	24R-20	MFWD 190	152,000	150	8	0.047	1.14	1.06	2.68 0.27	5.17	5.61 1.89	12.68
Plant - Folding	24R-30	MFWD 190	178,000	150	8	0.031	0.76	0.70	2.09 0.18	3.75	4.38 1.26	9.40
Plant - Folding	31R-15	MFWD 225	157,000	150	8	0.048	1.18	1.29	2.86 0.34	5.69	5.99 2.35	14.04
Plant - Folding	32R-15	MFWD 225	173,000	150	8	0.047	1.14	1.25	3.05 0.33	5.79	6.39 2.27	14.46
Plant - Rigid	4R-30	2WD 130	23,600	150	8	0.188	4.57	2.90	1.66 0.64	9.79	3.48 4.23	17.52
Plant - Rigid	4R-38	2WD 130	24,700	150	8	0.148	3.60	2.28	1.37 0.51	7.77	2.87 3.33	13.98
Plant - Rigid	6R-30	MFWD 150	30,900	150	8	0.125	3.05	2.23	1.45 0.54	7.29	3.04 3.59	13.93
Plant - Rigid	6R-38	MFWD 150	30,200	150	8	0.099	2.40	1.76	1.12 0.43	5.73	2.34 2.83	10.91
Plant - Rigid	8R-30	MFWD 170	39,800	150	8	0.094	2.28	1.89	1.40 0.45	6.05	2.94 3.10	12.10
Plant - Rigid	8R-38	MFWD 170	37,200	150	8	0.074	1.80	1.49	1.03 0.36	4.71	2.17 2.45	9.33
Plant - Rigid	11R-15	MFWD 170	46,400	150	8	0.137	3.34	2.77	2.39 0.66	9.17	5.00 4.53	18.71
Plant - Rigid	11R-20	MFWD 170	45,700	150	8	0.103	2.50	2.07	1.76 0.49	6.84	3.69 3.39	13.92
Plant - Rigid	12R-20	MFWD 190	47,900	150	8	0.094	2.28	2.12	1.69 0.55	6.66	3.54 3.78	13.99
Plant - Rigid	12R-30	MFWD 190	60,000	150	8	0.062	1.52	1.41	1.41 0.37	4.72	2.95 2.52	10.20
Plant - Rigid	15R-15	2WD 150	58,900	150	8	0.094	2.28	1.67	2.08 0.31	6.36	4.35 2.08	12.79
Plant - TwinRow	12R-30/40	MFWD 225	134,000	150	8	0.049	1.20	1.32	2.49 0.35	5.37	5.21 2.39	12.97
Plant - TwinRow	8R-30/40	MFWD 225	108,000	150	8	0.074	1.80	1.98	3.01 0.52	7.34	6.30 3.59	17.24
Roller/Cultipacker	20'	MFWD 150	15,800	300	12	0.074	1.13	1.32	0.27 0.32	3.06	0.41 2.13	5.62
Roller/Cultipacker	30'	MFWD 170	19,400	300	12	0.049	0.75	1.00	0.22 0.24	2.22	0.34 1.64	4.21
Roller/Cultipacker	38'	MFWD 225	21,800	300	12	0.039	0.59	1.04	0.20 0.27	2.12	0.30 1.89	4.32
Roller/Stubble	20'	2WD 50	13,800	300	12	0.074	1.13	0.44	0.24 0.05	1.87	0.36 0.32	2.56
Roller/Stubble	32'	MFWD 225	23,300	300	12	0.046	0.71	1.24	0.25 0.33	2.54	0.38 2.25	5.17
Rotary Cutter	7'	MFWD 130	5,280	185	10	0.168	2.56	2.59	0.72 0.65	6.53	0.55 4.29	11.38
Rotary Cutter	12'	2WD 150	12,100	185	10	0.098	1.49	1.74	0.96 0.33	4.53	0.73 2.16	7.43
Rotary Cutter-Flex	15'	MFWD 150	22,100	185	10	0.078	1.19	1.39	1.40 0.34	4.34	1.07 2.24	7.66
Rotary Cutter-Flex	20'	MFWD 150	29,900	185	10	0.058	0.89	1.04	1.42 0.25	3.62	1.09 1.68	6.41
Row Cond & Inc-Fold.	26'	MFWD 190	28,500	100	10	0.063	1.25	1.42	0.45 0.37	3.50	2.07 2.55	8.13
Row Cond & Inc-Fold.	38'	MFWD 225	38,200	100	10	0.043	0.85	1.15	0.41 0.30	2.73	1.90 2.09	6.73
Row Cond & Inc-Rigid	13'	2WD 130	16,900	100	10	0.126	2.50	1.95	0.53 0.43	5.43	2.46 2.85	10.75
Row Cond & Inc-Rigid	21'	2WD 170	20,800	100	10	0.078	1.55	1.58	0.40 0.29	3.83	1.87 1.98	7.70
Row Cond & Inc-Rigid	26'	MFWD 190	24,000	100	10	0.026	0.52	0.59	0.15 0.15	1.44	0.73 1.06	3.24
Row Cond Folding	26'	MFWD 225	21,100	100	10	0.059	0.90	1.59	0.31 0.42	3.23	1.44 2.88	7.57
Row Cond Folding	38'	MFWD 225	29,600	100	10	0.040	0.62	1.08	0.30 0.28	2.30	1.39 1.97	5.66
Row Cond Rigid	13'	2WD 130	9,540	100	10	0.119	1.81	1.83	0.28 0.41	4.35	1.31 2.68	8.34
Row Cond Rigid	21'	2WD 170	13,400	100	10	0.073	1.12	1.48	0.24 0.27	3.13	1.13 1.87	6.14
Row Cond Rigid	26'	MFWD 190	16,700	100	10	0.059	0.90	1.34	0.24 0.35	2.85	1.14 2.40	6.40
Row Cond./Roll-Fold.	26'	MFWD 190	19,800	160	10	0.072	1.09	1.62	0.35 0.42	3.50	1.02 2.89	7.42

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2020 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.		Total Direct	--Fixed-- Imp. P.U.		Total Cost
			dollars	hours	years	hr/ac	-----\$/acre-----							
Row Cond./Roll-Fold.	40'	MFWD 225	26,700	160	10	0.046	0.71	1.24	0.31	0.33	2.60	0.89	2.26	5.77
Spin Spreader	5 ton	MFWD 190	12,900	100	8	0.042	1.02	0.94	0.30	0.24	2.52	0.66	1.69	4.87
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.14	0.40	0.08	0.49	6.12	0.11	2.10	8.34
Spray (ATV)	20'	800 CC	1,690	200	8	0.084	1.67	0.13	0.06	0.16	2.02	0.08	0.68	2.80
Spray (Band)	27' Fold	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Band)	40' Fold	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Band)	50' Fold	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Band)	60' Fold	MFWD 170	15,600	200	8	0.028	0.55	0.56	0.20	0.13	1.46	0.26	0.92	2.66
Spray (Bcast/HB)	13' Rigid	MFWD 150	6,900	200	8	0.130	2.57	2.31	0.42	0.56	5.87	0.55	3.72	10.14
Spray (Bcast/HB)	20' Rigid	MFWD 150	8,100	200	8	0.084	1.67	1.50	0.32	0.37	3.86	0.42	2.42	6.70
Spray (Bcast/HB)	27' Fold	MFWD 170	15,400	200	8	0.062	1.23	1.26	0.45	0.30	3.25	0.59	2.06	5.91
Spray (Bcast/HB)	27' Rigid	MFWD 170	9,800	200	8	0.062	1.23	1.26	0.28	0.30	3.09	0.37	2.06	5.53
Spray (Bcast/HB)	30' Fold	MFWD 170	18,930	200	8	0.056	1.11	1.13	0.50	0.27	3.02	0.65	1.85	5.53
Spray (Bcast/HB)	40' Fold	MFWD 170	22,000	200	8	0.042	0.83	0.85	0.43	0.20	2.32	0.57	1.39	4.29
Spray (Broadcast)	27'	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Broadcast)	40'	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Broadcast)	50'	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Broadcast)	60'	MFWD 170	15,600	200	8	0.028	0.55	0.56	0.20	0.13	1.46	0.26	0.92	2.66
Spray (Direct/Hood)	8R-30	MFWD 170	20,400	200	8	0.084	1.67	1.70	0.80	0.40	4.59	1.05	2.78	8.44
Spray (Direct/Hood)	8R-38	MFWD 170	21,900	200	8	0.066	1.32	1.34	0.68	0.32	3.67	0.89	2.20	6.78
Spray (Direct/Hood)	12R-30	MFWD 170	25,300	200	8	0.056	1.11	1.13	0.66	0.27	3.19	0.87	1.85	5.92
Spray (Direct/Hood)	12R-38	MFWD 170	27,100	200	8	0.044	0.87	0.89	0.56	0.21	2.55	0.73	1.46	4.76
Spray (Direct/Layby)	8R-30	MFWD 170	11,300	200	8	0.084	1.67	1.70	0.44	0.40	4.23	0.58	2.78	7.60
Spray (Direct/Layby)	8R-38	MFWD 170	11,300	200	8	0.066	1.32	1.34	0.35	0.32	3.34	0.46	2.20	6.01
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	14,900	200	8	0.044	0.87	0.89	0.31	0.21	2.30	0.40	1.46	4.17
Spray (Direct/Layby)	12R-30	MFWD 170	14,900	200	8	0.056	1.11	1.13	0.39	0.27	2.91	0.51	1.85	5.29
Spray (Direct/Layby)	12R-38	MFWD 170	14,900	200	8	0.044	0.87	0.89	0.31	0.21	2.30	0.40	1.46	4.17
Spray (Direct/Layby)	16R-20	MFWD 225	22,300	200	8	0.062	1.23	1.66	0.65	0.44	4.00	0.85	3.02	7.88
Spray (Levee Leaper)	50'	MFWD 225	13,200	200	8	0.033	0.66	0.90	0.20	0.24	2.01	0.27	1.63	3.92
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.55	0.75	0.53	0.20	2.04	0.70	1.36	4.11
Spray (Pull Type)	80'	MFWD 225	52,500	200	8	0.021	0.41	0.56	0.52	0.15	1.65	0.68	1.02	3.35
Spray (Pull Type)	90'	2WD 50	53,200	200	8	0.018	0.37	0.11	0.46	0.01	0.96	0.61	0.08	1.66
Spray (Pull Type)	120'	MFWD 225	80,900	200	8	0.014	0.27	0.37	0.53	0.10	1.28	0.69	0.68	2.66
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.084	1.67	1.90	0.16	0.49	4.23	0.21	3.40	7.85
Spray (Spot)	27'	MFWD 170	7,400	200	8	0.062	1.23	1.26	0.21	0.30	3.02	0.28	2.06	5.37
Spray (Spot)	40'	MFWD 170	8,600	200	8	0.042	0.83	0.85	0.17	0.20	2.06	0.22	1.39	3.68
Spray (Spot)	50'	MFWD 170	13,700	200	8	0.033	0.66	0.68	0.21	0.16	1.73	0.28	1.11	3.13
Spray (Spot)	60'	MFWD 225	15,600	200	8	0.028	0.55	0.75	0.20	0.20	1.71	0.26	1.36	3.34
Stalk Shredder	14'	MFWD 150	14,500	200	10	0.117	1.79	2.09	1.49	0.51	5.89	0.98	3.37	10.25
Stalk Shredder Flex	20'	MFWD 150	30,200	200	10	0.082	1.25	1.46	2.18	0.36	5.26	1.43	2.35	9.05
Stalk Shredder-Flail	12'	MFWD 150	20,500	200	10	0.137	2.09	2.44	2.46	0.60	7.60	1.62	3.93	13.15
Stalk Shredder-Flail	15'	MFWD 150	23,800	200	10	0.110	1.67	1.95	2.29	0.48	6.39	1.50	3.14	11.05
Stalk Shredder-Flail	18'	MFWD 150	28,900	200	10	0.091	1.39	1.62	2.31	0.40	5.74	1.52	2.62	9.88
Stalk Shredder-Flail	20'	MFWD 150	30,100	200	10	0.082	1.25	1.46	2.17	0.36	5.25	1.42	2.35	9.04
Stalk Shredder-Flail	25'	MFWD 150	45,300	200	10	0.066	1.00	1.17	2.61	0.28	5.08	1.71	1.88	8.68
Subsoiler	3 shank	MFWD 190	5,920	100	15	0.204	3.10	4.59	0.40	1.20	9.31	1.11	8.21	18.64
Subsoiler	4 shank	MFWD 225	9,830	100	15	0.153	2.33	4.09	0.50	1.08	8.02	1.38	7.41	16.82
Subsoiler	5 shank	MFWD 225	13,900	100	15	0.122	1.86	3.25	0.56	0.86	6.55	1.56	5.90	14.02
Subsoiler low-till	6 shank	MFWD 225	15,300	100	15	0.102	1.55	2.72	0.52	0.72	5.52	1.43	4.93	11.89
Subsoiler low-till	8 shank	MFWD 225	22,000	100	15	0.076	1.16	2.03	0.56	0.54	4.30	1.54	3.69	9.55

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, 2020

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Artisan	oz	0.23
Agri-Dex	pt	2.43	Avaris	oz	1.65
AMS SuperMax	pt	3.81	Avicta Complete Bean	oz	3.65
Class Act NG	pt	2.44	Bravo Weather Stick	pt	6.35
Crop Oil Conc. (Pet.)	pt	3.00	Captan 50 WP	lb	4.28
Crop Oil Conc. (Veg.)	pt	3.22	Convoy	oz	0.78
Dyne-A-Pak	pt	5.45	Cotton Seed Trt.	acre	20.00
Fire-Zone	pt	3.07	CruiserMaxx	oz	4.18
Herbimax	pt	3.48	Echo	oz	0.41
Induce	pt	3.41	Elatius	oz	2.94
MSO	pt	3.55	Headline EC	oz	2.63
Penetrator Plus	pt	2.70	Miravis Top	oz	1.27
Surfactant	pt	5.31	Prior Xemium	oz	4.53
CLEANING			Propimax EC	pt	11.69
Cleaning Peanuts	ton	18.00	Prosaro	oz	2.45
CROP CONSULTANT			Provost Optimum	lb	1.64
Corn Consultant	acre	6.00	Quadris	oz	1.63
Cotton Consultant	acre	8.00	Quadris Top	oz	2.33
Peanut Consultant	acre	9.25	Quadris Top SBX	oz	2.36
Rice Consultant	acre	8.00	Quilt	pt	17.06
Sorghum Consultant	acre	6.00	Quilt XCEL	pt	23.43
Soybeans Consultant	acre	6.50	Stratego	pt	23.43
Wheat Consultant	acre	5.50	Stratego YLD	oz	3.51
CUSTOM FERTILIZE			Tebuconazole	oz	0.49
App Fert by Air	cwt	7.50	Tilt 3.6 EC	oz	0.72
App Fert by Air (Mi)	appl	7.50	Tilt/ Bravo SE	oz	1.00
Custom Apply Fert	acre	7.50	Trivapro	oz	1.53
CUSTOM LIME			GINNING		
Lime (Spread)	ton	43.00	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	oz	0.07
Custom Plant Air	cwt	7.50	Mepichlor 4.2%	oz	0.08
CUSTOM SPRAY			Mepiquat Chloride	oz	0.10
App by Air (3 gal)	appl	5.50	Mepstar 6	oz	0.39
App by Air (5 gal)	appl	7.00	Palisade	oz	1.28
App by Air (10 gal)	appl	9.00	Pentia	oz	0.85
Custom Spray Ground	acre	7.00	Pix Ultra	oz	0.21
DRYING			Stance	oz	1.23
Dry Corn	bu	0.19	Veto	oz	0.06
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	oz	0.93
Dry Rice	bu	0.40	Aim 2EC	oz	5.68
ERADICATION FEE			Boll Buster	oz	0.18
Eradication	acre	1.00	Def/Folex	pt	8.61
FERTILIZERS			Defol 5	gal	6.54
Agrotain Ultra	pt	8.36	Display	oz	10.13
Amm Sulfate (21% N)	cwt	17.46	Ethephon 6E	pt	2.90
Boron Plus	pt	4.52	Finish 6	pt	9.37
DAP	cwt	22.64	Folex 6EC	pt	8.61
Fert 10-34-0	cwt	24.78	Freefall SC	oz	1.18
Fert 10-34-0	gal	2.90	Ginstar EC	pt	21.44
Fert 11-37-0	cwt	29.40	Gramoxone SL	oz	0.17
Fert 41-0-0-4	cwt	18.60	Sharpen	oz	5.66
Lime	ton	32.97	Sodium Chlorate 5L	gal	6.54
NBPT	pt	7.97	SuperBoll	oz	0.19
Phosphorus (46% P2O5)	cwt	18.11	Thidiazuron 4lb	oz	1.18
Potash (60% K2O)	cwt	27.50	Tribufos 6lb	pt	8.61
Sulfur Plus	pt	2.62	Vacate	oz	1.60
UAN (32% N)	cwt	13.62	HAULING		
UAN (32%)	gal	1.51	Haul Corn	bu	0.23
UAN + Sulfur (28%)	cwt	12.55	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	gal	1.39	Haul Rice	bu	0.35
Urea, Solid (46% N)	cwt	20.22	Haul Sorghum	bu	0.25
Zinc Plus	pt	2.99	Haul Soybeans	bu	0.27
FUNGICIDES			Haul Wheat	bu	0.26
Abound	oz	0.98	HERBICIDES		
Alfa Guard	lb	1.82	2,4-D Ester	pt	3.28
Approach Prima	pt	31.96	2,4-D Amine 4	pt	2.73
Apron Maxx RTA	oz	1.66	AAtrex 4L	pt	2.24

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2020 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Accent Q	oz	17.67	Halomax	oz	19.90
Acuron	oz	2.22	Harmony Extra SG	oz	13.81
Aim	oz	5.68	Helmet	oz	4.15
Anthem Flex	oz	2.67	Hero	pt	25.77
Anthem Maxx	oz	4.90	Huskie	oz	0.84
Armezon Pro	oz	1.16	Impact	oz	1.24
Atrazine 4L	pt	2.09	Intimidator	oz	0.59
Atrazine 90DF	lb	7.52	Leadoff	oz	5.15
Authority First	oz	4.50	League	oz	4.51
Authority Elite	pt	14.03	Lexar	pt	7.67
Authority Maxx	lb	49.72	Liberty 280	oz	0.49
Authority MTZ	lb	32.08	Loyant	oz	2.21
Avatar	pt	7.87	Makaze	oz	0.14
Avenger	pt	9.89	Metolachlor	pt	4.87
Axial XL	oz	1.21	Metribuzin 4L	pt	9.30
Axiom	oz	1.84	Metribuzin 75	lb	18.75
Banvel	pt	15.04	MSMA	pt	3.97
Barrage	pt	5.43	Newpath	oz	3.73
Basagran	pt	5.43	Oberon	oz	3.75
Boundary	pt	8.84	Obey	oz	0.91
Brake	oz	1.72	Osprey	oz	3.24
Broadaxe	pt	16.41	Outlook	pt	16.38
Broadhead	lb	58.21	Panther Pro	oz	3.35
Bucaneer Plus	pt	2.37	Parallel	pt	4.64
Buctril	pt	4.28	Paraquat	oz	0.19
Butyrac 200 (2,4-DB)	pt	3.49	Parazone 3SL	oz	0.19
Cadre	oz	3.10	Permit	oz	21.22
Canopy	oz	2.13	Permit Plus	oz	20.60
Caparol	pt	4.59	PowerFlex	oz	6.71
Capreno	oz	4.75	Prefix	pt	5.69
Cinch	pt	16.06	Provisia	oz	0.83
Cinch ATZ	pt	5.20	Prowl 3.3 EC	pt	5.30
Clarity	pt	11.60	Python WDG	oz	15.10
Classic	oz	14.02	Quelex	oz	7.00
Clearpath	lb	57.57	RealmQ	oz	4.66
Clethomine 2E	oz	0.50	RebelEx	oz	2.68
Clincher SF	oz	2.32	Reflex	pt	5.87
Cobra	oz	1.71	Regiment	oz	42.66
Command 3ME	pt	16.09	Resicore	oz	0.55
Corvus	oz	6.65	Resource	oz	1.72
Cotoran	pt	5.85	RiceBeaux	pt	5.79
Cotton Pro	pt	3.75	Riceshot	pt	3.92
Declare	oz	1.64	Ricestar HT	pt	24.04
Dicamba	pt	5.66	Ringside	pt	4.17
Direx	pt	3.01	Roundup Power Max	oz	0.20
Diuron	pt	3.53	Roundup PowerMax	pt	3.20
Dual II Magnum	pt	12.63	Roundup PowerMax ii	oz	0.20
Dual Magnum	pt	10.26	Roundup Pro	pt	0.20
Duet	pt	5.39	Scepter 70 DG	oz	4.50
Endigo	oz	1.80	Select Max	pt	10.87
Engenia	oz	0.83	Sencor/Tricor.Metrib	oz	5.45
Envive	oz	0.53	Sequence	pt	5.16
Envoke	oz	106.65	Sharpen	oz	5.66
Facet L	pt	13.61	Sinister	pt	14.61
Fierce	oz	7.44	Sonic	oz	4.63
Fierce XLT	oz	6.66	Stalwart	pt	3.95
Finesse	oz	14.38	Stam 80 EDF	lb	9.32
Firestorm	pt	5.97	Stam M4	qt	7.91
First Rate	oz	40.12	Staple LX	oz	1.95
Flexstar	pt	9.11	Storm	pt	11.58
Flexstar GT	pt	4.44	Strada	oz	6.65
Fusilade DX	oz	1.06	Strada Pro	oz	6.86
Gambit	oz	16.96	Strada XT2	pt	3.20
Glyphosate 3lbs a.e	pt	2.16	Superwham	qt	9.27
Glyphosate 3lbs a.e	oz	0.14	Suprend	lb	10.14
Goal 2XL	pt	7.77	SureStart II	oz	0.67
Gramoxone SL 2.0	oz	0.17	Surveil	oz	0.72
Grandstand R	pt	18.26	Synchrony XP	oz	11.72
Grasp	oz	12.03	Tempest	oz	1.84
Grasp Xtra	oz	1.68	Touchdown Total	qt	5.23
Halex GT	pt	6.24			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2020 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Treflan	pt	3.37	Lambda	oz	1.71
Trifluralin	pt	3.36	Lannate LV	pt	9.85
Triflurex	pt	3.66	Macho	oz	0.53
Ultra Blazer	pt	10.69	Malathion 5E	pt	8.16
Valor EZ	oz	4.43	Malathion 8E	pt	5.50
Valor SX	oz	4.28	Mustang Max	oz	1.33
Valor XLT	oz	4.90	Nuprid 4F	oz	0.89
Vamos	pt	6.49	Orthene 90	lb	15.98
Verdict	oz	1.72	Permethrin	oz	0.63
Veritas	pt	7.49	Portal XLO	oz	0.88
Villain	pt	5.24	Pounce 25WP	lb	18.08
Volunteer	pt	10.63	Prevathon	oz	1.12
Warrant	pt	4.02	Radiant	oz	6.28
XtendiMax	oz	0.49	Sevin 4F	pt	6.22
Zidua DF	oz	8.23	Sevin XLR Plus	qt	15.09
Zidua SC	oz	5.75	Sivanto Prime	oz	2.54
INOCULANT			Straffer Max	oz	9.61
Inoculant -Soybean	acre	1.55	Tempest	oz	1.82
Optimize LIFT	oz	0.51	Transform WG	oz	7.38
INSECTICIDES			Up-Cyde	oz	0.43
Abamectin .15EC	oz	1.67	Warrior ZT	oz	2.57
Acephate 90%	lb	7.17	Zeal	oz	17.50
Acephate 90SP	lb	7.59	IRRIGATION SUPPLIES		
Admire Pro	oz	1.33	Roll-Out Pipe	ft	0.24
Agri-Mek	oz	2.96	SEED/PLANTS		
Asana .66 XL	oz	0.48	Corn Seed BtRR	thous	3.50
Avenger	oz	0.70	Corn Seed RR2	thous	3.50
Baythroid XL	oz	1.06	Corn Seed VT2P	thous	3.62
Belt	oz	7.50	Corn Seed Op Leptra	thous	4.39
Besiege	oz	1.93	Cotton Seed B3XF	thous	2.32
Bidrin 8EC	oz	1.28	Cotton Seed W3FE	thous	2.37
Bifenthrin	oz	0.82	Cot.Seed B3XF/W3FE	thous	2.34
Bifenture 2EC	oz	0.81	Peanut Seed	lb	0.84
Brigade EC	pt	14.70	Rice Clearfield	lb	0.95
Capture LFR	oz	2.36	Rice Clrflld Hyb Trt	lb	6.10
Centric 40WG	oz	4.89	Rice Conv Hyb Trt	lb	6.15
Cypermethrin	oz	0.55	Rice Seed CF (Levees)	lb	0.95
Declare	oz	1.87	Rice Seed CFH (Levee)	lb	2.67
Diamond .83EC	oz	1.31	Rice Seed Conv.	lb	0.28
Dimethoate 4E	pt	5.37	Rice Seed Cv (Levees)	lb	0.28
Dimilin 2L	oz	1.91	Rice Seed CvH (Levee)	lb	1.93
Force 3G	lb	7.23	Rice Seed Provisia	lb	1.08
Gaucho 600	oz	2.36	Rice Seed Trt/Insect	lbseed	0.29
Imidacloprid 4F	oz	0.62	Sorghum Concept+ Po	lb	3.96
Imidan 70 WSB	oz	0.71	Soybean Seed LL	lb	1.27
IncidentalPestTrt \$8	acre	8.00	Soybean Seed RR2	lb	1.39
IncidentalPestTrt \$15	acre	15.00	Soybean Seed RR2X	lb	1.32
IncidentalPestTrt \$22	acre	22.00	Wheat Seed Private	lb	0.24
IncidentalPestTrt \$30	acre	30.00	SOIL TEST		
Intrepid 2F	oz	2.15	Soil Test	acre	10.00
Intruder 70WSP	oz	9.05	SURVEY & MARK LEVEES		
Karate Z	oz	2.48	Survey & Mark Levees	acre	4.50

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2020

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	2.30
Gasoline	gal	2.20
INTEREST RATES		
Short-term	%	5.25
Intermediate-term	%	6.25

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2020

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	15.22
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, 2020

Crop	uni	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '20	4.06	-0.20	3.86	2.35	3.86
Cotton Lint	lb	Dec '20	0.6447	-0.0158	0.6289	0.52	0.6289
Cottonseed	lb						0.10 ^f
Grain Sorghum	bu				3.67	2.27	3.67
Peanuts	ton				400.00	370.00	400.00
Soybeans	bu	Nov '20	9.62	-0.02	9.60	6.41	9.60
Rice	bu	Nov '20	5.32	-0.37	4.95	3.20	4.95
Wheat	bu	Jul '20	4.39	-0.15	4.24	3.35	4.24

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2019 for the stated contract months.

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

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

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

^e Price used in MSU Extension Service Planning Budgets.

^f Cottonseed price is the average marketing year price over the years 2008-2018.

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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Land Plane	50'x16'		0.85	0.30	0.58		0.01	1.74	1.76	3.50
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.19	0.07	0.14		0.01	0.41	0.34	0.75
Roll-Out Pipe	ft	7.92					0.17	8.09		8.09
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.25	0.10	0.42		0.02	0.79	0.88	1.67
IRRIGATE LABOR	hour				1.81		0.04	1.85		1.85
Apply Water										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.38	0.15	0.63		0.01	1.17	1.32	2.49
Land Forming (\$450)	each								36.04	36.04
Well & Pump, Furrow	each			2.96			0.06	3.02	9.86	12.88
Main Line Pipe	each								5.45	5.45
Engine, RPF, 75	each								9.34	9.34
June Irrigation	ac-in		6.56	1.31			0.17	8.04		8.04
July Irrigation	ac-in		6.56	1.31			0.14	8.01		8.01
August Irrigation	ac-in		6.56	1.31			0.10	7.97		7.97
TOTALS		7.92	21.35	7.51	4.50	0.00	0.75	42.03	64.99	107.02

Note: Cost of production estimates are based on 2019 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, 2020

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Maintenance										
IRRIGATE LABOR	hour				1.07		0.03	1.10		1.10
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Pivot, 1/4 CP	each			13.48			0.29	13.77	59.97	73.74
Well & Pump, 1/4 CP	each			3.50			0.08	3.58	11.69	15.27
Engine, 1/4 CP, 65	each								11.07	11.07
June Irr. 3app@.75"	ac-in		7.73	1.40			0.20	9.33		9.33
July Irr. 4app@.75"	ac-in		10.31	1.87			0.21	12.39		12.39
Aug Irr. 3app@.75"	ac-in		7.73	1.40			0.12	9.25		9.25
TOTALS		0.00	25.77	21.65	1.84	0.00	0.94	50.20	82.73	132.93

Note: Cost of production estimates are based on 2019 input prices.

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