

**CORN, GRAIN
SORGHUM & WHEAT
2023
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2022-03**

November 2022

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 2023 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.

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.

2023 Budget Committees

Corn, Grain Sorghum, and Wheat

Will Maples, MSU-ES, Co-Chair
Brian Mills, MSU-ES, Co-Chair
Erick Larson, MSU-ES/MAFES
Jason Bond, MSU-ES/MAFES
Angus Catchot, MAFES
Don Cook, MAFES
Whitney Crow, MSU-ES
Drew Gholson, MSU-ES/MAFES
Jeff Gore, MSU-ES/MAFES
Larry Oldham, MSU-ES

Cotton

Will Maples, MSU-ES, Co-Chair
Brian Mills, MSU-ES, Co-Chair
Brian Pieralisi, MSU-ES
Jason Bond, MSU-ES/MAFES
Angus Catchot, MAFES
Don Cook, MAFES
Whitney Crow, MSU-ES
Jeff Gore, MSU-ES/MAFES
Larry Oldham, MSU-ES

Peanuts

Will Maples, MSU-ES, Co-Chair
Brian Mills, MSU-ES, Co-Chair
Jeff Gore, MSU-ES/MAFES
Alan Henn, MSU-ES
Brendan Zurweller, MSU-ES

Rice

Will Maples, MSU-ES, Co-Chair
Brian Mills, MSU-ES, Co-Chair
Tom Allen, MSU-ES/MAFES
Jason Bond, MSU-ES/MAFES
Drew Gholson, MSU-ES/MAFES
Jeff Gore, MSU-ES/MAFES

Soybeans

Will Maples, MSU-ES, Co-Chair
Brian Mills, MSU-ES, Co-Chair
Trent Irby, MSU-ES
Tom Allen, MSU-ES/MAFES
Jason Bond, MSU-ES/MAFES
Angus Catchot, MAFES
Don Cook, MAFES
Whitney Crow, MSU-ES
Drew Gholson, MSU-ES/MAFES
Jeff Gore, MSU-ES/MAFES

Vegetables

Elizabeth Canales, MSU-ES, Chairman
Blake Layton, MSU-ES
Casey Barickman, MSU-MAFES/ES
Stephen Meyers, MSU-ES

Fruit & Nut

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

Supporting Committees

Equipment

Evan Gregory, MSU-ES
W. Gail Gillis, MSU-ES

Prices

Evan Gregory, MSU-ES
W. Gail Gillis, MSU-ES

Documentation and Data Processing

Evan Gregory, MSU-ES
W. Gail Gillis, MSU-ES

Publication Review

Evan Gregory, MSU-ES
W. Gail Gillis, MSU-ES

Table of Contents

	Page
Foreword.....	i
Acknowledgments.....	i
2023 Budget Committees.....	ii
2023 Planning Budgets	1
Budgets for Agricultural Enterprises.....	1
Methods and Procedures	1
Production Practices	1
Machinery	1
Estimates of Direct Costs.....	2
Estimates of Fixed Costs.....	2
Estimates of Returns	3
Irrigation Costs	3
Net Returns	3
 Enterprise Budgets	
Table	
1 Corn, stale seedbed, BtRR, 16-row 30”, 220 bu yield goal Furrow irrigated, 13 ac-in., Delta Area.....	6
2 Corn, stale seedbed, BtRR, 12-row 38”, 170 bu yield goal Non-irrigated, Delta Area	12
3 Corn, stale seedbed, BtRR, 16-row 30”, 220 bu yield goal Pivot irrigated, 7.5 ac-in., Delta Area	18
4 Corn, conventional tillage, RR2, 12-row 38”, 220 bu yield goal, furrow-irrigated, 13 ac-in , Delta Area.....	24
5 Corn, conventional tillage, RR2, 12-row 38” 170 bu yield goal, non-irrigated, Delta Area	30
6 Corn, conventional tillage, RR2, 12-row 38” 220 bu yield goal, pivot irrigated, 7.5 ac-in ,Delta Area.....	36
7 Corn, stale seedbed, RR2, 12-row 30” 170 bu yield goal, Non-Delta.....	42
8 Corn, stale seedbed, RR2, 16-row 30”, 220 bu yield goal Pivot irrigated, 7.5 ac-in ,Non-Delta	48
9 Corn, no-tillage, BtRR, 12-row 30”, 170 bu yield goal Non-irrigated, Non-Delta.....	54
10 Corn, no-tillage, BtRR, 12-row 30”, 220 bu yield goal Pivot irrigated, 7.5 ac-in ,Non-Delta	60
11 Grain sorghum, 12-row 30”, 100 bu yield goal All Areas.....	66
12 Wheat followed by soybeans, 70 bu yield goal All Areas.....	72

Appendix
Table

1	Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed costs per hour	80
2	Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed costs per acre.....	81
3	Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed costs per acre	82
4	Operating inputs: estimated prices	87
5	Estimated fuel prices and interest rates	90
6	Labor types, wage rates and unallocated labor multipliers for crop enterprises.....	90
7	Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets	91
8	Irrigation with a ¼ mile center pivot system 135-acre system, 7.5 ac-in., Delta Area	92
9	Corn irrigated with roll-out pipe 160-acre system, 13 ac-in., Delta Area	93
Literature Cited		95

2023 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 2022. (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 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	0.2000	1.28	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	1.9570	97.85	_____
Potash (60% K2O)	cwt	46.60	1.5000	69.90	_____
Fert 10-34-0	gal	5.36	4.0000	21.44	_____
Zinc Plus	pt	3.68	2.0000	7.36	_____
UAN + Sulfur (28%)	gal	4.41	32.1712	141.87	_____
UAN (32%)	gal	4.30	30.0000	129.00	_____
Urea, Solid (46% N)	cwt	41.58	1.0000	41.58	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	1.2800	1.45	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	34.0000	127.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	8.00	1.0000	8.00	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4484	7.43	_____
Harvesters	hour	16.54	0.1277	2.11	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1462	1.33	_____
UNALLOCATED LABOR					
	hour	16.56	0.4478	7.42	_____
DIESEL FUEL					
Tractors	gal	4.48	5.0106	22.44	_____
Harvesters	gal	4.48	1.7419	7.80	_____
Roll-Out Pipe Irr.	gal	4.48	10.5901	47.44	_____
REPAIR & MAINTENANCE					
Implements	acre	11.66	1.0000	11.66	_____
Tractors	acre	3.68	1.0000	3.68	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	35.37	1.0000	35.37	_____
TOTAL DIRECT EXPENSES				1014.03	_____
FIXED EXPENSES					
Implements	acre	21.14	1.0000	21.14	_____
Tractors	acre	26.04	1.0000	26.04	_____
Harvesters	acre	27.10	1.0000	27.10	_____
Roll-Out Pipe Irr.	acre	65.01	1.0000	65.01	_____
TOTAL FIXED EXPENSES				139.29	_____
TOTAL SPECIFIED EXPENSES				1153.32	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____

TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.88	1.0000	8.88	_____
FERTILIZERS	acre	509.00	1.0000	509.00	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	1.45	1.0000	1.45	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	127.50	1.0000	127.50	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1462	1.33	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	16.54	0.5761	9.54	_____
UNALLOCATED LABOR	hour	16.56	0.4478	7.42	_____
DIESEL FUEL	gal	4.48	17.3427	77.68	_____
REPAIR & MAINTENANCE	acre	28.66	1.0000	28.66	_____
INTEREST ON OP. CAP.	acre	35.37	1.0000	35.37	_____

TOTAL DIRECT EXPENSES				1014.03	_____
RETURNS ABOVE DIRECT EXPENSES				338.97	_____
TOTAL FIXED EXPENSES				139.29	_____

TOTAL SPECIFIED EXPENSES				1153.32	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				199.68	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

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	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.9570				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant & Pre-Folding	16R-30	MFWD 225	0.050	1.00	Mar		0.05	0.05	0.10	0.04
Corn Seed BtRR	thous					34.0000				
Fert 10-34-0	gal					4.0000				
Zinc Plus	pt					2.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Corn Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN (32%)	gal					30.0000				
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.57	0.57	1.10	0.44

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

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						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71			0.29	4.88	3.35	8.23
Phosphorus (46% P2O5)	cwt	97.85						6.26	104.11		104.11
Potash (60% K2O)	cwt	69.90						4.47	74.37		74.37
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96			0.44	7.37	7.37	14.74
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
Clarity	pt	7.15						0.31	7.46		7.46
Select Max	pt	13.86						0.59	14.45		14.45
Plant & Pre-Folding	16R-30		2.63	2.97	2.06			0.29	7.95	8.63	16.58
Corn Seed BtRR	thous	127.50						4.76	132.26		132.26
Fert 10-34-0	gal	21.44						0.80	22.24		22.24
Zinc Plus	pt	7.36						0.27	7.63		7.63
Custom Apply Fert	acre	7.50						0.24	7.74		7.74
UAN + Sulfur (28%)	gal	141.87						4.54	146.41		146.41
Spray (Broadcast)	60'		1.46	0.46	1.02			0.09	3.03	2.02	5.05
Atrazine 4L	pt	12.00						0.38	12.38		12.38
Halex GT	pt	37.80						1.21	39.01		39.01
App by Air (3 gal)	appl	1.28						0.03	1.31		1.31
Bifenthrin	oz	1.45						0.04	1.49		1.49
Corn Consultant	acre	6.00						0.16	6.16		6.16
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83			0.25	9.44	6.84	16.28
UAN (32%)	gal	129.00						3.44	132.44		132.44
App Fert by Air	cwt	8.00						0.17	8.17		8.17
Urea, Solid (46% N)	cwt	41.58						0.89	42.47		42.47
Header - Corn	8R-30		7.80	8.95	4.01			0.11	20.87	31.85	52.72
Grain Cart Corn	700 bu		1.31	0.57	0.80			0.01	2.69	2.25	4.94
Haul Corn	bu	50.60						0.27	50.87		50.87
Stalk Shredder Flex	20'		4.28	3.10	2.59			0.05	10.02	6.67	16.69
Roll-Out Pipe Irr.	acre	7.92	50.70	7.90	4.84			1.55	72.91	70.31	143.22
TOTALS		850.50	77.68	28.66	21.82	0.00	35.37	1014.03	139.29	1153.32	

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	0.00	0.00	0.00	0.00
FERTILIZERS	167.75	0.00	0.00	0.00	0.00	28.80	141.87	129.00	41.58	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	127.50	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	8.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	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	0.00	6.00	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	4.30	0.00	0.00	0.00	0.00	2.06	1.02	3.06	3.10	0.23	0.65	7.40
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	7.08	0.00	0.00	0.00	0.00	2.63	1.46	4.08	36.44	11.86	0.74	13.39
REPAIR & MAINTENANCE	2.79	0.00	0.00	0.00	0.00	2.97	0.46	2.28	6.31	1.05	0.18	12.62
INTEREST ON OP. CAP.	14.31	0.00	0.00	0.00	1.68	6.12	6.46	3.93	2.20	0.21	0.02	0.44
TOTAL DIRECT EXPENSES	238.19	0.00	0.00	0.00	41.17	170.08	208.57	151.08	105.55	13.35	1.59	84.45
NET INCOME	-238.19	0.00	0.00	0.00	-41.17	-170.08	-208.57	-151.08	-105.55	-13.35	-1.59	1268.55
NET INCOME TO DATE	-238.19	-238.19	-238.19	-238.19	-279.36	-449.44	-658.01	-809.09	-914.64	-927.99	-929.58	338.97

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Corn	4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68		
PERCENT	YIELD	UNIT	-----dollars-----										
50	110.00	bu	-481	-447	-413	-379	-345	-312	-278	-244	-210	-176	-142
			-620	-586	-552	-519	-485	-451	-417	-383	-349	-316	-282
60	132.00	bu	-384	-344	-303	-263	-222	-181	-141	-100	-60	-19	21
			-524	-483	-442	-402	-361	-321	-280	-239	-199	-158	-118
70	154.00	bu	-288	-241	-193	-146	-99	-51	-4	43	90	137	185
			-427	-380	-333	-285	-238	-190	-143	-96	-48	-1	45
80	176.00	bu	-192	-137	-83	-29	24	78	132	186	240	295	349
			-331	-277	-223	-168	-114	-60	-6	47	101	155	209
90	198.00	bu	-95	-34	26	86	147	208	269	330	391	452	513
			-234	-174	-113	-52	8	69	130	191	252	313	373
100	220.00	bu	0	68	136	203	271	338	406	474	541	609	677
			-138	-70	-3	64	132	199	267	334	402	470	537
110	242.00	bu	97	171	245	320	394	469	543	618	692	766	841
			-42	32	106	181	255	329	404	478	553	627	701
120	264.00	bu	193	274	355	437	518	599	680	761	842	924	1005
			54	135	216	297	378	460	541	622	703	784	866
130	286.00	bu	289	377	465	553	641	729	817	905	993	1081	1169
			150	238	326	414	502	590	678	766	854	942	1030
140	308.00	bu	386	480	575	670	765	859	954	1049	1143	1238	1333
			246	341	436	531	625	720	815	909	1004	1099	1194
150	330.00	bu	482	584	685	787	888	990	1091	1192	1294	1395	1497
			343	444	546	647	749	850	952	1053	1155	1256	1358

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 2022 input prices.

Table 2.A Estimated costs per acre
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	0.2000	1.28	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	1.6300	81.50	_____
Potash (60% K2O)	cwt	46.60	1.2500	58.25	_____
Fert 10-34-0	gal	5.36	4.0000	21.44	_____
Zinc Plus	pt	3.68	2.0000	7.36	_____
UAN + Sulfur (28%)	gal	4.41	19.3063	85.14	_____
UAN (32%)	gal	4.30	36.7200	157.90	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	1.2800	1.45	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	28.0000	105.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.3457	5.71	_____
Harvesters	hour	16.54	0.1009	1.67	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR	hour	16.56	0.4020	6.66	_____
DIESEL FUEL					
Tractors	gal	4.48	4.0040	17.92	_____
Harvesters	gal	4.48	1.3770	6.17	_____
REPAIR & MAINTENANCE					
Implements	acre	9.57	1.0000	9.57	_____
Tractors	acre	2.98	1.0000	2.98	_____
Harvesters	acre	4.87	1.0000	4.87	_____
INTEREST ON OP. CAP.	acre	28.91	1.0000	28.91	_____
TOTAL DIRECT EXPENSES				788.85	_____
FIXED EXPENSES					
Implements	acre	16.15	1.0000	16.15	_____
Tractors	acre	21.08	1.0000	21.08	_____
Harvesters	acre	21.42	1.0000	21.42	_____
TOTAL FIXED EXPENSES				58.65	_____
TOTAL SPECIFIED EXPENSES				847.50	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	170.0000	1045.50	_____

TOTAL INCOME				1045.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.88	1.0000	8.88	_____
FERTILIZERS	acre	411.59	1.0000	411.59	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	1.45	1.0000	1.45	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
OPERATOR LABOR	hour	16.54	0.4466	7.38	_____
UNALLOCATED LABOR	hour	16.56	0.4020	6.66	_____
DIESEL FUEL	gal	4.48	5.3810	24.09	_____
REPAIR & MAINTENANCE	acre	17.42	1.0000	17.42	_____
INTEREST ON OP. CAP.	acre	28.91	1.0000	28.91	_____

TOTAL DIRECT EXPENSES				788.85	_____
RETURNS ABOVE DIRECT EXPENSES				256.65	_____
TOTAL FIXED EXPENSES				58.65	_____

TOTAL SPECIFIED EXPENSES				847.50	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				198.00	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal
 Non-irrigated, Delta Area, Mississippi, 2023

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	Oct	0.3330					
Lime (Spread)	ton			0.33	Oct	0.6660					
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03	
Phosphorus(46% P2O5)	cwt					1.6300					
Potash (60% K2O)	cwt					1.2500					
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05	
App by Air (5 gal)	appl			1.00	Feb	1.0000					
Glyphosate 3lbs a.e	oz					32.0000					
Clarity	pt					0.5000					
Select Max	pt					1.0000					
Plant & Pre-Folding	12R-38	MFWD 225	0.053	1.00	Mar		0.05	0.05	0.10	0.04	
Corn Seed BtRR	thous					28.0000					
Fert 10-34-0	gal					4.0000					
Zinc Plus	pt					2.0000					
Custom Apply Fert	acre			1.00	Apr	1.0000					
UAN + Sulfur (28%)	gal					19.3063					
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02	
Atrazine 4L	pt					4.0000					
Halex GT	pt					3.6000					
App by Air (3 gal)	appl			0.20	May	0.2000					
Bifenthrin	oz					1.2800					
Corn Consultant	acre			1.00	May	1.0000					
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04	
UAN (32%)	gal					36.7200					
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09	
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02	
Haul Corn	bu					170.0000					
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07	
TOTALS								0.44	0.44	0.58	0.40

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal
 Non-irrigated, Delta Area, Mississippi, 2023

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						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71			0.29	4.88	3.35	8.23
Phosphorus (46% P2O5)	cwt	81.50						5.22	86.72		86.72
Potash (60% K2O)	cwt	58.25						3.73	61.98		61.98
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96			0.44	7.37	7.37	14.74
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
Clarity	pt	7.15						0.31	7.46		7.46
Select Max	pt	13.86						0.59	14.45		14.45
Plant & Pre-Folding	12R-38		2.77	2.45	2.16			0.28	7.66	7.61	15.27
Corn Seed BtRR	thous	105.00						3.92	108.92		108.92
Fert 10-34-0	gal	21.44						0.80	22.24		22.24
Zinc Plus	pt	7.36						0.27	7.63		7.63
Custom Apply Fert	acre	7.50						0.24	7.74		7.74
UAN + Sulfur (28%)	gal	85.14						2.72	87.86		87.86
Spray (Broadcast)	60'		1.46	0.46	1.02			0.09	3.03	2.02	5.05
Atrazine 4L	pt	12.00						0.38	12.38		12.38
Halex GT	pt	37.80						1.21	39.01		39.01
App by Air (3 gal)	appl	1.28						0.03	1.31		1.31
Bifenthrin	oz	1.45						0.04	1.49		1.49
Corn Consultant	acre	6.00						0.16	6.16		6.16
Fert Appl (Liquid)	12R-38		2.68	1.52	1.85			0.16	6.21	4.52	10.73
UAN (32%)	gal	157.90						4.21	162.11		162.11
Header - Corn	8R-38		6.17	6.89	3.17			0.09	16.32	24.86	41.18
Grain Cart Corn	700 bu		1.31	0.57	0.80			0.01	2.69	2.25	4.94
Haul Corn	bu	39.10						0.21	39.31		39.31
Stalk Shredder Flex	20'		4.28	3.10	2.59			0.05	10.02	6.67	16.69
TOTALS			703.17	24.09	17.42	15.26	0.00	28.91	788.85	58.65	847.50

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1045.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	0.00	0.00	0.00	0.00
FERTILIZERS	139.75	0.00	0.00	0.00	0.00	28.80	85.14	157.90	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	38.63	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	0.00	6.00	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	3.67	0.00	0.00	0.00	0.00	2.16	1.02	1.85	0.00	0.00	0.00	6.56
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	5.42	0.00	0.00	0.00	0.00	2.77	1.46	2.68	0.00	0.00	0.00	11.76
REPAIR & MAINTENANCE	2.43	0.00	0.00	0.00	0.00	2.45	0.46	1.52	0.00	0.00	0.00	10.56
INTEREST ON OP. CAP.	12.36	0.00	0.00	0.00	1.68	5.27	4.64	4.60	0.00	0.00	0.00	0.36
TOTAL DIRECT EXPENSES	205.59	0.00	0.00	0.00	41.17	146.45	150.02	177.28	0.00	0.00	0.00	68.34
NET INCOME	-205.59	0.00	0.00	0.00	-41.17	-146.45	-150.02	-177.28	0.00	0.00	0.00	977.16
NET INCOME TO DATE	-205.59	-205.59	-205.59	-205.59	-246.76	-393.21	-543.23	-720.51	-720.51	-720.51	-720.51	256.65

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal
 Non-irrigated, Delta Area, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-377	-350	-324	-298	-272	-246	-220	-194	-168	-141	-115
			-435	-409	-383	-357	-331	-305	-278	-252	-226	-200	-174
60	102.00	bu	-302	-271	-239	-208	-177	-145	-114	-83	-51	-20	10
			-361	-329	-298	-267	-235	-204	-173	-141	-110	-79	-47
70	119.00	bu	-228	-191	-154	-118	-81	-45	-8	27	64	101	137
			-286	-250	-213	-177	-140	-103	-67	-30	5	42	79
80	136.00	bu	-153	-111	-70	-28	13	55	97	139	180	222	264
			-212	-170	-128	-86	-45	-3	38	80	122	164	205
90	153.00	bu	-79	-32	14	61	108	156	203	250	297	344	391
			-137	-90	-43	3	50	97	144	191	238	285	332
100	170.00	bu	-4	47	99	152	204	256	308	361	413	465	518
			-63	-11	41	93	145	198	250	302	354	407	459
110	187.00	bu	69	127	184	242	299	357	414	472	529	587	644
			11	68	126	183	241	298	356	413	471	528	586
120	204.00	bu	144	206	269	332	395	457	520	583	646	708	771
			85	148	211	273	336	399	461	524	587	650	712
130	221.00	bu	218	286	354	422	490	558	626	694	762	830	898
			160	228	295	363	431	499	567	635	703	771	839
140	238.00	bu	293	366	439	512	585	659	732	805	878	951	1025
			234	307	380	454	527	600	673	746	820	893	966
150	255.00	bu	367	446	524	602	681	759	838	916	994	1073	1151
			309	387	465	544	622	701	779	857	936	1014	1093

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 2022 input prices.

Table 3.A Estimated costs per acre
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	0.2000	1.28	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	1.9570	97.85	_____
Potash (60% K2O)	cwt	46.60	1.5000	69.90	_____
Fert 10-34-0	gal	5.36	4.0000	21.44	_____
Zinc Plus	pt	3.68	2.0000	7.36	_____
UAN + Sulfur (28%)	gal	4.41	32.1712	141.87	_____
UAN (32%)	gal	4.30	30.0000	129.00	_____
Urea, Solid (46% N)	cwt	41.58	1.0000	41.58	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	1.2800	1.45	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	34.0000	127.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	8.00	1.0000	8.00	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.3699	6.12	_____
Harvesters	hour	16.54	0.1277	2.11	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1462	1.33	_____
UNALLOCATED LABOR					
	hour	16.56	0.4478	7.42	_____
DIESEL FUEL					
Tractors	gal	4.48	4.2843	19.18	_____
Harvesters	gal	4.48	1.7419	7.80	_____
1/4-mi. Pivot Irr.	gal	4.48	11.2011	50.17	_____
REPAIR & MAINTENANCE					
Implements	acre	11.41	1.0000	11.41	_____
Tractors	acre	3.19	1.0000	3.19	_____
Harvesters	acre	6.16	1.0000	6.16	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	35.48	1.0000	35.48	_____
TOTAL DIRECT EXPENSES				1016.74	_____
FIXED EXPENSES					
Implements	acre	19.32	1.0000	19.32	_____
Tractors	acre	22.56	1.0000	22.56	_____
Harvesters	acre	27.10	1.0000	27.10	_____
1/4-mi. Pivot Irr.	acre	87.96	1.0000	87.96	_____
TOTAL FIXED EXPENSES				156.94	_____
TOTAL SPECIFIED EXPENSES				1173.68	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____

TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.88	1.0000	8.88	_____
FERTILIZERS	acre	509.00	1.0000	509.00	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	1.45	1.0000	1.45	_____
SEED/PLANTS	acre	127.50	1.0000	127.50	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1462	1.33	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	16.54	0.4976	8.23	_____
UNALLOCATED LABOR	hour	16.56	0.4478	7.42	_____
DIESEL FUEL	gal	4.48	17.2274	77.15	_____
REPAIR & MAINTENANCE	acre	42.71	1.0000	42.71	_____
INTEREST ON OP. CAP.	acre	35.48	1.0000	35.48	_____

TOTAL DIRECT EXPENSES				1016.74	_____
RETURNS ABOVE DIRECT EXPENSES				336.26	_____
TOTAL FIXED EXPENSES				156.94	_____

TOTAL SPECIFIED EXPENSES				1173.68	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				179.32	_____

Note: Cost of production estimates are based on 2022 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.C Estimated resource use for field operations, per acre
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

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	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.9570				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant & Pre-Folding	16R-30	MFWD 225	0.050	1.00	Mar		0.05	0.05	0.10	0.04
Corn Seed BtRR	thous					34.0000				
Fert 10-34-0	gal					4.0000				
Zinc Plus	pt					2.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
Spray (Broadcast)	60'	MFWD 225	0.028	1.00	Apr		0.02	0.02	0.04	0.02
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Corn Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN (32%)	gal					30.0000				
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
1/4-mi. Pivot Irr.	acre				Jul	1.0000			0.20	
TOTALS							0.49	0.49	0.84	0.44

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

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						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71			0.29	4.88	3.35	8.23
Phosphorus (46% P2O5)	cwt	97.85						6.26	104.11		104.11
Potash (60% K2O)	cwt	69.90						4.47	74.37		74.37
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96			0.44	7.37	7.37	14.74
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
Clarity	pt	7.15						0.31	7.46		7.46
Select Max	pt	13.86						0.59	14.45		14.45
Plant & Pre-Folding	16R-30		2.63	2.97	2.06			0.29	7.95	8.63	16.58
Corn Seed BtRR	thous	127.50						4.76	132.26		132.26
Fert 10-34-0	gal	21.44						0.80	22.24		22.24
Zinc Plus	pt	7.36						0.27	7.63		7.63
Custom Apply Fert	acre	7.50						0.24	7.74		7.74
UAN + Sulfur (28%)	gal	141.87						4.54	146.41		146.41
Spray (Broadcast)	60'		1.46	0.46	1.02			0.09	3.03	2.02	5.05
Atrazine 4L	pt	12.00						0.38	12.38		12.38
Halex GT	pt	37.80						1.21	39.01		39.01
App by Air (3 gal)	appl	1.28						0.03	1.31		1.31
Bifenthrin	oz	1.45						0.04	1.49		1.49
Corn Consultant	acre	6.00						0.16	6.16		6.16
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83			0.25	9.44	6.84	16.28
UAN (32%)	gal	129.00						3.44	132.44		132.44
App Fert by Air	cwt	8.00						0.17	8.17		8.17
Urea, Solid (46% N)	cwt	41.58						0.89	42.47		42.47
Header - Corn	8R-30		7.80	8.95	4.01			0.11	20.87	31.85	52.72
Grain Cart Corn	700 bu		1.31	0.57	0.80			0.01	2.69	2.25	4.94
Haul Corn	bu	50.60						0.27	50.87		50.87
Stalk Shredder Flex	20'		4.28	3.10	2.59			0.05	10.02	6.67	16.69
1/4-mi. Pivot Irr.	acre		50.17	21.95	1.84			1.66	75.62	87.96	163.58
TOTALS		842.58	77.15	42.71	18.82	0.00	35.48	1016.74	156.94	1173.68	

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	0.00	0.00	0.00	0.00
FERTILIZERS	167.75	0.00	0.00	0.00	0.00	28.80	141.87	129.00	41.58	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	127.50	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	8.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	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	0.00	6.00	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	3.67	0.00	0.00	0.00	0.00	2.06	2.36	2.98	0.20	0.15	0.00	7.40
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	5.42	0.00	0.00	0.00	0.00	2.63	1.46	19.13	20.07	15.05	0.00	13.39
REPAIR & MAINTENANCE	2.43	0.00	0.00	0.00	0.00	2.97	0.46	20.75	1.99	1.49	0.00	12.62
INTEREST ON OP. CAP.	14.14	0.00	0.00	0.00	1.68	6.12	6.50	4.81	1.53	0.26	0.00	0.44
TOTAL DIRECT EXPENSES	235.37	0.00	0.00	0.00	41.17	170.08	209.95	185.40	73.37	16.95	0.00	84.45
NET INCOME	-235.37	0.00	0.00	0.00	-41.17	-170.08	-209.95	-185.40	-73.37	-16.95	0.00	1268.55
NET INCOME TO DATE	-235.37	-235.37	-235.37	-235.37	-276.54	-446.62	-656.57	-841.97	-915.34	-932.29	-932.29	336.26

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
			-----dollars-----										
Corn			4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68
PERCENT	YIELD	UNIT											
50	110.00	bu	-483 -640	-450 -607	-416 -573	-382 -539	-348 -505	-314 -471	-280 -437	-247 -404	-213 -370	-179 -336	-145 -302
60	132.00	bu	-387 -544	-346 -503	-306 -463	-265 -422	-225 -382	-184 -341	-144 -300	-103 -260	-62 -219	-22 -179	18 -138
70	154.00	bu	-291 -448	-243 -400	-196 -353	-149 -306	-101 -258	-54 -211	-7 -163	40 -116	87 -69	135 -21	182 25
80	176.00	bu	-194 -351	-140 -297	-86 -243	-32 -189	21 -135	75 -81	129 -26	184 27	238 81	292 135	346 189
90	198.00	bu	-98 -255	-37 -194	23 -133	84 -72	145 -11	206 49	266 109	327 170	388 231	449 292	510 353
100	220.00	bu	-1 -158	65 -91	133 -23	200 44	268 111	336 179	403 246	471 314	539 382	606 449	674 517
110	242.00	bu	94 -62	168 11	243 86	317 160	392 235	466 309	540 383	615 458	689 532	764 607	838 681
120	264.00	bu	190 33	271 115	353 196	434 277	515 358	596 439	677 520	759 602	840 683	921 764	1002 845
130	286.00	bu	287 130	375 218	463 306	551 394	638 482	726 569	814 657	902 745	990 833	1078 921	1166 1009
140	308.00	bu	383 226	478 321	572 416	667 510	762 605	857 700	951 794	1046 889	1141 984	1235 1079	1330 1173
150	330.00	bu	479 323	581 424	682 525	784 627	885 728	987 830	1088 931	1190 1033	1291 1134	1393 1236	1494 1337

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 2022 input prices.

Table 4.A Estimated costs per acre
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area,
 Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	1.2000	7.68	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	1.9570	97.85	_____
Potash (60% K2O)	cwt	46.60	1.5000	69.90	_____
UAN + Sulfur (28%)	gal	4.41	32.1712	141.87	_____
UAN (32%)	gal	4.30	30.0000	129.00	_____
Urea, Solid (46% N)	cwt	41.58	1.0000	41.58	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	1.2800	1.45	_____
Intrepid 2F	oz	2.06	4.0000	8.24	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed RR2	thous	2.93	34.0000	99.62	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	8.00	1.0000	8.00	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.6423	10.63	_____
Harvesters	hour	16.54	0.1009	1.67	_____
Self-Propelled	hour	16.54	0.0176	0.29	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3250	2.96	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR	hour	16.55	0.6141	10.17	_____
DIESEL FUEL					
Tractors	gal	4.48	7.2557	32.50	_____
Harvesters	gal	4.48	1.3770	6.17	_____
Self-Propelled	gal	4.48	0.1586	0.71	_____
Roll-Out Pipe Irr.	gal	4.48	10.5901	47.44	_____
REPAIR & MAINTENANCE					
Implements	acre	12.61	1.0000	12.61	_____
Tractors	acre	5.35	1.0000	5.35	_____
Harvesters	acre	4.87	1.0000	4.87	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	34.73	1.0000	34.73	_____
TOTAL DIRECT EXPENSES				987.63	_____
FIXED EXPENSES					
Implements	acre	25.92	1.0000	25.92	_____
Tractors	acre	37.86	1.0000	37.86	_____
Harvesters	acre	21.42	1.0000	21.42	_____
Self-Propelled	acre	1.50	1.0000	1.50	_____
Roll-Out Pipe Irr.	acre	65.01	1.0000	65.01	_____
TOTAL FIXED EXPENSES				151.71	_____
TOTAL SPECIFIED EXPENSES				1139.34	_____

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area,
 Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____
TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.28	1.0000	15.28	_____
FERTILIZERS	acre	480.20	1.0000	480.20	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	9.69	1.0000	9.69	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	99.62	1.0000	99.62	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	16.54	0.7609	12.59	_____
UNALLOCATED LABOR	hour	16.55	0.6141	10.17	_____
DIESEL FUEL	gal	4.48	19.3816	86.82	_____
REPAIR & MAINTENANCE	acre	30.19	1.0000	30.19	_____
INTEREST ON OP. CAP.	acre	34.73	1.0000	34.73	_____
TOTAL DIRECT EXPENSES				987.63	_____
RETURNS ABOVE DIRECT EXPENSES				365.37	_____
TOTAL FIXED EXPENSES				151.71	_____
TOTAL SPECIFIED EXPENSES				1139.34	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				213.66	_____

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	42'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.9570				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond./Roll-Fold.	40'	MFWD 225	0.046	1.00	Mar		0.04	0.04	0.04	0.04
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					34.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					30.0000				
Cultivate	12R-38	MFWD 225	0.054	1.00	May		0.05	0.05	0.05	0.04
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000	0.07	0.07	0.46	
TOTALS							0.76	0.74	1.27	0.61

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		5.30	1.06	3.21			0.61	10.18	6.77	16.95
Disk Harrow	42'		2.43	2.15	1.47			0.39	6.44	7.05	13.49
Soil Test	acre	3.33						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71			0.29	4.88	3.35	8.23
Phosphorus (46% P2O5)	cwt	97.85						6.26	104.11		104.11
Potash (60% K2O)	cwt	69.90						4.47	74.37		74.37
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96			0.44	7.37	7.37	14.74
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
Clarity	pt	7.15						0.31	7.46		7.46
Select Max	pt	13.86						0.59	14.45		14.45
Row Cond./Roll-Fold.	40'		2.43	1.07	1.48			0.19	5.17	4.87	10.04
Plant - Folding	12R-38		2.57	2.10	2.01			0.25	6.93	6.68	13.61
Corn Seed RR2	thous	99.62						3.72	103.34		103.34
Custom Apply Fert	acre	7.50						0.24	7.74		7.74
UAN + Sulfur (28%)	gal	141.87						4.54	146.41		146.41
Sprayer 600-750gal	60' 175hp		0.71	0.20	0.63			0.05	1.59	1.50	3.09
Atrazine 4L	pt	12.00						0.38	12.38		12.38
Halex GT	pt	37.80						1.21	39.01		39.01
Corn Consultant	acre	6.00						0.16	6.16		6.16
App by Air (3 gal)	appl	1.28						0.03	1.31		1.31
Bifenthrin	oz	1.45						0.04	1.49		1.49
Fert Appl (Liquid)	12R-38		2.68	1.52	1.85			0.16	6.21	4.52	10.73
UAN (32%)	gal	129.00						3.44	132.44		132.44
Cultivate	12R-38		2.82	1.20	1.71			0.15	5.88	5.51	11.39
App Fert by Air	cwt	8.00						0.17	8.17		8.17
Urea, Solid (46% N)	cwt	41.58						0.89	42.47		42.47
App by Air (3 gal)	appl	6.40						0.14	6.54		6.54
Intrepid 2F	oz	8.24						0.18	8.42		8.42
Header - Corn	8R-38		6.17	6.89	3.17			0.09	16.32	24.86	41.18
Grain Cart Corn	700 bu		1.31	0.57	0.80			0.01	2.69	2.25	4.94
Haul Corn	bu	50.60						0.27	50.87		50.87
Stalk Shredder Flex	20'		4.28	3.10	2.59			0.05	10.02	6.67	16.69
Roll-Out Pipe Irr.	acre	7.92	50.70	7.90	4.84			1.55	72.91	70.31	143.22
TOTALS		808.46	86.82	30.19	27.43	0.00	34.73	987.63	151.71	1139.34	

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	6.40	0.00	0.00	0.00
FERTILIZERS	167.75	0.00	0.00	0.00	0.00	0.00	141.87	129.00	41.58	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	8.24	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	99.62	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	8.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	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	0.00	6.00	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	8.98	0.00	0.00	0.00	0.00	3.49	0.63	3.79	3.10	0.23	0.65	6.56
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	14.81	0.00	0.00	0.00	0.00	5.00	0.71	5.50	36.44	11.86	0.74	11.76
REPAIR & MAINTENANCE	6.00	0.00	0.00	0.00	0.00	3.17	0.20	2.72	6.31	1.05	0.18	10.56
INTEREST ON OP. CAP.	15.31	0.00	0.00	0.00	1.68	4.16	6.42	3.99	2.52	0.21	0.02	0.42
TOTAL DIRECT EXPENSES	254.81	0.00	0.00	0.00	41.17	115.44	207.13	153.73	120.51	13.35	1.59	79.90
NET INCOME	-254.81	0.00	0.00	0.00	-41.17	-115.44	-207.13	-153.73	-120.51	-13.35	-1.59	1273.10
NET INCOME TO DATE	-254.81	-254.81	-254.81	-254.81	-295.98	-411.42	-618.55	-772.28	-892.79	-906.14	-907.73	365.37

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Corn	4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68		
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-454 -606	-420 -572	-387 -538	-353 -505	-319 -471	-285 -437	-251 -403	-218 -369	-184 -335	-150 -302	-116 -268
60	132.00	bu	-358 -510	-317 -469	-277 -428	-236 -388	-196 -347	-155 -307	-114 -266	-74 -226	-33 -185	6 -144	47 -104
70	154.00	bu	-262 -413	-214 -366	-167 -319	-119 -271	-72 -224	-25 -176	22 -129	69 -82	116 -34	164 12	211 59
80	176.00	bu	-165 -317	-111 -263	-57 -209	-3 -155	50 -100	104 -46	159 7	213 61	267 115	321 169	375 223
90	198.00	bu	-69 -220	-8 -160	52 -99	113 -38	174 22	235 83	296 144	356 205	417 266	478 326	539 387
100	220.00	bu	27 -124	94 -56	162 10	230 78	297 146	365 213	433 281	500 348	568 416	635 484	703 551
110	242.00	bu	123 -28	197 46	272 120	346 195	421 269	495 343	569 418	644 492	718 567	793 641	867 715
120	264.00	bu	219 68	301 149	382 230	463 311	544 392	625 474	706 555	788 636	869 717	950 798	1031 879
130	286.00	bu	316 164	404 252	492 340	580 428	668 516	756 604	843 692	931 780	1019 868	1107 956	1195 1044
140	308.00	bu	412 260	507 355	602 450	696 545	791 639	886 734	980 829	1075 923	1170 1018	1265 1113	1359 1208
150	330.00	bu	509 357	610 458	712 560	813 661	914 763	1016 864	1117 966	1219 1067	1320 1169	1422 1270	1523 1372

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 2022 input prices.

Table 5.A Estimated costs per acre
 Corn, conventional tillage, RR2, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	1.2000	7.68	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	1.6300	81.50	_____
Potash (60% K2O)	cwt	46.60	1.2500	58.25	_____
UAN + Sulfur (28%)	gal	4.41	19.3063	85.14	_____
UAN (32%)	gal	4.30	36.7200	157.90	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	1.2804	1.45	_____
Intrepid 2F	oz	2.06	4.0000	8.24	_____
SEED/PLANTS					
Corn Seed RR2	thous	2.93	28.0000	82.04	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4903	8.11	_____
Harvesters	hour	16.54	0.1009	1.67	_____
Self-Propelled	hour	16.54	0.0176	0.29	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	16.54	0.5480	9.07	_____
DIESEL FUEL					
Tractors	gal	4.48	5.6788	25.43	_____
Harvesters	gal	4.48	1.3770	6.17	_____
Self-Propelled	gal	4.48	0.1586	0.71	_____
REPAIR & MAINTENANCE					
Implements	acre	11.13	1.0000	11.13	_____
Tractors	acre	4.23	1.0000	4.23	_____
Harvesters	acre	4.87	1.0000	4.87	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	28.30	1.0000	28.30	_____
TOTAL DIRECT EXPENSES				767.37	_____
FIXED EXPENSES					
Implements	acre	21.14	1.0000	21.14	_____
Tractors	acre	29.90	1.0000	29.90	_____
Harvesters	acre	21.42	1.0000	21.42	_____
Self-Propelled	acre	1.50	1.0000	1.50	_____
TOTAL FIXED EXPENSES				73.96	_____
TOTAL SPECIFIED EXPENSES				841.33	_____

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	170.0000	1045.50	_____

TOTAL INCOME				1045.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.28	1.0000	15.28	_____
FERTILIZERS	acre	382.79	1.0000	382.79	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	9.69	1.0000	9.69	_____
SEED/PLANTS	acre	82.04	1.0000	82.04	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
OPERATOR LABOR	hour	16.54	0.6089	10.07	_____
UNALLOCATED LABOR	hour	16.54	0.5480	9.07	_____
DIESEL FUEL	gal	4.48	7.2145	32.31	_____
REPAIR & MAINTENANCE	acre	20.43	1.0000	20.43	_____
INTEREST ON OP. CAP.	acre	28.30	1.0000	28.30	_____

TOTAL DIRECT EXPENSES				767.37	_____
RETURNS ABOVE DIRECT EXPENSES				278.13	_____
TOTAL FIXED EXPENSES				73.96	_____

TOTAL SPECIFIED EXPENSES				841.33	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				204.17	_____

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
							-----hours-----			
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	42'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
Bed/Disk (Hipper)	12R-38	MFWD 225	0.049	1.00	Oct		0.04	0.04	0.04	0.04
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond Folding	38'	MFWD 225	0.040	1.00	Mar		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2804				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					36.7200				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.60	0.59	0.73	0.54

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Subsoiler	3 shank		5.30	1.06	3.21		0.61	10.18	6.77	16.95
Disk Harrow	42'		2.43	2.15	1.47		0.39	6.44	7.05	13.49
Soil Test	acre	3.33					0.21	3.54		3.54
Lime (Spread)	ton	38.63					2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71		0.29	4.88	3.35	8.23
Phosphorus(46% P2O5)	cwt	81.50					5.22	86.72		86.72
Potash (60% K2O)	cwt	58.25					3.73	61.98		61.98
Bed/Disk (Hipper)	12R-38		2.56	1.38	1.55		0.35	5.84	5.85	11.69
App by Air (5 gal)	appl	7.60					0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34		11.34
Clarity	pt	7.15					0.31	7.46		7.46
Select Max	pt	13.86					0.59	14.45		14.45
Row Cond Folding	38'		2.12	0.76	1.29		0.16	4.33	4.46	8.79
Plant - Folding	12R-38		2.57	2.10	2.01		0.25	6.93	6.68	13.61
Corn Seed RR2	thous	82.04					3.06	85.10		85.10
Custom Apply Fert	acre	7.50					0.24	7.74		7.74
UAN + Sulfur (28%)	gal	85.14					2.72	87.86		87.86
Sprayer 600-750gal	60' 175hp		0.71	0.20	0.63		0.05	1.59	1.50	3.09
Atrazine 4L	pt	12.00					0.38	12.38		12.38
Halex GT	pt	37.80					1.21	39.01		39.01
Corn Consultant	acre	6.00					0.16	6.16		6.16
App by Air (3 gal)	appl	1.28					0.03	1.31		1.31
Bifenthrin	oz	1.45					0.04	1.49		1.49
Fert Appl (Liquid)	12R-38		2.68	1.52	1.85		0.16	6.21	4.52	10.73
UAN (32%)	gal	157.90					4.21	162.11		162.11
App by Air (3 gal)	appl	6.40					0.14	6.54		6.54
Intrepid 2F	oz	8.24					0.18	8.42		8.42
Header - Corn	8R-38		6.17	6.89	3.17		0.09	16.32	24.86	41.18
Grain Cart Corn	700 bu		1.31	0.57	0.80		0.01	2.69	2.25	4.94
Haul Corn	bu	39.10					0.21	39.31		39.31
Stalk Shredder Flex	20'		4.28	3.10	2.59		0.05	10.02	6.67	16.69
TOTALS		666.05	32.31	20.43	20.28	0.00	28.30	767.37	73.96	841.33

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1045.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	6.40	0.00	0.00	0.00
FERTILIZERS	139.75	0.00	0.00	0.00	0.00	0.00	85.14	157.90	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	8.24	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	82.04	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	38.63	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	0.00	6.00	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	7.94	0.00	0.00	0.00	0.00	3.30	0.63	1.85	0.00	0.00	0.00	6.56
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	12.47	0.00	0.00	0.00	0.00	4.69	0.71	2.68	0.00	0.00	0.00	11.76
REPAIR & MAINTENANCE	5.29	0.00	0.00	0.00	0.00	2.86	0.20	1.52	0.00	0.00	0.00	10.56
INTEREST ON OP. CAP.	13.27	0.00	0.00	0.00	1.68	3.47	4.60	4.60	0.32	0.00	0.00	0.36
TOTAL DIRECT EXPENSES	220.68	0.00	0.00	0.00	41.17	96.36	148.58	177.28	14.96	0.00	0.00	68.34
NET INCOME	-220.68	0.00	0.00	0.00	-41.17	-96.36	-148.58	-177.28	-14.96	0.00	0.00	977.16
NET INCOME TO DATE	-220.68	-220.68	-220.68	-220.68	-261.85	-358.21	-506.79	-684.07	-699.03	-699.03	-699.03	278.13

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68
			-----dollars-----										
PERCENT	YIELD	UNIT											
50	85.00	bu	-355	-329	-303	-277	-251	-224	-198	-172	-146	-120	-94
			-429	-403	-377	-351	-325	-298	-272	-246	-220	-194	-168
60	102.00	bu	-281	-249	-218	-187	-155	-124	-92	-61	-30	1	32
			-355	-323	-292	-261	-229	-198	-166	-135	-104	-72	-41
70	119.00	bu	-206	-170	-133	-96	-60	-23	12	49	86	122	159
			-280	-244	-207	-170	-134	-97	-61	-24	12	48	85
80	136.00	bu	-132	-90	-48	-6	35	76	118	160	202	244	285
			-206	-164	-122	-80	-38	2	44	86	128	170	212
90	153.00	bu	-57	-10	36	83	130	177	224	271	318	365	412
			-131	-84	-37	9	56	103	150	197	244	291	338
100	170.00	bu	16	69	121	173	225	278	330	382	434	487	539
			-57	-4	47	99	151	204	256	308	360	413	465
110	187.00	bu	91	148	206	263	321	378	436	493	551	608	666
			17	74	132	189	247	304	362	419	477	534	592
120	204.00	bu	165	228	291	353	416	479	542	604	667	730	793
			91	154	217	279	342	405	468	530	593	656	719
130	221.00	bu	240	308	376	444	512	579	647	715	783	851	919
			166	234	302	370	438	506	573	641	709	777	845
140	238.00	bu	314	387	461	534	607	680	753	826	900	973	1046
			240	313	387	460	533	606	679	753	826	899	972
150	255.00	bu	389	467	545	624	702	781	859	938	1016	1094	1173
			315	393	472	550	628	707	785	864	942	1020	1099

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 2022 input prices.

Table 6.A Estimated costs per acre
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, -pivot irrigated, 13 ac-in., Delta Area,
 Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	1.2000	7.68	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	50.00	1.9570	97.85	_____
Potash (60% K2O)	cwt	46.60	1.5000	69.90	_____
UAN + Sulfur (28%)	gal	4.41	32.1712	141.87	_____
UAN (32%)	gal	4.30	30.0000	129.00	_____
Urea, Solid (46% N)	cwt	41.58	1.0000	41.58	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	1.2800	1.45	_____
Intrepid 2F	oz	2.06	4.0000	8.24	_____
SEED/PLANTS					
Corn Seed RR2	thous	2.93	34.0000	99.62	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	8.00	1.0000	8.00	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.5637	9.32	_____
Harvesters	hour	16.54	0.1009	1.67	_____
Self-Propelled	hour	16.54	0.0176	0.29	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR	hour	16.55	0.6141	10.17	_____
DIESEL FUEL					
Tractors	gal	4.48	6.5294	29.24	_____
Harvesters	gal	4.48	1.3770	6.17	_____
Self-Propelled	gal	4.48	0.1586	0.71	_____
1/4-mi. Pivot Irr.	gal	4.48	11.2011	50.17	_____
REPAIR & MAINTENANCE					
Implements	acre	12.36	1.0000	12.36	_____
Tractors	acre	4.86	1.0000	4.86	_____
Harvesters	acre	4.87	1.0000	4.87	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	34.84	1.0000	34.84	_____
TOTAL DIRECT EXPENSES				990.34	_____
FIXED EXPENSES					
Implements	acre	24.10	1.0000	24.10	_____
Tractors	acre	34.38	1.0000	34.38	_____
Harvesters	acre	21.42	1.0000	21.42	_____
Self-Propelled	acre	1.50	1.0000	1.50	_____
1/4-mi. Pivot Irr.	acre	87.96	1.0000	87.96	_____
TOTAL FIXED EXPENSES				169.36	_____
TOTAL SPECIFIED EXPENSES				1159.70	_____

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, pivot irrigated, 13 ac-in., Delta Area,
 Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____

TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.28	1.0000	15.28	_____
FERTILIZERS	acre	480.20	1.0000	480.20	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	9.69	1.0000	9.69	_____
SEED/PLANTS	acre	99.62	1.0000	99.62	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	16.54	0.6823	11.28	_____
UNALLOCATED LABOR	hour	16.55	0.6141	10.17	_____
DIESEL FUEL	gal	4.48	19.2663	86.29	_____
REPAIR & MAINTENANCE	acre	44.24	1.0000	44.24	_____
INTEREST ON OP. CAP.	acre	34.84	1.0000	34.84	_____

TOTAL DIRECT EXPENSES				990.34	_____
RETURNS ABOVE DIRECT EXPENSES				362.66	_____
TOTAL FIXED EXPENSES				169.36	_____

TOTAL SPECIFIED EXPENSES				1159.70	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				193.30	_____

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, pivot irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	42'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.9570				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond./Roll-Fold.	40'	MFWD 225	0.046	1.00	Mar		0.04	0.04	0.04	0.04
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					34.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					30.0000				
Cultivate	12R-38	MFWD 225	0.054	1.00	May		0.05	0.05	0.05	0.04
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
1/4-mi. Pivot Irr.	acre				Jul	1.0000			0.20	
TOTALS							0.68	0.66	1.01	0.61

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		5.30	1.06	3.21			0.61	10.18	6.77	16.95
Disk Harrow	42'		2.43	2.15	1.47			0.39	6.44	7.05	13.49
Soil Test	acre	3.33						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71			0.29	4.88	3.35	8.23
Phosphorus (46% P2O5)	cwt	97.85						6.26	104.11		104.11
Potash (60% K2O)	cwt	69.90						4.47	74.37		74.37
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96			0.44	7.37	7.37	14.74
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
Clarity	pt	7.15						0.31	7.46		7.46
Select Max	pt	13.86						0.59	14.45		14.45
Row Cond./Roll-Fold.	40'		2.43	1.07	1.48			0.19	5.17	4.87	10.04
Plant - Folding	12R-38		2.57	2.10	2.01			0.25	6.93	6.68	13.61
Corn Seed RR2	thous	99.62						3.72	103.34		103.34
Custom Apply Fert	acre	7.50						0.24	7.74		7.74
UAN + Sulfur (28%)	gal	141.87						4.54	146.41		146.41
Sprayer 600-750gal	60' 175hp		0.71	0.20	0.63			0.05	1.59	1.50	3.09
Atrazine 4L	pt	12.00						0.38	12.38		12.38
Halex GT	pt	37.80						1.21	39.01		39.01
Corn Consultant	acre	6.00						0.16	6.16		6.16
App by Air (3 gal)	appl	1.28						0.03	1.31		1.31
Bifenthrin	oz	1.45						0.04	1.49		1.49
Fert Appl (Liquid)	12R-38		2.68	1.52	1.85			0.16	6.21	4.52	10.73
UAN (32%)	gal	129.00						3.44	132.44		132.44
Cultivate	12R-38		2.82	1.20	1.71			0.15	5.88	5.51	11.39
App Fert by Air	cwt	8.00						0.17	8.17		8.17
Urea, Solid (46% N)	cwt	41.58						0.89	42.47		42.47
App by Air (3 gal)	appl	6.40						0.14	6.54		6.54
Intrepid 2F	oz	8.24						0.18	8.42		8.42
Header - Corn	8R-38		6.17	6.89	3.17			0.09	16.32	24.86	41.18
Grain Cart Corn	700 bu		1.31	0.57	0.80			0.01	2.69	2.25	4.94
Haul Corn	bu	50.60						0.27	50.87		50.87
Stalk Shredder Flex	20'		4.28	3.10	2.59			0.05	10.02	6.67	16.69
1/4-mi. Pivot Irr.	acre		50.17	21.95	1.84			1.66	75.62	87.96	163.58
TOTALS		800.54	86.29	44.24	24.43	0.00	34.84	990.34	169.36	1159.70	

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	6.40	0.00	0.00	0.00
FERTILIZERS	167.75	0.00	0.00	0.00	0.00	0.00	141.87	129.00	41.58	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	8.24	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	99.62	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	8.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	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	0.00	6.00	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	8.35	0.00	0.00	0.00	0.00	3.49	1.97	3.71	0.20	0.15	0.00	6.56
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	13.15	0.00	0.00	0.00	0.00	5.00	0.71	20.55	20.07	15.05	0.00	11.76
REPAIR & MAINTENANCE	5.64	0.00	0.00	0.00	0.00	3.17	0.20	21.19	1.99	1.49	0.00	10.56
INTEREST ON OP. CAP.	15.14	0.00	0.00	0.00	1.68	4.16	6.46	4.87	1.85	0.26	0.00	0.42
TOTAL DIRECT EXPENSES	251.99	0.00	0.00	0.00	41.17	115.44	208.51	188.05	88.33	16.95	0.00	79.90
NET INCOME	-251.99	0.00	0.00	0.00	-41.17	-115.44	-208.51	-188.05	-88.33	-16.95	0.00	1273.10
NET INCOME TO DATE	-251.99	-251.99	-251.99	-251.99	-293.16	-408.60	-617.11	-805.16	-893.49	-910.44	-910.44	362.66

Note: Cost of production estimates are based on 2022 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
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, pivot irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2023

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
			dollars										
PERCENT	YIELD	UNIT											
Corn			4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68
50	110.00	bu	-457 -626	-423 -593	-389 -559	-356 -525	-322 -491	-288 -457	-254 -423	-220 -390	-186 -356	-153 -322	-119 -288
60	132.00	bu	-361 -530	-320 -489	-279 -449	-239 -408	-198 -368	-158 -327	-117 -286	-77 -246	-36 -205	4 -165	44 -124
70	154.00	bu	-264 -434	-217 -386	-170 -339	-122 -292	-75 -244	-27 -197	19 -149	66 -102	114 -55	161 -7	208 39
80	176.00	bu	-168 -337	-114 -283	-60 -229	-6 -175	48 -121	102 -67	156 -13	210 41	264 95	318 149	372 203
90	198.00	bu	-71 -241	-11 -180	49 -119	110 -58	171 2	232 63	293 123	354 184	415 245	475 306	536 367
100	220.00	bu	24 -144	92 -77	159 -9	227 58	295 125	362 193	430 260	497 328	565 396	633 463	700 531
110	242.00	bu	120 -48	195 25	269 100	344 174	418 249	492 323	567 397	641 472	716 546	790 621	864 695
120	264.00	bu	217 47	298 129	379 210	460 291	541 372	623 453	704 534	785 616	866 697	947 778	1028 859
130	286.00	bu	313 144	401 232	489 320	577 408	665 495	753 583	841 671	929 759	1017 847	1105 935	1193 1023
140	308.00	bu	409 240	504 335	599 430	694 524	788 619	883 714	978 808	1072 903	1167 998	1262 1092	1357 1187
150	330.00	bu	506 336	607 438	709 539	810 641	912 742	1013 844	1115 945	1216 1047	1318 1148	1419 1250	1521 1351

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 2022 input prices.

Table 7.A Estimated costs per acre
 Corn, stale seedbed, RR2, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	1.2000	7.68	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	1.6300	81.50	_____
Potash (60% K2O)	cwt	46.60	1.2500	58.25	_____
UAN + Sulfur (28%)	gal	4.41	56.0263	247.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	1.2804	1.45	_____
Intrepid 2F	oz	2.06	4.0000	8.24	_____
SEED/PLANTS					
Corn Seed RR2	thous	2.93	28.0000	82.04	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4295	7.10	_____
Harvesters	hour	16.54	0.1277	2.11	_____
Self-Propelled	hour	16.54	0.0176	0.29	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	16.56	0.5173	8.57	_____
DIESEL FUEL					
Tractors	gal	4.48	4.9741	22.28	_____
Harvesters	gal	4.48	1.7419	7.80	_____
Self-Propelled	gal	4.48	0.1586	0.71	_____
REPAIR & MAINTENANCE					
Implements	acre	11.63	1.0000	11.63	_____
Tractors	acre	3.70	1.0000	3.70	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	28.04	1.0000	28.04	_____
TOTAL DIRECT EXPENSES				770.07	_____
FIXED EXPENSES					
Implements	acre	20.34	1.0000	20.34	_____
Tractors	acre	26.19	1.0000	26.19	_____
Harvesters	acre	27.10	1.0000	27.10	_____
Self-Propelled	acre	1.50	1.0000	1.50	_____
TOTAL FIXED EXPENSES				75.13	_____
TOTAL SPECIFIED EXPENSES				845.20	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	170.0000	1045.50	_____

TOTAL INCOME				1045.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.28	1.0000	15.28	_____
FERTILIZERS	acre	386.83	1.0000	386.83	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	9.69	1.0000	9.69	_____
SEED/PLANTS	acre	82.04	1.0000	82.04	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1530	1.39	_____
OPERATOR LABOR	hour	16.54	0.5748	9.50	_____
UNALLOCATED LABOR	hour	16.56	0.5173	8.57	_____
DIESEL FUEL	gal	4.48	6.8748	30.79	_____
REPAIR & MAINTENANCE	acre	21.69	1.0000	21.69	_____
INTEREST ON OP. CAP.	acre	28.04	1.0000	28.04	_____

TOTAL DIRECT EXPENSES				770.07	_____
RETURNS ABOVE DIRECT EXPENSES				275.43	_____
TOTAL FIXED EXPENSES				75.13	_____

TOTAL SPECIFIED EXPENSES				845.20	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				200.30	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2023

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	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
Disk Heavy	28'	MFWD 225	0.075	1.00	Oct		0.07	0.07	0.07	0.06
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant - Rigid	12R-30	MFWD 225	0.062	1.00	Mar		0.06	0.06	0.12	0.05
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					36.7200				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2804				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.57	0.55	0.72	0.51

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2023

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						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71			0.29	4.88	3.35	8.23
Phosphorus(46% P2O5)	cwt	81.50						5.22	86.72		86.72
Potash (60% K2O)	cwt	58.25						3.73	61.98		61.98
Disk Heavy	28'		3.93	2.22	2.38			0.55	9.08	8.39	17.47
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96			0.44	7.37	7.37	14.74
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
Clarity	pt	7.15						0.31	7.46		7.46
Select Max	pt	13.86						0.59	14.45		14.45
Plant - Rigid	12R-30		3.26	2.06	2.55			0.29	8.16	7.15	15.31
Corn Seed RR2	thous	82.04						3.06	85.10		85.10
Custom Apply Fert	acre	7.50						0.24	7.74		7.74
UAN + Sulfur (28%)	gal	85.14						2.72	87.86		87.86
Sprayer 600-750gal	60' 175hp		0.71	0.20	0.63			0.05	1.59	1.50	3.09
Atrazine 4L	pt	12.00						0.38	12.38		12.38
Halex GT	pt	37.80						1.21	39.01		39.01
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83			0.25	9.44	6.84	16.28
UAN + Sulfur (28%)	gal	161.94						4.32	166.26		166.26
Corn Consultant	acre	6.00						0.16	6.16		6.16
App by Air (3 gal)	appl	1.28						0.03	1.31		1.31
Bifenthrin	oz	1.45						0.04	1.49		1.49
App by Air (3 gal)	appl	6.40						0.14	6.54		6.54
Intrepid 2F	oz	8.24						0.18	8.42		8.42
Header - Corn	8R-30		7.80	8.95	4.01			0.11	20.87	31.85	52.72
Grain Cart Corn	500 bu		1.31	0.45	0.80			0.01	2.57	2.01	4.58
Haul Corn	bu	39.10						0.21	39.31		39.31
Stalk Shredder Flex	20'		4.28	3.10	2.59			0.05	10.02	6.67	16.69
TOTALS		670.09	30.79	21.69	19.46	0.00	28.04	770.07	75.13	845.20	

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1045.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	6.40	0.00	0.00	0.00
FERTILIZERS	139.75	0.00	0.00	0.00	0.00	0.00	85.14	161.94	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	8.24	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	82.04	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	38.63	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	0.00	6.00	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	6.05	0.00	0.00	0.00	0.00	2.55	0.63	2.83	0.00	0.00	0.00	7.40
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	9.35	0.00	0.00	0.00	0.00	3.26	0.71	4.08	0.00	0.00	0.00	13.39
REPAIR & MAINTENANCE	4.65	0.00	0.00	0.00	0.00	2.06	0.20	2.28	0.00	0.00	0.00	12.50
INTEREST ON OP. CAP.	12.91	0.00	0.00	0.00	1.68	3.35	4.60	4.80	0.32	0.00	0.00	0.38
TOTAL DIRECT EXPENSES	214.67	0.00	0.00	0.00	41.17	93.26	148.58	184.66	14.96	0.00	0.00	72.77
NET INCOME	-214.67	0.00	0.00	0.00	-41.17	-93.26	-148.58	-184.66	-14.96	0.00	0.00	972.73
NET INCOME TO DATE	-214.67	-214.67	-214.67	-214.67	-255.84	-349.10	-497.68	-682.34	-697.30	-697.30	-697.30	275.43

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Corn	4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68		
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-358 -433	-332 -407	-306 -381	-279 -355	-253 -328	-227 -302	-201 -276	-175 -250	-149 -224	-123 -198	-96 -172
60	102.00	bu	-283 -359	-252 -327	-221 -296	-189 -264	-158 -233	-127 -202	-95 -170	-64 -139	-32 -108	-1 -76	29 -45
70	119.00	bu	-209 -284	-172 -247	-136 -211	-99 -174	-63 -138	-26 -101	10 -64	46 -28	83 8	119 44	156 81
80	136.00	bu	-134 -210	-93 -168	-51 -126	-9 -84	32 -42	74 -0	116 40	157 82	199 124	241 166	283 208
90	153.00	bu	-60 -135	-13 -88	33 -41	80 5	127 52	174 99	221 146	268 193	315 240	363 287	410 334
100	170.00	bu	14 -61	66 -8	118 43	170 95	223 148	275 200	327 252	379 304	432 357	484 409	536 461
110	187.00	bu	88 13	146 70	203 128	261 185	318 243	376 300	433 358	491 415	548 473	606 530	663 588
120	204.00	bu	163 87	225 150	288 213	351 276	413 338	476 401	539 464	602 526	664 589	727 652	790 715
130	221.00	bu	237 162	305 230	373 298	441 366	509 434	577 502	645 570	713 638	781 706	849 773	917 841
140	238.00	bu	311 236	385 310	458 383	531 456	604 529	677 602	751 675	824 749	897 822	970 895	1043 968
150	255.00	bu	386 311	464 389	543 468	621 546	700 624	778 703	856 781	935 860	1013 938	1092 1017	1170 1095

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 2022 input prices.

Table 8.A Estimated costs per acre
 Corn, stale seedbed, RR2, 16-row 30", Pivot Irrigated,
 220 bu yield goal, Non-Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	1.2000	7.68	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	1.6300	81.50	_____
Potash (60% K2O)	cwt	46.60	1.2500	58.25	_____
UAN + Sulfur (28%)	gal	4.41	56.0263	247.08	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	1.2804	1.45	_____
Intrepid 2F	oz	2.06	4.0000	8.24	_____
SEED/PLANTS					
Corn Seed RR2	thous	2.93	28.0000	82.04	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4137	6.84	_____
Harvesters	hour	16.54	0.1277	2.11	_____
Self-Propelled	hour	16.54	0.0176	0.29	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1285	1.17	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	16.55	0.5032	8.33	_____
DIESEL FUEL					
Tractors	gal	4.48	4.7921	21.47	_____
Harvesters	gal	4.48	1.7419	7.80	_____
Self-Propelled	gal	4.48	0.1586	0.71	_____
1/4-mi. Pivot Irr.	gal	4.48	11.2011	50.17	_____
REPAIR & MAINTENANCE					
Implements	acre	12.28	1.0000	12.28	_____
Tractors	acre	3.57	1.0000	3.57	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	29.73	1.0000	29.73	_____
TOTAL DIRECT EXPENSES				856.29	_____
FIXED EXPENSES					
Implements	acre	21.77	1.0000	21.77	_____
Tractors	acre	25.23	1.0000	25.23	_____
Harvesters	acre	27.10	1.0000	27.10	_____
Self-Propelled	acre	1.50	1.0000	1.50	_____
1/4-mi. Pivot Irr.	acre	87.96	1.0000	87.96	_____
TOTAL FIXED EXPENSES				163.56	_____
TOTAL SPECIFIED EXPENSES				1019.85	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 16-row 30",
 Pivot Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____

TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.28	1.0000	15.28	_____
FERTILIZERS	acre	386.83	1.0000	386.83	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	9.69	1.0000	9.69	_____
SEED/PLANTS	acre	82.04	1.0000	82.04	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1373	1.25	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	16.54	0.5591	9.24	_____
UNALLOCATED LABOR	hour	16.55	0.5032	8.33	_____
DIESEL FUEL	gal	4.48	17.8938	80.15	_____
REPAIR & MAINTENANCE	acre	44.16	1.0000	44.16	_____
INTEREST ON OP. CAP.	acre	29.73	1.0000	29.73	_____

TOTAL DIRECT EXPENSES				856.29	_____
RETURNS ABOVE DIRECT EXPENSES				496.71	_____
TOTAL FIXED EXPENSES				163.56	_____

TOTAL SPECIFIED EXPENSES				1019.85	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				333.15	_____

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 16-row 30",
 Pivot Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2023

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	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus (46% P2O5)	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
Disk Heavy	28'	MFWD 225	0.075	1.00	Oct		0.07	0.07	0.07	0.06
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant - Folding	16R-30	MFWD 225	0.047	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					36.7200				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2804				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
1/4-mi. Pivot Irr.	acre				Jul	1.0000			0.20	
TOTALS							0.55	0.54	0.90	0.50

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 16-row 30",
 Pivot Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2023

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						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71			0.29	4.88	3.35	8.23
Phosphorus(46% P2O5)	cwt	81.50						5.22	86.72		86.72
Potash (60% K2O)	cwt	58.25						3.73	61.98		61.98
Disk Heavy	28'		3.93	2.22	2.38			0.55	9.08	8.39	17.47
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96			0.44	7.37	7.37	14.74
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
Clarity	pt	7.15						0.31	7.46		7.46
Select Max	pt	13.86						0.59	14.45		14.45
Plant - Folding	16R-30		2.45	2.58	1.91			0.26	7.20	7.62	14.82
Corn Seed RR2	thous	82.04						3.06	85.10		85.10
Custom Apply Fert	acre	7.50						0.24	7.74		7.74
UAN + Sulfur (28%)	gal	85.14						2.72	87.86		87.86
Sprayer 600-750gal	60' 175hp		0.71	0.20	0.63			0.05	1.59	1.50	3.09
Atrazine 4L	pt	12.00						0.38	12.38		12.38
Halex GT	pt	37.80						1.21	39.01		39.01
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83			0.25	9.44	6.84	16.28
UAN + Sulfur (28%)	gal	161.94						4.32	166.26		166.26
Corn Consultant	acre	6.00						0.16	6.16		6.16
App by Air (3 gal)	appl	1.28						0.03	1.31		1.31
Bifenthrin	oz	1.45						0.04	1.49		1.49
App by Air (3 gal)	appl	6.40						0.14	6.54		6.54
Intrepid 2F	oz	8.24						0.18	8.42		8.42
Header - Corn	8R-30		7.80	8.95	4.01			0.11	20.87	31.85	52.72
Grain Cart Corn	500 bu		1.31	0.45	0.80			0.01	2.57	2.01	4.58
Haul Corn	bu	50.60						0.27	50.87		50.87
Stalk Shredder Flex	20'		4.28	3.10	2.59			0.05	10.02	6.67	16.69
1/4-mi. Pivot Irr.	acre		50.17	21.95	1.84			1.66	75.62	87.96	163.58
TOTALS		681.59	80.15	44.16	20.66	0.00	29.73	856.29	163.56	1019.85	

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 16-row 30",
 Pivot Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	6.40	0.00	0.00	0.00
FERTILIZERS	139.75	0.00	0.00	0.00	0.00	0.00	85.14	161.94	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	8.24	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	82.04	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	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	0.00	6.00	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	6.05	0.00	0.00	0.00	0.00	1.91	1.97	2.98	0.20	0.15	0.00	7.40
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	9.35	0.00	0.00	0.00	0.00	2.45	0.71	19.13	20.07	15.05	0.00	13.39
REPAIR & MAINTENANCE	4.65	0.00	0.00	0.00	0.00	2.58	0.20	20.75	1.99	1.49	0.00	12.50
INTEREST ON OP. CAP.	12.91	0.00	0.00	0.00	1.68	3.32	4.64	5.69	0.79	0.26	0.00	0.44
TOTAL DIRECT EXPENSES	214.67	0.00	0.00	0.00	41.17	92.30	149.96	219.22	37.69	16.95	0.00	84.33
NET INCOME	-214.67	0.00	0.00	0.00	-41.17	-92.30	-149.96	-219.22	-37.69	-16.95	0.00	1268.67
NET INCOME TO DATE	-214.67	-214.67	-214.67	-214.67	-255.84	-348.14	-498.10	-717.32	-755.01	-771.96	-771.96	496.71

Note: Cost of production estimates are based on 2022 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
 Corn, stale seedbed, RR2, 16-row 30",
 Pivot Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Corn	4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68		
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-323 -487	-289 -453	-255 -419	-222 -385	-188 -351	-154 -317	-120 -284	-86 -250	-52 -216	-19 -182	14 -148
60	132.00	bu	-227 -390	-186 -350	-145 -309	-105 -268	-64 -228	-24 -187	16 -147	57 -106	97 -65	138 -25	178 15
70	154.00	bu	-130 -294	-83 -246	-35 -199	11 -152	58 -104	106 -57	153 -10	200 37	248 84	295 131	342 179
80	176.00	bu	-34 -197	19 -143	73 -89	128 -35	182 18	236 72	290 126	344 180	398 235	452 289	506 343
90	198.00	bu	62 -101	122 -40	183 20	244 81	305 142	366 202	427 263	488 324	549 385	610 446	670 507
100	220.00	bu	158 -5	226 62	293 130	361 197	429 265	496 333	564 400	632 468	699 536	767 603	834 671
110	242.00	bu	254 91	329 165	403 240	478 314	552 388	626 463	701 537	775 612	850 686	924 761	998 835
120	264.00	bu	351 187	432 268	513 350	594 431	675 512	757 593	838 674	919 755	1000 837	1081 918	1163 999
130	286.00	bu	447 284	535 372	623 459	711 547	799 635	887 723	975 811	1063 899	1151 987	1239 1075	1327 1163
140	308.00	bu	544 380	638 475	733 569	828 664	922 759	1017 854	1112 948	1206 1043	1301 1138	1396 1232	1491 1327
150	330.00	bu	640 476	741 578	843 679	944 781	1046 882	1147 984	1249 1085	1350 1187	1452 1288	1553 1390	1655 1491

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 2022 input prices.

Table 9.A Estimated costs per acre
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
 Non-irrigated, Non-Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	1.0000	6.40	_____
FERTILIZERS					
DAP	cwt	55.40	1.6300	90.30	_____
Potash (60% K2O)	cwt	46.60	1.2500	58.25	_____
Fert 10-34-0	gal	5.36	5.0000	26.80	_____
UAN (32%)	gal	4.30	43.8348	188.49	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	6.4020	7.23	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	28.0000	105.00	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.3616	5.99	_____
Harvesters	hour	16.54	0.1277	2.11	_____
HAND LABOR					
Implements	hour	9.06	0.1832	1.66	_____
UNALLOCATED LABOR	hour	16.55	0.4404	7.29	_____
DIESEL FUEL					
Tractors	gal	4.48	4.1883	18.76	_____
Harvesters	gal	4.48	1.7419	7.80	_____
REPAIR & MAINTENANCE					
Implements	acre	9.81	1.0000	9.81	_____
Tractors	acre	3.12	1.0000	3.12	_____
Harvesters	acre	6.16	1.0000	6.16	_____
INTEREST ON OP. CAP.	acre	24.35	1.0000	24.35	_____
TOTAL DIRECT EXPENSES				745.87	_____
FIXED EXPENSES					
Implements	acre	14.92	1.0000	14.92	_____
Tractors	acre	22.05	1.0000	22.05	_____
Harvesters	acre	27.10	1.0000	27.10	_____
TOTAL FIXED EXPENSES				64.07	_____
TOTAL SPECIFIED EXPENSES				809.94	_____

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
 Non-irrigated, Non-Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	170.0000	1045.50	_____

TOTAL INCOME				1045.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.00	1.0000	14.00	_____
FERTILIZERS	acre	363.84	1.0000	363.84	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	7.23	1.0000	7.23	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1832	1.66	_____
OPERATOR LABOR	hour	16.54	0.4893	8.10	_____
UNALLOCATED LABOR	hour	16.55	0.4404	7.29	_____
DIESEL FUEL	gal	4.48	5.9303	26.56	_____
REPAIR & MAINTENANCE	acre	19.09	1.0000	19.09	_____
INTEREST ON OP. CAP.	acre	24.35	1.0000	24.35	_____

TOTAL DIRECT EXPENSES				745.87	_____
RETURNS ABOVE DIRECT EXPENSES				299.63	_____
TOTAL FIXED EXPENSES				64.07	_____

TOTAL SPECIFIED EXPENSES				809.94	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				235.56	_____

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
 Non-irrigated, Non-Delta, Mississippi, 2023

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	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Mar		0.04	0.04	0.08	0.03
DAP	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
NT Plant&Pre-Rigid	12R-30	MFWD 225	0.070	1.00	Mar		0.07	0.07	0.14	0.06
Corn Seed BtRR	thous					28.0000				
Fert 10-34-0	gal					5.0000				
Spray (Broadcast)	27'	MFWD 225	0.062	1.00	Apr		0.06	0.06	0.09	0.05
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.11	0.07
UAN (32%)	gal					43.8348				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			1.00	May	1.0000				
Bifenthrin	oz					6.4020				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					170.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
TOTALS							0.48	0.48	0.67	0.44

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
 Non-irrigated, Non-Delta, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Lime (Spread)	ton	38.63					2.47	41.10	41.10
App by Air (5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34	11.34
Clarity	pt	7.15					0.31	7.46	7.46
Select Max	pt	13.86					0.59	14.45	14.45
Spin Spreader	5 ton		2.18	0.70	1.71		0.17	4.76	3.35 8.11
DAP	cwt	90.30					3.37	93.67	93.67
Potash (60% K2O)	cwt	58.25					2.17	60.42	60.42
NT Plant&Pre-Rigid	12R-30		3.66	2.90	2.86		0.35	9.77	9.30 19.07
Corn Seed BtRR	thous	105.00					3.92	108.92	108.92
Fert 10-34-0	gal	26.80					1.00	27.80	27.80
Spray (Broadcast)	27'		3.25	0.71	2.25		0.20	6.41	4.05 10.46
Atrazine 4L	pt	12.00					0.38	12.38	12.38
Halex GT	pt	37.80					1.21	39.01	39.01
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83		0.29	9.48	6.84 16.32
UAN (32%)	gal	188.49					6.03	194.52	194.52
Corn Consultant	acre	6.00					0.16	6.16	6.16
App by Air (3 gal)	appl	6.40					0.17	6.57	6.57
Bifenthrin	oz	7.23					0.19	7.42	7.42
Header - Corn	8R-30		7.80	8.95	4.01		0.11	20.87	31.85 52.72
Grain Cart Corn	500 bu		1.31	0.45	0.80		0.01	2.57	2.01 4.58
Haul Corn	bu	39.10					0.21	39.31	39.31
Stalk Shredder Flex	20'		4.28	3.10	2.59		0.05	10.02	6.67 16.69
TOTALS		658.82	26.56	19.09	17.05	0.00	24.35	745.87	64.07 809.94

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
 Non-Irrigated, Non-Delta, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1045.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	6.40	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	175.35	188.49	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.23	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	38.63	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	0.00	6.00	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	4.57	5.08	0.00	0.00	0.00	0.00	7.40
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	5.84	7.33	0.00	0.00	0.00	0.00	13.39
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	3.60	2.99	0.00	0.00	0.00	0.00	12.50
INTEREST ON OP. CAP.	2.68	0.00	0.00	0.00	1.68	10.98	8.11	0.52	0.00	0.00	0.00	0.38
TOTAL DIRECT EXPENSES	44.64	0.00	0.00	0.00	41.17	305.34	261.80	20.15	0.00	0.00	0.00	72.77
NET INCOME	-44.64	0.00	0.00	0.00	-41.17	-305.34	-261.80	-20.15	0.00	0.00	0.00	972.73
NET INCOME TO DATE	-44.64	-44.64	-44.64	-44.64	-85.81	-391.15	-652.95	-673.10	-673.10	-673.10	-673.10	299.63

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
 Non-Irrigated, Non-Delta, Mississippi, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Corn	4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68		
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-334 -398	-308 -372	-281 -345	-255 -319	-229 -293	-203 -267	-177 -241	-151 -215	-125 -189	-98 -162	-72 -136
60	102.00	bu	-259 -323	-228 -292	-196 -261	-165 -229	-134 -198	-102 -166	-71 -135	-40 -104	-8 -72	22 -41	53 -10
70	119.00	bu	-185 -249	-148 -212	-112 -176	-75 -139	-38 -102	-2 -66	34 -29	70 6	107 43	144 80	180 116
80	136.00	bu	-110 -174	-68 -132	-27 -91	14 -49	56 -7	98 34	140 76	182 117	223 159	265 201	307 243
90	153.00	bu	-36 -100	10 -53	57 -6	104 40	151 87	199 134	246 181	293 229	340 276	387 323	434 370
100	170.00	bu	38 -25	90 26	142 78	195 131	247 183	299 235	351 287	404 340	456 392	508 444	561 496
110	187.00	bu	112 48	170 106	227 163	285 221	342 278	400 336	457 393	515 451	572 508	630 566	687 623
120	204.00	bu	187 123	249 185	312 248	375 311	438 374	500 436	563 499	626 562	689 624	751 687	814 750
130	221.00	bu	261 197	329 265	397 333	465 401	533 469	601 537	669 605	737 673	805 741	873 809	941 877
140	238.00	bu	336 272	409 345	482 418	555 491	628 564	702 638	775 711	848 784	921 857	994 930	1068 1003
150	255.00	bu	410 346	489 425	567 503	645 581	724 660	802 738	881 817	959 895	1037 973	1116 1052	1194 1130

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 2022 input prices.

Table 10.A Estimated costs per acre
 Corn, no-tillage, BtRR, 12-row 30", 220 bu yield goal
 Pivot Irrigated, Non-Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
App by Air (3 gal)	appl	6.40	1.0000	6.40	_____
FERTILIZERS					
DAP	cwt	55.40	1.6300	90.30	_____
Potash (60% K2O)	cwt	46.60	1.2500	58.25	_____
Fert 10-34-0	gal	5.36	5.0000	26.80	_____
UAN (32%)	gal	4.30	43.8348	188.49	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
Clarity	pt	14.30	0.5000	7.15	_____
Select Max	pt	13.86	1.0000	13.86	_____
Atrazine 4L	pt	3.00	4.0000	12.00	_____
Halex GT	pt	10.50	3.6000	37.80	_____
INSECTICIDES					
Bifenthrin	oz	1.13	6.4020	7.23	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	28.0000	105.00	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.3616	5.99	_____
Harvesters	hour	16.54	0.1277	2.11	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1832	1.66	_____
UNALLOCATED LABOR					
	hour	16.55	0.4404	7.29	_____
DIESEL FUEL					
Tractors	gal	4.48	4.1883	18.76	_____
Harvesters	gal	4.48	1.7419	7.80	_____
1/4-mi. Pivot Irr.	gal	4.48	11.2011	50.17	_____
REPAIR & MAINTENANCE					
Implements	acre	9.81	1.0000	9.81	_____
Tractors	acre	3.12	1.0000	3.12	_____
Harvesters	acre	6.16	1.0000	6.16	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	26.07	1.0000	26.07	_____
TOTAL DIRECT EXPENSES				833.05	_____
FIXED EXPENSES					
Implements	acre	14.92	1.0000	14.92	_____
Tractors	acre	22.05	1.0000	22.05	_____
Harvesters	acre	27.10	1.0000	27.10	_____
1/4-mi. Pivot Irr.	acre	87.96	1.0000	87.96	_____
TOTAL FIXED EXPENSES				152.03	_____
TOTAL SPECIFIED EXPENSES				985.08	_____

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 220 bu yield goal
 Pivot Irrigated, Non-Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____

TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.00	1.0000	14.00	_____
FERTILIZERS	acre	363.84	1.0000	363.84	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	7.23	1.0000	7.23	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1832	1.66	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	16.54	0.4893	8.10	_____
UNALLOCATED LABOR	hour	16.55	0.4404	7.29	_____
DIESEL FUEL	gal	4.48	17.1314	76.73	_____
REPAIR & MAINTENANCE	acre	41.04	1.0000	41.04	_____
INTEREST ON OP. CAP.	acre	26.07	1.0000	26.07	_____

TOTAL DIRECT EXPENSES				833.05	_____
RETURNS ABOVE DIRECT EXPENSES				519.95	_____
TOTAL FIXED EXPENSES				152.03	_____

TOTAL SPECIFIED EXPENSES				985.08	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				367.92	_____

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 220 bu yield goal
 Pivot Irrigated, Non-Delta, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Mar		0.04	0.04	0.08	0.03
DAP	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
NT Plant&Pre-Rigid	12R-30	MFWD 225	0.070	1.00	Mar		0.07	0.07	0.14	0.06
Corn Seed BtRR	thous					28.0000				
Fert 10-34-0	gal					5.0000				
Spray (Broadcast)	27'	MFWD 225	0.062	1.00	Apr		0.06	0.06	0.09	0.05
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	Apr		0.07	0.07	0.11	0.07
UAN (32%)	gal					43.8348				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			1.00	May	1.0000				
Bifenthrin	oz					6.4020				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
1/4-mi. Pivot Irr.	acre				Jul	1.0000			0.20	
TOTALS							0.48	0.48	0.87	0.44

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 220 bu yield goal
 Pivot Irrigated, Non-Delta, Mississippi, 2023

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						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
Clarity	pt	7.15						0.31	7.46		7.46
Select Max	pt	13.86						0.59	14.45		14.45
Spin Spreader	5 ton		2.18	0.70	1.71			0.17	4.76	3.35	8.11
DAP	cwt	90.30						3.37	93.67		93.67
Potash (60% K2O)	cwt	58.25						2.17	60.42		60.42
NT Plant&Pre-Rigid	12R-30		3.66	2.90	2.86			0.35	9.77	9.30	19.07
Corn Seed BtRR	thous	105.00						3.92	108.92		108.92
Fert 10-34-0	gal	26.80						1.00	27.80		27.80
Spray (Broadcast)	27'		3.25	0.71	2.25			0.20	6.41	4.05	10.46
Atrazine 4L	pt	12.00						0.38	12.38		12.38
Halex GT	pt	37.80						1.21	39.01		39.01
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83			0.29	9.48	6.84	16.32
UAN (32%)	gal	188.49						6.03	194.52		194.52
Corn Consultant	acre	6.00						0.16	6.16		6.16
App by Air (3 gal)	appl	6.40						0.17	6.57		6.57
Bifenthrin	oz	7.23						0.19	7.42		7.42
Header - Corn	8R-30		7.80	8.95	4.01			0.11	20.87	31.85	52.72
Grain Cart Corn	500 bu		1.31	0.45	0.80			0.01	2.57	2.01	4.58
Haul Corn	bu	50.60						0.27	50.87		50.87
Stalk Shredder Flex	20'		4.28	3.10	2.59			0.05	10.02	6.67	16.69
1/4-mi. Pivot Irr.	acre		50.17	21.95	1.84			1.66	75.62	87.96	163.58
TOTALS		670.32	76.73	41.04	18.89	0.00	26.07	833.05	152.03	985.08	

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BTRR, 12-row 30", 220 bu yield goal
 Pivot Irrigated, Non-Delta, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	6.40	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	175.35	188.49	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.23	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	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	0.00	6.00	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	4.57	6.42	0.15	0.20	0.15	0.00	7.40
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	5.84	7.33	15.05	20.07	15.05	0.00	13.39
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	3.60	2.99	18.47	1.99	1.49	0.00	12.50
INTEREST ON OP. CAP.	2.68	0.00	0.00	0.00	1.68	10.98	8.15	1.41	0.47	0.26	0.00	0.44
TOTAL DIRECT EXPENSES	44.64	0.00	0.00	0.00	41.17	305.34	263.18	54.71	22.73	16.95	0.00	84.33
NET INCOME	-44.64	0.00	0.00	0.00	-41.17	-305.34	-263.18	-54.71	-22.73	-16.95	0.00	1268.67
NET INCOME TO DATE	-44.64	-44.64	-44.64	-44.64	-85.81	-391.15	-654.33	-709.04	-731.77	-748.72	-748.72	519.95

Note: Cost of production estimates are based on 2022 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
 Corn, no-tillage, BtRR, 12-row 30", 220 bu yield goal
 Pivot Irrigated, Non-Delta, Mississippi, 2023

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			4.61	4.92	5.22	5.53	5.84	6.15	6.45	6.76	7.07	7.38	7.68
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-300 -452	-266 -418	-232 -384	-198 -350	-164 -316	-131 -283	-97 -249	-63 -215	-29 -181	4 -147	38 -114
60	132.00	bu	-203 -355	-163 -315	-122 -274	-82 -234	-41 -193	-0 -152	39 -112	80 -71	120 -31	161 9	202 50
70	154.00	bu	-107 -259	-60 -212	-12 -164	34 -117	81 -70	129 -22	176 24	224 71	271 119	318 166	366 214
80	176.00	bu	-11 -163	43 -108	97 -54	151 -0	205 53	259 107	313 161	367 215	421 269	476 323	530 378
90	198.00	bu	85 -66	146 -5	207 55	267 115	328 176	389 237	450 298	511 359	572 420	633 481	694 542
100	220.00	bu	181 29	249 97	317 164	384 232	452 300	519 367	587 435	655 503	722 570	790 638	858 706
110	242.00	bu	278 126	352 200	426 274	501 349	575 423	650 498	724 572	798 646	873 721	947 795	1022 870
120	264.00	bu	374 222	455 303	536 384	618 465	699 547	780 628	861 709	942 790	1023 871	1105 953	1186 1034
130	286.00	bu	470 318	558 406	646 494	734 582	822 670	910 758	998 846	1086 934	1174 1022	1262 1110	1350 1198
140	308.00	bu	567 415	661 509	756 604	851 699	946 794	1040 888	1135 983	1230 1078	1324 1172	1419 1267	1514 1362
150	330.00	bu	663 511	765 613	866 714	968 816	1069 917	1171 1018	1272 1120	1373 1221	1475 1323	1576 1424	1678 1526

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 2022 input prices.

Table 11.A Estimated costs per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	1.0000	7.60	_____
FERTILIZERS					
DAP	cwt	55.40	1.3000	72.02	_____
Potash (60% K2O)	cwt	46.60	1.0000	46.60	_____
UAN + Sulfur (28%)	gal	4.41	38.2883	168.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Select Max	pt	13.86	1.0000	13.86	_____
Lexar	pt	6.76	6.0000	40.56	_____
INSECTICIDES					
Sivanto Prime	oz	3.36	8.0000	26.88	_____
Warrior II	oz	2.74	1.5000	4.11	_____
Prevathon	oz	1.16	14.0000	16.24	_____
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.51	4.5000	15.79	_____
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Sorghum Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.2915	4.83	_____
Harvesters	hour	16.54	0.1021	1.69	_____
Self-Propelled	hour	16.54	0.0661	1.10	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0330	0.30	_____
UNALLOCATED LABOR					
	hour	16.57	0.4138	6.86	_____
DIESEL FUEL					
Tractors	gal	4.48	3.3766	15.12	_____
Harvesters	gal	4.48	1.3935	6.24	_____
Self-Propelled	gal	4.48	0.8505	3.80	_____
REPAIR & MAINTENANCE					
Implements	acre	6.95	1.0000	6.95	_____
Tractors	acre	2.51	1.0000	2.51	_____
Harvesters	acre	4.93	1.0000	4.93	_____
Self-Propelled	acre	1.05	1.0000	1.05	_____
INTEREST ON OP. CAP.	acre	17.05	1.0000	17.05	_____
TOTAL DIRECT EXPENSES				577.74	_____
FIXED EXPENSES					
Implements	acre	15.36	1.0000	15.36	_____
Tractors	acre	17.78	1.0000	17.78	_____
Harvesters	acre	21.68	1.0000	21.68	_____
Self-Propelled	acre	7.60	1.0000	7.60	_____
TOTAL FIXED EXPENSES				62.42	_____
TOTAL SPECIFIED EXPENSES				640.16	_____

Note: Cost of production estimates are based on 2022 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 11.B Summary of estimated costs and returns per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	5.84	100.0000	584.00	_____

TOTAL INCOME				584.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.60	1.0000	7.60	_____
FERTILIZERS	acre	287.47	1.0000	287.47	_____
HERBICIDES	acre	71.96	1.0000	71.96	_____
INSECTICIDES	acre	47.23	1.0000	47.23	_____
SEED/PLANTS	acre	15.79	1.0000	15.79	_____
ADJUVANTS	acre	0.99	1.0000	0.99	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1772	1.61	_____
OPERATOR LABOR	hour	16.54	0.4598	7.62	_____
UNALLOCATED LABOR	hour	16.57	0.4138	6.86	_____
DIESEL FUEL	gal	4.48	5.6208	25.16	_____
REPAIR & MAINTENANCE	acre	15.44	1.0000	15.44	_____
INTEREST ON OP. CAP.	acre	17.05	1.0000	17.05	_____

TOTAL DIRECT EXPENSES				577.74	_____
RETURNS ABOVE DIRECT EXPENSES				6.26	_____
TOTAL FIXED EXPENSES				62.42	_____

TOTAL SPECIFIED EXPENSES				640.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-56.16	_____

Note: Cost of production estimates are based on 2022 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 11.C Estimated resource use for field operations, per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2023

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	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Disk Harrow	32'	MFWD 225	0.061	1.00	Nov		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.3000				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Apr		0.04	0.04	0.08	0.03
DAP	cwt					1.3000				
Potash (60% K2O)	cwt					1.0000				
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Apr		0.04	0.04	0.04	0.04
Plant - Folding	12R-30	MFWD 225	0.062	1.00	Apr		0.06	0.06	0.12	0.05
Sorghum Concept+ Po	lb					4.5000				
Sprayer 800gal	80' 250hp		0.013	1.00	Apr			0.01	0.01	0.01
Lexar	pt					6.0000				
Sorghum Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					38.2883				
Sprayer 800gal	80' 250hp		0.013	1.00	Jun			0.01	0.01	0.01
Sivanto Prime	oz					4.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Warrior II	oz					1.5000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Prevathon	oz					14.0000				
Sprayer 800gal	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Sivanto Prime	oz					4.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Sep		0.10	0.10	0.10	0.09
Haul Sorghum	bu					100.0000				
TOTALS							0.45	0.39	0.63	0.41

Note: Cost of production estimates are based on 2022 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 11.D Estimated costs for field operations, per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2023

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						0.21	3.54		3.54
Lime (Spread)	ton	38.63						2.47	41.10		41.10
Disk Harrow	32'		3.18	1.92	1.93			0.41	7.44	7.07	14.51
App by Air (5 gal)	appl	7.60						0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88						0.46	11.34		11.34
2,4-D Amine 4	pt	6.66						0.28	6.94		6.94
Select Max	pt	13.86						0.59	14.45		14.45
Surfactant	pt	0.99						0.04	1.03		1.03
Spin Spreader	5 ton		2.18	0.70	1.71			0.15	4.74	3.35	8.09
DAP	cwt	72.02						2.30	74.32		74.32
Potash (60% K2O)	cwt	46.60						1.49	48.09		48.09
Field Cultivate Fld	32'		2.42	1.09	1.46			0.16	5.13	6.16	11.29
Plant - Folding	12R-30		3.26	2.40	2.55			0.26	8.47	7.90	16.37
Sorghum Concept+ Po	lb	15.79						0.51	16.30		16.30
Sprayer 800gal	80' 250hp		0.76	0.21	0.48			0.05	1.50	1.52	3.02
Lexar	pt	40.56						1.30	41.86		41.86
Sorghum Consultant	acre	6.00						0.16	6.16		6.16
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83			0.25	9.44	6.84	16.28
UAN + Sulfur (28%)	gal	168.85						4.50	173.35		173.35
Sprayer 800gal	80' 250hp		0.76	0.21	0.48			0.03	1.48	1.52	3.00
Sivanto Prime	oz	13.44						0.29	13.73		13.73
Sprayer 800gal	80' 250hp		0.76	0.21	0.48			0.02	1.47	1.52	2.99
Warrior II	oz	4.11						0.07	4.18		4.18
Sprayer 800gal	80' 250hp		0.76	0.21	0.48			0.02	1.47	1.52	2.99
Prevathon	oz	16.24						0.26	16.50		16.50
Sprayer 800gal	80' 250hp		0.76	0.21	0.48			0.02	1.47	1.52	2.99
Sivanto Prime	oz	13.44						0.22	13.66		13.66
Header Wheat/Sorghum	25' Rigid		6.24	6.00	3.21			0.08	15.53	23.50	39.03
Haul Sorghum	bu	25.00						0.13	25.13		25.13
TOTALS		504.00	25.16	15.44	16.09	0.00	17.05	577.74	62.42	640.16	

Note: Cost of production estimates are based on 2022 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 11.E Estimated monthly income and expense flows per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----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	584.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	118.62	168.85	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.40	0.00	40.56	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.44	33.79	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
CUSTOM LIME	38.63	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	0.00	6.00	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	1.93	0.00	0.00	0.00	0.00	6.20	2.83	0.48	1.44	0.00	3.21
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	3.18	0.00	0.00	0.00	0.00	8.62	4.08	0.76	2.28	0.00	6.24
REPAIR & MAINTENANCE	0.00	1.92	0.00	0.00	0.00	0.00	4.40	2.28	0.21	0.63	0.00	6.00
INTEREST ON OP. CAP.	2.68	0.41	0.00	0.00	1.69	0.00	6.22	4.91	0.32	0.61	0.00	0.21
TOTAL DIRECT EXPENSES	44.64	7.44	0.00	0.00	41.68	0.00	200.41	188.95	15.21	38.75	0.00	40.66
NET INCOME	-44.64	-7.44	0.00	0.00	-41.68	0.00	-200.41	-188.95	-15.21	-38.75	0.00	543.34
NET INCOME TO DATE	-44.64	-52.08	-52.08	-52.08	-93.76	-93.76	-294.17	-483.12	-498.33	-537.08	-537.08	6.26

Note: Cost of production estimates are based on 2022 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 11.F Estimated returns for various price/yield combinations, per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Grain Sorghum	4.38	4.67	4.96	5.25	5.54	5.84	6.13	6.42	6.71	7.00	7.30		
PERCENT	YIELD	UNIT	dollars										
50	50.00	bu	-346 -408	-331 -393	-316 -379	-302 -364	-287 -350	-273 -335	-258 -320	-243 -306	-229 -291	-214 -277	-200 -262
60	60.00	bu	-304 -367	-287 -349	-269 -332	-252 -314	-234 -297	-217 -279	-199 -262	-182 -244	-164 -227	-147 -209	-129 -192
70	70.00	bu	-263 -326	-243 -305	-222 -285	-202 -264	-181 -244	-161 -223	-140 -203	-120 -182	-100 -162	-79 -142	-59 -121
80	80.00	bu	-222 -284	-198 -261	-175 -238	-152 -214	-128 -191	-105 -167	-82 -144	-58 -121	-35 -97	-12 -74	11 -51
90	90.00	bu	-181 -243	-154 -217	-128 -190	-102 -164	-75 -138	-49 -112	-23 -85	2 -59	29 -33	55 -6	81 19
100	100.00	bu	-139 -202	-110 -172	-81 -143	-52 -114	-22 -85	6 -56	35 -26	64 2	93 31	123 60	152 89
110	110.00	bu	-98 -160	-66 -128	-34 -96	-2 -64	30 -32	62 -0	94 31	126 63	158 96	190 128	222 160
120	120.00	bu	-57 -119	-22 -84	12 -49	47 -14	82 20	118 55	153 90	188 125	223 160	258 195	293 230
130	130.00	bu	-15 -78	22 -40	60 -2	98 35	135 73	173 111	211 149	249 187	287 225	325 263	363 301
140	140.00	bu	25 -37	66 3	107 44	148 85	188 126	229 167	270 208	311 249	352 290	393 330	434 371
150	150.00	bu	66 4	110 48	154 91	198 135	241 179	285 223	329 267	373 310	417 354	460 398	504 442

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 2022 input prices.

Table 12.A Estimated costs per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.60	2.0000	15.20	_____
App by Air (3 gal)	appl	6.40	1.0000	6.40	_____
FERTILIZERS					
DAP	cwt	55.40	1.0000	55.40	_____
Potash (60% K2O)	cwt	46.60	0.7500	34.95	_____
Fert 41-0-0-4	cwt	37.06	3.0480	112.96	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	4.5000	34.34	_____
Prosaro	oz	1.78	8.0000	14.24	_____
HERBICIDES					
Axiom	oz	2.10	10.0000	21.00	_____
Harmony Extra SG	oz	10.34	0.7500	7.76	_____
Axial XL	oz	1.71	16.4000	28.04	_____
INSECTICIDES					
Warrior II	oz	2.74	1.5000	4.11	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.38	90.0000	34.20	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	3.0480	24.38	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
CROP CONSULTANT					
Wheat Consultant	acre	5.50	1.0000	5.50	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.2129	3.53	_____
Harvesters	hour	16.54	0.1021	1.69	_____
HAND LABOR					
Implements	hour	9.06	0.1049	0.95	_____
UNALLOCATED LABOR	hour	16.53	0.2521	4.17	_____
DIESEL FUEL					
Tractors	gal	4.48	2.4667	11.04	_____
Harvesters	gal	4.48	1.3935	6.24	_____
REPAIR & MAINTENANCE					
Implements	acre	5.43	1.0000	5.43	_____
Tractors	acre	1.83	1.0000	1.83	_____
Harvesters	acre	4.93	1.0000	4.93	_____
INTEREST ON OP. CAP.	acre	18.15	1.0000	18.15	_____
TOTAL DIRECT EXPENSES				516.60	_____
FIXED EXPENSES					
Implements	acre	13.49	1.0000	13.49	_____
Tractors	acre	12.99	1.0000	12.99	_____
Harvesters	acre	21.68	1.0000	21.68	_____
TOTAL FIXED EXPENSES				48.16	_____
TOTAL SPECIFIED EXPENSES				564.76	_____

Note: Cost of production estimates are based on 2022 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 12.B Summary of estimated costs and returns per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	8.90	70.0000	623.00	_____

TOTAL INCOME				623.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.60	1.0000	21.60	_____
FERTILIZERS	acre	203.31	1.0000	203.31	_____
FUNGICIDES	acre	48.58	1.0000	48.58	_____
HERBICIDES	acre	56.80	1.0000	56.80	_____
INSECTICIDES	acre	4.11	1.0000	4.11	_____
SEED/PLANTS	acre	34.20	1.0000	34.20	_____
CUSTOM FERTILIZE	acre	24.38	1.0000	24.38	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	5.50	1.0000	5.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1049	0.95	_____
OPERATOR LABOR	hour	16.54	0.3151	5.22	_____
UNALLOCATED LABOR	hour	16.53	0.2521	4.17	_____
DIESEL FUEL	gal	4.48	3.8602	17.28	_____
REPAIR & MAINTENANCE	acre	12.19	1.0000	12.19	_____
INTEREST ON OP. CAP.	acre	18.15	1.0000	18.15	_____

TOTAL DIRECT EXPENSES				516.60	_____
RETURNS ABOVE DIRECT EXPENSES				106.40	_____
TOTAL FIXED EXPENSES				48.16	_____

TOTAL SPECIFIED EXPENSES				564.76	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				58.24	_____

Note: Cost of production estimates are based on 2022 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 12.C Estimated resource use for field operations, per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2023

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	Sep	0.3330				
Lime (Spread)	ton			0.33	Sep	0.6660				
Disk Harrow	32'	MFWD 225	0.061	1.00	Sep		0.06	0.06	0.06	0.04
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Sep		0.04	0.04	0.08	0.03
DAP	cwt					1.0000				
Potash (60% K2O)	cwt					0.7500				
Field Cultivate Fld	32'	MFWD 225	0.046	1.00	Sep		0.04	0.04	0.04	0.03
Grain Drill	30'	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.12	0.05
Wheat Seed Private	lb					90.0000				
CruiserMaxx Vibrance	oz					4.5000				
Wheat Consultant	acre			1.00	Oct	1.0000				
App by Air (5 gal)	appl			1.00	Nov	1.0000				
Axiom	oz					10.0000				
App by Air (3 gal)	appl			1.00	Feb	1.0000				
Warrior II	oz					1.5000				
Harmony Extra SG	oz					0.7500				
Axial XL	oz					16.4000				
App Fert by Air	cwt			1.00	Feb	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App Fert by Air	cwt			1.00	Mar	1.5240				
Fert 41-0-0-4	cwt					1.5240				
App by Air (5 gal)	appl			1.00	Apr	1.0000				
Prosaro	oz					8.0000				
Header Wheat/Sorghum	25' Rigid	265 hp	0.102	1.00	Jun		0.10	0.10	0.10	0.08
Haul Wheat	bu					70.0000				
TOTALS							0.31	0.31	0.42	0.25

Note: Cost of production estimates are based on 2022 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 12.D Estimated costs for field operations, per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2023

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						0.18	3.51	3.51
Lime (Spread)	ton	38.63						2.06	40.69	40.69
Disk Harrow	32'		3.18	1.92	1.83			0.37	7.30	7.07
Spin Spreader	5 ton		2.18	0.70	1.64			0.24	4.76	3.35
DAP	cwt	55.40						2.95	58.35	58.35
Potash (60% K2O)	cwt	34.95						1.86	36.81	36.81
Field Cultivate Fld	32'		2.42	1.09	1.39			0.26	5.16	6.16
Grain Drill	30'		3.26	2.48	2.44			0.39	8.57	8.08
Wheat Seed Private	lb	34.20						1.64	35.84	35.84
CruiserMaxx Vibrance	oz	34.34						1.65	35.99	35.99
Wheat Consultant	acre	5.50						0.26	5.76	5.76
App by Air (5 gal)	appl	7.60						0.32	7.92	7.92
Axiom	oz	21.00						0.90	21.90	21.90
App by Air (3 gal)	appl	6.40						0.17	6.57	6.57
Warrior II	oz	4.11						0.11	4.22	4.22
Harmony Extra SG	oz	7.76						0.21	7.97	7.97
Axial XL	oz	28.04						0.75	28.79	28.79
App Fert by Air	cwt	12.19						0.33	12.52	12.52
Fert 41-0-0-4	cwt	56.48						1.51	57.99	57.99
App Fert by Air	cwt	12.19						0.26	12.45	12.45
Fert 41-0-0-4	cwt	56.48						1.20	57.68	57.68
App by Air (5 gal)	appl	7.60						0.12	7.72	7.72
Prosaro	oz	14.24						0.23	14.47	14.47
Header Wheat/Sorghum	25' Rigid		6.24	6.00	3.04			0.08	15.36	23.50
Haul Wheat	bu	18.20						0.10	18.30	18.30
TOTALS		458.64	17.28	12.19	10.34	0.00	18.15	516.60	48.16	564.76

Note: Cost of production estimates are based on 2022 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 12.E Estimated monthly income and expense flows per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2023

ITEM	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
-----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	623.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	6.40	0.00	7.60	0.00	0.00
FERTILIZERS	0.00	0.00	90.35	0.00	0.00	0.00	0.00	56.48	56.48	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	34.34	0.00	0.00	0.00	0.00	0.00	14.24	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.00	0.00	0.00	35.80	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.11	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	34.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.19	12.19	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.20
CUSTOM LIME	0.00	0.00	38.63	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	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	4.86	2.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.04
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	7.78	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.24
REPAIR & MAINTENANCE	0.00	0.00	3.71	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
INTEREST ON OP. CAP.	0.00	0.00	7.92	3.94	1.22	0.00	0.00	3.08	1.46	0.35	0.00	0.18
TOTAL DIRECT EXPENSES	0.00	0.00	156.58	86.16	29.82	0.00	0.00	118.06	70.13	22.19	0.00	33.66
NET INCOME	0.00	0.00	-156.58	-86.16	-29.82	0.00	0.00	-118.06	-70.13	-22.19	0.00	589.34
NET INCOME TO DATE	0.00	0.00	-156.58	-242.74	-272.56	-272.56	-272.56	-390.62	-460.75	-482.94	-482.94	106.40

Note: Cost of production estimates are based on 2022 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 12.F Estimated returns for various price/yield combinations, per acre
Wheat followed by soybeans, 70 bu yield goal
All Areas, Mississippi, 2023

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Wheat			6.67	7.12	7.56	8.01	8.45	8.90	9.34	9.79	10.23	10.68	11.12
PERCENT YIELD UNIT			-----dollars-----										
50	35.00	bu	-273	-258	-242	-227	-211	-195	-180	-164	-149	-133	-118
			-321	-306	-290	-275	-259	-244	-228	-212	-197	-181	-166
60	42.00	bu	-228	-210	-191	-172	-154	-135	-116	-98	-79	-60	-42
			-277	-258	-239	-221	-202	-183	-164	-146	-127	-108	-90
70	49.00	bu	-184	-162	-140	-118	-96	-75	-53	-31	-9	12	34
			-232	-210	-188	-166	-144	-123	-101	-79	-57	-35	-14
80	56.00	bu	-139	-114	-89	-64	-39	-14	10	35	60	85	110
			-187	-162	-137	-112	-87	-62	-37	-12	12	36	61
90	63.00	bu	-94	-66	-38	-10	17	45	73	102	130	158	186
			-142	-114	-86	-58	-30	-2	25	53	81	109	137
100	70.00	bu	-49	-18	12	44	75	106	137	168	199	231	262
			-97	-66	-35	-4	27	58	89	120	151	182	213
110	77.00	bu	-4	29	64	98	132	166	201	235	269	303	338
			-52	-18	15	50	84	118	152	187	221	255	290
120	84.00	bu	40	77	115	152	189	227	264	302	339	376	414
			-7	29	67	104	141	179	216	253	291	328	366
130	91.00	bu	85	125	166	206	247	287	328	368	409	449	490
			37	77	118	158	199	239	280	320	361	401	442
140	98.00	bu	130	173	217	261	304	348	391	435	479	522	566
			82	125	169	212	256	300	343	387	430	474	518
150	105.00	bu	175	221	268	315	362	408	455	502	548	595	642
			126	173	220	267	313	360	407	454	500	547	594

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 2022 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, 2023

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	463,000	300	8	13.64	16.54	61.10	48.22	125.87	212.16	338.04
Combine (300-349 hp)	325 hp	468,000	300	8	16.73	16.54	74.95	48.75	140.24	214.45	354.69
Combine (350-399 hp)	355 hp	500,000	300	8	18.27	16.54	81.84	52.08	150.47	229.12	379.59
Combine (400-449 hp)	425 hp	519,000	300	8	21.87	16.54	98.00	54.06	168.60	237.82	406.43
Combine (450-499hp)	475 hp	539,000	300	8	24.44	16.54	109.53	56.14	182.21	246.99	429.21
Tractor (20-39hp)CB	MFWD 30	34,200	600	8	1.54	16.54	6.91	1.06	24.52	7.27	31.80
Tractor (20-39hp)RB	MFWD 30	27,100	600	8	1.54	16.54	6.91	0.84	24.30	5.76	30.07
Tractor (40-59hp)CB	2WD 50	34,600	600	8	2.57	16.54	11.52	1.08	29.15	7.36	36.51
Tractor (40-59hp)CB	MFWD 50	47,000	600	8	2.57	16.54	11.52	1.46	29.53	10.00	39.54
Tractor (40-59hp)RB	2WD 50	24,500	600	8	2.57	16.54	11.52	0.76	28.83	5.21	34.04
Tractor (40-59hp)RB	MFWD 50	31,400	600	8	2.57	16.54	11.52	0.98	29.05	6.68	35.73
Tractor (60-89hp)CB	2WD 75	64,300	600	8	3.86	16.54	17.29	2.00	35.84	13.68	49.52
Tractor (60-89hp)CB	MFWD 75	72,000	600	8	3.86	16.54	17.29	2.25	36.08	15.32	51.40
Tractor (60-89hp)RB	2WD 75	54,100	600	8	3.86	16.54	17.29	1.69	35.52	11.51	47.03
Tractor (60-89hp)RB	MFWD 75	48,100	600	8	3.86	16.54	17.29	1.50	35.33	10.23	45.57
Tractor (90-119hp)CB	2WD 105	83,900	600	8	5.40	16.54	24.21	2.62	43.37	17.85	61.23
Tractor (90-119hp)CB	MFWD 105	104,000	600	8	5.40	16.54	24.21	3.25	44.00	22.13	66.13
Tractor (90-119hp)RB	2WD 105	73,400	600	8	5.40	16.54	24.21	2.29	43.04	15.62	58.66
Tractor (90-119hp)RB	MFWD 105	81,100	600	8	5.40	16.54	24.21	2.53	43.28	17.25	60.54
Tractor (120-139hp)CB	2WD 130	117,600	600	8	6.69	16.54	29.97	3.67	50.19	25.02	75.22
Tractor (120-139hp)CB	MFWD 130	133,300	600	8	6.69	16.54	29.97	4.16	50.68	28.36	79.05
Tractor (140-159hp)	2WD 150	131,200	600	8	7.72	16.54	34.58	4.10	55.22	27.92	83.15
Tractor (140-159hp)CB	MFWD 150	158,000	600	8	7.72	16.54	34.58	4.93	56.06	33.62	89.69
Tractor (160-179hp)CB	MFWD 170	186,000	600	8	8.75	16.54	39.20	5.81	61.55	41.10	102.65
Tractor (180-199hp)CB	MFWD 190	216,000	600	8	9.77	16.54	43.81	6.75	67.10	47.72	114.83
Tractor (200-249hp)CB	MFWD 225	276,000	600	8	11.58	16.54	51.88	8.62	77.04	60.98	138.03
Tractor (250-349hp)CB	4WD 300	377,000	600	8	15.44	16.54	69.17	11.78	97.50	83.30	180.80
Tractor (250-349hp)CB	MFWD 300	304,000	600	8	15.44	16.54	69.17	9.50	95.21	67.17	162.39
Tractor (250-349hp)CB	Track 300	329,000	600	8	15.44	16.54	69.17	10.28	96.00	72.69	168.69
Tractor (350-449hp)	Track 400	547,000	600	8	20.58	16.54	92.23	17.09	125.87	120.87	246.74
Tractor (350-449hp)CB	4WD 400	428,000	600	8	20.58	16.54	92.23	13.37	122.15	94.57	216.72
Tractor (450-550hp)CB	4WD 500	426,000	600	8	25.73	16.54	115.29	13.31	145.14	94.13	239.28
Tractor (450-550hp)CB	Track 500	527,000	600	8	25.73	16.54	115.29	16.46	148.30	116.45	264.75
Utility Vehicle	800 CC	12,200	200	8	0.70	16.54	2.23	1.90	20.67	8.38	29.06
Utility Vehicle	900 CC	15,800	200	8	1.00	16.54	3.19	2.46	22.19	10.86	33.05

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, 2023

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	6.59	14.86	10.79	32.25	47.48	79.74
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.59	20.80	14.13	41.54	62.19	103.73
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	4.41	13.90	9.61	27.92	42.28	70.21
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	5.58	17.86	15.85	39.31	69.75	109.06
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.41	14.10	12.51	31.03	55.07	86.11
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.59	23.77	21.58	51.96	94.97	146.93
Cotton Picker/Module	6R-30 (500)	936,000	200	8	25.73	0.218	5.58	25.16	31.91	62.66	140.41	203.08
Cotton Picker/Module	6R-38 (500)	937,000	200	8	25.73	0.172	4.41	19.86	25.22	49.50	110.97	160.48
Dry Applicator SP	70'300cuft	469,000	350	8	16.98	0.015	0.31	1.14	0.37	1.84	2.78	4.63
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.37	0.71	0.20	1.28	1.49	2.78
Sprayer 600-825gal	80' 175hp	269,000	350	8	11.81	0.013	0.27	0.69	0.19	1.16	1.39	2.56
Sprayer 600-825gal	90' 250hp	316,000	350	8	12.73	0.011	0.24	0.67	0.19	1.11	1.45	2.57
Sprayer 800gal	100' 250hp	353,000	350	8	14.15	0.010	0.22	0.67	0.20	1.09	1.46	2.56
Sprayer 800gal	80' 250hp	292,000	350	8	12.86	0.013	0.27	0.76	0.20	1.24	1.51	2.76
Sprayer 1000-1400gal	90' 275hp	330,000	350	8	14.15	0.010	0.22	0.67	0.18	1.08	1.37	2.45
Sprayer 1000gal	100' 300hp	479,000	350	8	15.44	0.010	0.22	0.73	0.27	1.22	1.99	3.21
Sprayer 1200+gal	120' 300hp	489,000	350	8	15.44	0.008	0.18	0.60	0.23	1.02	1.69	2.71

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2023 (continued)

Table with 15 columns: 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. Rows include various agricultural equipment like Cultivate & Post, Disk & Incorporate, Disk Harrow, Disk Heavy, Ditcher, Fert Appl, Field Cult, Grain Cart, Grain Drill, and Header.

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2023 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---	Total Imp. P.U. Direct	--Fixed-- Imp. P.U.	Total Cost			
			dollars	hours	years	hr/ac	-----\$/acre-----								
Header - Draper (CL)	36'	Rigid	355 hp	85,500	300	8	0.141	2.33	11.54	2.76	7.34	23.98	4.93	32.31	61.23
Header - Draper (CL)	40'	Rigid	425 hp	90,400	300	8	0.126	2.09	12.43	2.62	6.86	24.02	4.69	30.18	58.91
Header - Draper (SL)	25'	Rigid	325 hp	77,900	300	8	0.176	2.91	13.19	3.14	8.58	27.82	5.61	37.74	71.18
Header - Draper (SL)	30'	Rigid	325 hp	81,600	300	8	0.146	2.42	10.99	2.74	7.15	23.31	4.89	31.45	59.66
Header - Draper (SL)	36'	Rigid	355 hp	85,500	300	8	0.122	2.02	10.00	2.39	6.36	20.78	4.27	28.00	53.06
Header - Draper (SL)	40'	Rigid	425 hp	90,400	300	8	0.110	1.81	10.78	2.27	5.94	20.82	4.07	26.16	51.05
Header -RiceStrp(CL)	20'		265 hp	50,600	300	8	0.253	4.19	15.51	3.21	12.24	35.16	5.46	53.85	94.49
Header -RiceStrp(CL)	24'		325 hp	54,000	300	8	0.211	3.49	15.85	2.85	10.31	32.52	4.86	45.36	82.75
Header -RiceStrp(CL)	32'		325 hp	60,800	300	8	0.158	2.62	11.89	2.41	7.73	24.66	4.10	34.02	62.79
Header -RiceStrp(SL)	20'		265 hp	50,600	300	8	0.220	3.63	13.44	2.78	10.61	30.47	4.73	46.67	81.89
Header -RiceStrp(SL)	24'		325 hp	54,000	300	8	0.183	3.03	13.74	2.47	8.93	28.18	4.21	39.31	71.71
Header -RiceStrp(SL)	32'		325 hp	60,800	300	8	0.137	2.27	10.30	2.09	6.70	21.37	3.55	29.48	54.41
Header -Soybean	22'	Flex	265 hp	38,700	300	8	0.116	1.92	7.09	1.12	5.59	15.73	1.91	24.63	42.28
Header -Soybean	25'	Flex	325 hp	39,600	300	8	0.102	1.68	7.65	1.01	4.98	15.33	1.72	21.91	38.97
Header -Soybean	30'	Flex	325 hp	47,100	300	8	0.085	1.40	6.38	1.00	4.15	12.94	1.70	18.25	32.90
Header -Soybean	35'	Flex	355 hp	55,300	300	8	0.072	1.20	5.97	1.00	3.80	11.99	1.71	16.72	30.42
Header Wheat/Sorghum	22'	Rigid	265 hp	19,800	300	8	0.116	1.92	7.09	0.57	5.59	15.18	0.97	24.63	40.80
Header Wheat/Sorghum	25'	Rigid	325 hp	41,800	300	8	0.102	1.68	7.65	1.06	4.98	15.39	1.81	21.91	39.12
Header Wheat/Sorghum	30'	Rigid	325 hp	55,100	300	8	0.085	1.40	6.38	1.17	4.15	13.11	1.99	18.25	33.36
Land Plane	50'x16'		MFWD 190	13,000	200	10	0.151	2.50	6.64	0.39	1.02	10.57	1.18	7.23	18.99
Levee Pull & Seed	8 Blade		MFWD 170	12,000	100	10	0.003	0.05	0.13	0.00	0.02	0.22	0.05	0.14	0.42
Levee Pull (1m/80a)	8 blade		MFWD 170	7,560	100	10	0.003	0.05	0.13	0.00	0.02	0.22	0.03	0.14	0.40
Levee Splitter (1/80)	32"		MFWD 150	9,220	100	10	0.004	0.06	0.14	0.00	0.02	0.24	0.04	0.14	0.42
Module Builder	4R-38 (250)		MFWD 190	34,700	200	10	0.257	6.59	11.29	2.23	1.74	21.86	5.20	12.30	39.37
Module Builder	4R-38 (350)		MFWD 190	34,700	200	10	0.257	6.59	11.29	2.23	1.74	21.86	5.20	12.30	39.37
Module Builder	4R2x1 (350)		MFWD 190	34,700	200	10	0.172	4.41	7.54	1.49	1.16	14.61	3.47	8.22	26.31
Module Builder	6R-30 (355)		MFWD 190	34,700	200	10	0.218	5.58	9.56	1.89	1.47	18.51	4.40	10.41	33.33
Module Builder	6R-38 (355)		MFWD 190	34,700	200	10	0.172	4.41	7.54	1.49	1.16	14.61	3.47	8.22	26.31
NT Grain Drill	10'		2WD 130	37,700	150	8	0.235	6.03	7.06	3.33	0.86	17.29	7.27	5.89	30.47
NT Grain Drill	12'		2WD 130	50,200	150	8	0.163	4.19	4.90	3.08	0.60	12.78	6.72	4.09	23.60
NT Grain Drill	15'		MFWD 150	63,300	150	8	0.130	3.35	4.52	3.10	0.64	11.63	6.78	4.40	22.82
NT Grain Drill	20'		MFWD 170	81,200	150	8	0.098	2.51	3.84	2.99	0.57	9.92	6.52	4.03	20.49
NT Grain Drill	24'		MFWD 190	111,300	150	8	0.081	2.09	3.58	3.41	0.55	9.65	7.45	3.90	21.01
NT Grain Drill	30'		MFWD 225	110,200	150	8	0.065	1.67	3.39	2.70	0.56	8.34	5.90	3.99	18.24
NT Grain Drill & Pre	10'		2WD 130	43,000	150	8	0.211	5.41	6.34	3.41	0.77	15.94	7.44	5.29	28.68
NT Grain Drill & Pre	12'		2WD 130	55,600	150	8	0.176	4.51	5.28	3.67	0.64	14.12	8.02	4.41	26.55
NT Grain Drill & Pre	15'		MFWD 150	68,700	150	8	0.141	3.61	4.87	3.63	0.69	12.81	7.93	4.74	25.49
NT Grain Drill & Pre	20'		MFWD 170	86,500	150	8	0.105	2.70	4.14	3.43	0.61	10.89	7.49	4.34	22.73
NT Grain Drill & Pre	24'		MFWD 190	116,600	150	8	0.088	2.25	3.86	3.85	0.59	10.56	8.41	4.20	23.18
NT Grain Drill & Pre	30'		MFWD 225	115,500	150	8	0.070	1.80	3.65	3.05	0.60	9.12	6.66	4.30	20.09
NT Plant&Pre-Folding	8R-38		MFWD 170	67,800	150	8	0.083	2.14	3.27	2.12	0.48	8.02	4.64	3.43	16.10
NT Plant&Pre-Folding	8R-38 2x1		MFWD 170	107,000	150	8	0.055	1.42	2.18	2.23	0.32	6.16	4.87	2.28	13.32
NT Plant&Pre-Folding	12R-20		MFWD 190	82,800	150	8	0.105	2.70	4.63	3.28	0.71	11.33	7.16	5.04	23.55
NT Plant&Pre-Folding	12R-30		MFWD 190	101,000	150	8	0.070	1.80	3.08	2.67	0.47	8.04	5.83	3.36	17.23
NT Plant&Pre-Folding	12R-38		MFWD 190	111,800	150	8	0.055	1.42	2.43	2.33	0.37	6.57	5.09	2.65	14.32
NT Plant&Pre-Folding	16R-30		MFWD 190	149,400	150	8	0.052	1.35	2.31	2.96	0.35	6.99	6.46	2.52	15.98
NT Plant&Pre-Folding	23R-15		MFWD 190	202,900	150	8	0.073	1.88	3.21	5.58	0.49	11.18	12.20	3.50	26.88
NT Plant&Pre-Folding	24R-20		MFWD 190	238,100	150	8	0.052	1.35	2.31	4.72	0.35	8.74	10.30	2.52	21.58
NT Plant&Pre-Folding	24R-30		MFWD 190	224,900	150	8	0.035	0.90	1.54	2.97	0.23	5.65	6.49	1.68	13.83
NT Plant&Pre-Folding	31R-15		MFWD 225	244,300	150	8	0.054	1.39	2.83	5.00	0.47	9.71	10.93	3.33	23.97
NT Plant&Pre-Folding	32R-15		MFWD 225	248,700	150	8	0.052	1.35	2.74	4.93	0.45	9.48	10.76	3.22	23.47
NT Plant&Pre-Rigid	4R-30		2WD 130	37,700	150	8	0.211	5.41	6.34	2.99	0.77	15.52	6.52	5.29	27.34
NT Plant&Pre-Rigid	4R-38		2WD 130	34,500	150	8	0.166	4.26	4.99	2.15	0.61	12.02	4.70	4.16	20.89
NT Plant&Pre-Rigid	6R-30		MFWD 150	47,400	150	8	0.141	3.61	4.87	2.50	0.69	11.69	5.47	4.74	21.90
NT Plant&Pre-Rigid	6R-38		MFWD 150	47,500	150	8	0.111	2.85	3.85	1.98	0.54	9.23	4.32	3.74	17.30
NT Plant&Pre-Rigid	8R-30		MFWD 170	60,300	150	8	0.105	2.70	4.14	2.39	0.61	9.86	5.22	4.34	19.42
NT Plant&Pre-Rigid	8R-38		MFWD 170	56,200	150	8	0.083	2.14	3.27	1.76	0.48	7.66	3.84	3.43	14.94
NT Plant&Pre-Rigid	11R-15		MFWD 170	67,300	150	8	0.143	3.68	5.64	3.63	0.83	13.79	7.92	5.91	27.63
NT Plant&Pre-Rigid	11R-20		MFWD 170	68,500	150	8	0.115	2.95	4.53	2.96	0.67	11.13	6.48	4.75	22.36
NT Plant&Pre-Rigid	12R-20		MFWD 190	73,000	150	8	0.105	2.70	4.63	2.89	0.71	10.95	6.32	5.04	22.32
NT Plant&Pre-Rigid	12R-30		MFWD 190	86,600	150	8	0.070	1.80	3.08	2.28	0.47	7.66	4.99	3.36	16.02
NT Plant&Pre-Rigid	15R-15		MFWD 190	89,600	150	8	0.113	2.89	4.95	3.80	0.76	12.41	8.29	5.39	26.11
NT Plant&Pre-TwinRow	12R-30/40		MFWD 225	172,500	150	8	0.055	1.42	2.88	3.60	0.48	8.39	7.86	3.39	19.65
NT Plant&Pre-TwinRow	8R-30/40		MFWD 225	135,300	150	8	0.083	2.14	4.33	4.24	0.72	11.44	9.26	5.09	25.80
NT Plant-Folding	8R-38		MFWD 170	72,900	150	8	0.077	1.98	3.04	2.12	0.45	7.60	4.63	3.19	15.42
NT Plant-Folding	8R-38 2x1		MFWD 170	102,000	150	8	0.051	1.32	2.02	1.97	0.30	5.62	4.31	2.12	12.06
NT Plant-Folding	12R-20		MFWD 190	77,500	150	8	0.098	2.51	4.30	2.85	0.66	10.33	6.23	4.68	21.25
NT Plant-Folding	12R-30		MFWD 190	91,300	150	8	0.065	1.67	2.86	2.24	0.44	7.22	4.89	3.12	15.24
NT Plant-Folding	12R-38		MFWD 190	102,000	150	8	0.051	1.32	2.26	1.97	0.34	5.91	4.31	2.46	12.69
NT Plant-Folding	16R-30		MFWD 190	139,600	150	8	0.049	1.25	2.15	2.57	0.33	6.31	5.61	2.34	14.26
NT Plant-Folding	23R-15		MFWD 190	193,000	150	8	0.068	1.74	2.98	4.93	0.46	10.13	10.77	3.25	24.16
NT Plant-Folding	24R-20		MFWD 190	228,000	150	8	0.049	1.25	2.15	4.19	0.33	7.93	9.16	2.34	19.45
NT Plant-Folding	24R-30		MFWD 190	208,000	150	8	0.032	0.83	1.43	2.55	0.22	5.04	5.57	1.56	12.18
NT Plant-Folding	31R-15		MFWD 225	234,500	150	8	0.050	1.29	2.63	4.46	0.43	8.83	9.74	3.09	21.67
NT Plant-Folding	32R-15		MFWD 225	239,000	150	8	0.049	1.25	2.54	4.40	0.42	8.63	9.60	2.99	21.23
NT Plant-Rigid	4R-30		2WD 130	31,900	150	8	0.196	5.02	5.88	2.34	0.72	13.98	5.12	4.91	24.03
NT Plant-Rigid	4R-38		2WD 130	28,800	150	8	0.154	3.95	4.63	1.67	0.56	10.83	3.64	3.87	18.35
NT Plant-Rigid	6R-30		MFWD 150	41,600	150	8	0.130	3.35	4.52	2.04	0.64	10.57	4.45	4.40	19.43
NT Plant-Rigid	6R-38		MFWD 150	41,800	150	8	0.103	2.64	3.57	1.62	0.51	8.35	3.53	3.47	15.36

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2023 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
NT Plant-Rigid	8R-30	MFWD 170	54,600	150	8	0.098	2.51	3.84	2.01	0.57	8.94	4.38	4.03	17.37
NT Plant-Rigid	8R-38	MFWD 170	50,500	150	8	0.077	1.98	3.04	1.47	0.45	6.95	3.20	3.19	13.35
NT Plant-Rigid	11R-15	MFWD 170	61,600	150	8	0.133	3.42	5.23	3.08	0.77	12.52	6.73	5.49	24.75
NT Plant-Rigid	11R-20	MFWD 170	62,700	150	8	0.107	2.74	4.20	2.52	0.62	10.10	5.50	4.41	20.02
NT Plant-Rigid	12R-20	MFWD 190	67,300	150	8	0.098	2.51	4.30	2.47	0.66	9.95	5.41	4.68	20.05
NT Plant-Rigid	12R-30	MFWD 190	76,800	150	8	0.065	1.67	2.86	1.88	0.44	6.87	4.11	3.12	14.11
NT Plant-Rigid	15R-15	MFWD 190	79,900	150	8	0.105	2.68	4.60	3.14	0.70	11.14	6.87	5.01	23.03
NT Plant-TwinRow	12R-30/40	MFWD 225	163,000	150	8	0.051	1.32	2.68	3.15	0.44	7.61	6.89	3.15	17.66
NT Plant-TwinRow	8R-30/40	MFWD 225	130,000	150	8	0.077	1.98	4.02	3.78	0.66	10.47	8.26	4.73	23.46
Peanut Cond. & Lifter	6-Row	MFWD 190	15,200	300	20	0.100	1.65	4.38	0.25	0.67	6.96	0.44	4.77	12.18
Peanut Conditioner	6-Row	MFWD 190	21,600	300	20	0.100	1.65	4.38	0.43	0.67	7.14	0.58	4.77	12.50
Peanut Dig/Invertor	4R-30	MFWD 190	37,900	300	15	0.235	3.90	10.33	2.22	1.59	18.05	3.07	11.25	32.37
Peanut Dig/Invertor	4R-38	MFWD 190	37,900	300	15	0.186	3.08	8.15	1.75	1.25	14.25	2.42	8.88	25.56
Peanut Dig/Invertor	6R-38	MFWD 190	51,100	300	15	0.124	2.05	5.43	1.11	0.83	9.43	2.17	5.92	17.53
Peanut Dump Cart	6-Row	MFWD 190	67,400	300	20	0.310	5.12	13.58	1.21	2.09	22.02	6.00	14.79	42.82
Peanut Harvester	4R-30	MFWD 225	171,000	300	20	0.849	14.05	44.10	8.23	7.33	73.72	39.40	51.83	164.97
Peanut Harvester	4R-38	MFWD 225	171,000	300	20	0.934	15.45	48.48	9.05	8.06	81.06	44.63	56.99	182.70
Peanut Harvester	6R-38	MFWD 225	190,000	300	20	0.625	10.33	32.42	5.73	5.39	53.89	33.16	38.11	125.18
Peanut Lifter	6-Row	MFWD 225	9,220	300	20	0.100	1.65	5.18	0.19	0.86	7.89	0.24	6.09	14.24
Peanut Plt&Pre Fold.	12R-38	MFWD 190	99,500	150	8	0.080	2.05	3.52	3.00	0.54	9.12	6.55	3.83	19.51
Peanut Plt&Pre Rigid	8R-30	MFWD 190	52,200	150	8	0.152	3.91	6.69	2.99	1.03	14.62	6.52	7.29	28.44
Peanut Plt&Pre Rigid	8R-38	MFWD 190	48,000	150	8	0.120	3.09	5.29	2.17	0.81	11.37	4.74	5.76	21.88
Peanut Plt&PreTwin	8R-30/40	MFWD 190	127,000	150	8	0.120	3.09	5.29	5.75	0.81	14.94	12.55	5.76	33.27
Pipe Spool 160ac	1/4m roll	2WD 130	6,480	15	12	0.003	0.10	0.09	0.01	0.01	0.22	0.14	0.07	0.44
Pipe Trailer 1m/160a	30'	2WD 130	2,700	100	15	0.003	0.19	0.11	0.00	0.01	0.32	0.01	0.09	0.43
Plant & Pre-Folding	8R-38	MFWD 170	70,400	150	8	0.080	2.05	3.14	2.11	0.46	7.78	4.62	3.29	15.71
Plant & Pre-Folding	8R-38 2x1	MFWD 170	99,500	150	8	0.053	1.36	2.09	1.99	0.31	5.76	4.35	2.19	12.31
Plant & Pre-Folding	12R-20	MFWD 190	70,600	150	8	0.101	2.59	4.44	2.68	0.68	10.42	5.86	4.84	21.13
Plant & Pre-Folding	12R-30	MFWD 190	88,800	150	8	0.067	1.73	2.96	2.25	0.45	7.40	4.92	3.23	15.56
Plant & Pre-Folding	12R-38	MFWD 190	99,500	150	8	0.053	1.36	2.34	1.99	0.36	6.06	4.35	2.55	12.96
Plant & Pre-Folding	16R-30	MFWD 190	133,000	150	8	0.050	1.29	2.22	2.53	0.34	6.39	5.52	2.42	14.35
Plant & Pre-Folding	23R-15	MFWD 190	179,000	150	8	0.070	1.80	3.08	4.73	0.47	10.10	10.33	3.36	23.80
Plant & Pre-Folding	24R-20	MFWD 190	214,000	150	8	0.050	1.29	2.22	4.07	0.34	7.94	8.89	2.42	19.25
Plant & Pre-Folding	24R-30	MFWD 190	200,000	150	8	0.033	0.86	1.48	2.53	0.22	5.11	5.54	1.61	12.27
Plant & Pre-Folding	31R-15	MFWD 225	213,000	150	8	0.052	1.34	2.72	4.19	0.45	8.70	9.14	3.20	21.05
Plant & Pre-Folding	32R-15	MFWD 225	216,000	150	8	0.050	1.29	2.63	4.11	0.43	8.48	8.97	3.09	20.55
Plant & Pre-Rigid	4R-30	2WD 130	33,700	150	8	0.203	5.19	6.08	2.56	0.74	14.59	5.60	5.08	25.28
Plant & Pre-Rigid	4R-38	2WD 130	30,400	150	8	0.159	4.09	4.79	1.82	0.58	11.29	3.97	4.00	19.27
Plant & Pre-Rigid	6R-30	MFWD 150	41,200	150	8	0.135	3.46	4.68	2.09	0.66	10.90	4.56	4.55	20.02
Plant & Pre-Rigid	6R-38	MFWD 150	41,400	150	8	0.106	2.73	3.69	1.65	0.52	8.62	3.62	3.59	15.83
Plant & Pre-Rigid	8R-30	MFWD 170	52,200	150	8	0.101	2.59	3.98	1.98	0.59	9.15	4.33	4.17	17.67
Plant & Pre-Rigid	8R-38	MFWD 170	48,000	150	8	0.080	2.05	3.14	1.44	0.46	7.11	3.15	3.29	13.56
Plant & Pre-Rigid	11R-15	MFWD 170	56,100	150	8	0.148	3.79	5.81	3.11	0.86	13.58	6.80	6.09	26.48
Plant & Pre-Rigid	11R-20	MFWD 170	57,200	150	8	0.110	2.84	4.35	2.38	0.64	10.21	5.19	4.56	19.97
Plant & Pre-Rigid	12R-20	MFWD 190	60,800	150	8	0.101	2.59	4.44	2.31	0.68	10.04	5.05	4.84	19.94
Plant & Pre-Rigid	12R-30	MFWD 190	74,400	150	8	0.067	1.73	2.96	1.88	0.45	7.04	4.12	3.23	14.39
Plant & Pre-Rigid	15R-15	MFWD 190	74,300	150	8	0.108	2.78	4.75	3.02	0.73	11.29	6.60	5.18	23.08
Plant & Pre-TwinRow	12R-30/40	MFWD 225	160,200	150	8	0.053	1.36	2.77	3.21	0.46	7.81	7.00	3.25	18.08
Plant & Pre-TwinRow	8R-30/40	MFWD 225	127,000	150	8	0.080	2.05	4.16	3.82	0.69	10.73	8.34	4.89	23.97
Plant - Folding	8R-38	MFWD 170	64,700	150	8	0.074	1.90	2.92	1.80	0.43	7.07	3.94	3.06	14.08
Plant - Folding	8R-38 2x1	MFWD 170	89,800	150	8	0.049	1.27	1.94	1.67	0.28	5.17	3.64	2.03	10.86
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.41	4.13	2.30	0.63	9.48	5.03	4.50	19.02
Plant - Folding	12R-30	MFWD 190	79,000	150	8	0.062	1.60	2.75	1.86	0.42	6.64	4.06	3.00	13.71
Plant - Folding	12R-38	MFWD 190	89,800	150	8	0.049	1.27	2.17	1.67	0.33	5.45	3.64	2.36	11.46
Plant - Folding	16R-30	MFWD 190	123,000	150	8	0.047	1.20	2.06	2.17	0.31	5.76	4.74	2.24	12.76
Plant - Folding	23R-15	MFWD 190	170,000	150	8	0.065	1.67	2.86	4.17	0.44	9.16	9.11	3.12	21.40
Plant - Folding	24R-20	MFWD 190	204,000	150	8	0.047	1.20	2.06	3.60	0.31	7.19	7.87	2.24	17.31
Plant - Folding	24R-30	MFWD 190	184,000	150	8	0.031	0.80	1.37	2.16	0.21	4.56	4.73	1.50	10.79
Plant - Folding	31R-15	MFWD 225	203,000	150	8	0.048	1.24	2.52	3.70	0.42	7.90	8.09	2.97	18.97
Plant - Folding	32R-15	MFWD 225	206,000	150	8	0.047	1.20	2.44	3.64	0.40	7.70	7.94	2.87	18.52
Plant - Rigid	4R-30	2WD 130	27,900	150	8	0.188	4.82	5.65	1.97	0.69	13.14	4.30	4.71	22.17
Plant - Rigid	4R-38	2WD 130	24,700	150	8	0.148	3.80	4.45	1.37	0.54	10.17	3.00	3.71	16.89
Plant - Rigid	6R-30	MFWD 150	35,500	150	8	0.125	3.21	4.34	1.67	0.62	9.86	3.65	4.22	17.74
Plant - Rigid	6R-38	MFWD 150	35,700	150	8	0.099	2.54	3.43	1.32	0.49	7.79	2.90	3.33	14.03
Plant - Rigid	8R-30	MFWD 170	46,500	150	8	0.094	2.41	3.69	1.64	0.54	8.30	3.58	3.87	15.76
Plant - Rigid	8R-38	MFWD 170	42,300	150	8	0.074	1.90	2.92	1.18	0.43	6.44	2.58	3.06	12.08
Plant - Rigid	11R-15	MFWD 170	50,400	150	8	0.137	3.52	5.39	2.60	0.80	12.32	5.67	5.65	23.65
Plant - Rigid	11R-20	MFWD 170	51,500	150	8	0.103	2.63	4.03	1.98	0.59	9.26	4.34	4.23	17.84
Plant - Rigid	12R-20	MFWD 190	55,000	150	8	0.094	2.41	4.13	1.94	0.63	9.12	4.24	4.50	17.87
Plant - Rigid	12R-30	MFWD 190	64,600	150	8	0.062	1.60	2.75	1.52	0.42	6.31	3.32	3.00	12.63
Plant - Rigid	15R-15	2WD 150	64,600	150	8	0.094	2.41	3.26	2.28	0.38	8.34	4.98	2.63	15.96
Plant - TwinRow	12R-30/40	MFWD 225	150,000	150	8	0.049	1.27	2.57	2.79	0.42	7.06	6.09	3.02	16.18
Plant - TwinRow	8R-30/40	MFWD 225	121,000	150	8	0.074	1.90	3.86	3.38	0.64	9.79	7.38	4.54	21.72
Roller/Cultipacker	12'	2WD 130	7,470	300	12	0.124	2.05	3.73	0.21	0.45	6.46	0.34	3.11	9.92
Roller/Cultipacker	20'	MFWD 150	13,400	300	12	0.074	1.23	2.58	0.23	0.36	4.42	0.37	2.51	7.30
Roller/Cultipacker	30'	MFWD 170	20,600	300	12	0.049	0.82	1.95	0.24	0.28	3.30	0.37	2.04	5.73
Roller/Cultipacker	38'	MFWD 225	26,300	300	12	0.039	0.65	2.03	0.24	0.33	3.27	0.38	2.39	6.05
Roller/Stubble	20'	2WD 50	15,600	300	12	0.074	1.23	0.86	0.27	0.05	2.42	0.43	0.38	3.24
Roller/Stubble	32'	MFWD 225	23,400	300	12	0.046	0.77	2.42	0.25	0.40	3.85	0.40	2.84	7.10

(continued)

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2023 (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-----							
Rotary Cutter	7'	MFWD 130	0	185	10	0.168	2.78	5.04	0.00	0.70	8.53	0.00	4.77	13.30
Rotary Cutter	12'	2WD 150	20,200	185	10	0.098	1.62	3.39	1.60	0.40	7.03	1.28	2.74	11.06
Rotary Cutter-Flex	15'	MFWD 150	28,700	185	10	0.078	1.29	2.71	1.82	0.38	6.23	1.46	2.64	10.33
Rotary Cutter-Flex	20'	MFWD 150	41,400	185	10	0.058	0.97	2.03	1.97	0.29	5.28	1.58	1.98	8.84
Row Cond & Inc-Fold.	26'	MFWD 190	37,600	100	10	0.063	1.33	2.78	0.59	0.42	5.14	2.86	3.02	11.03
Row Cond & Inc-Fold.	38'	MFWD 225	49,800	100	10	0.043	0.91	2.25	0.54	0.37	4.08	2.59	2.64	9.32
Row Cond & Inc-Rigid	13'	2WD 130	18,700	100	10	0.126	2.67	3.80	0.59	0.46	7.53	2.84	3.17	13.56
Row Cond & Inc-Rigid	21'	2WD 170	26,900	100	10	0.078	1.65	3.08	0.52	0.29	5.55	2.53	2.06	10.15
Row Cond & Inc-Rigid	26'	MFWD 190	29,300	100	10	0.026	0.56	1.16	0.19	0.17	2.10	0.93	1.27	4.30
Row Cond Folding	26'	MFWD 225	31,900	100	10	0.059	0.98	3.09	0.47	0.51	5.07	2.28	3.64	11.00
Row Cond Folding	38'	MFWD 225	40,100	100	10	0.040	0.67	2.12	0.40	0.35	3.55	1.96	2.49	8.01
Row Cond Rigid	13'	2WD 130	12,900	100	10	0.119	1.97	3.58	0.38	0.43	6.38	1.84	2.98	11.21
Row Cond Rigid	21'	2WD 170	21,200	100	10	0.073	1.22	2.89	0.39	0.27	4.78	1.87	1.94	8.61
Row Cond Rigid	26'	MFWD 190	23,600	100	10	0.059	0.98	2.61	0.35	0.40	4.36	1.69	2.85	8.90
Row Cond./Roll-Fol	30'	MFWD 190	69,000	160	10	0.062	1.03	2.73	1.07	0.42	5.27	3.23	2.98	11.48
Row Cond./Roll-Fold.	26'	MFWD 190	38,000	160	10	0.072	1.19	3.15	0.68	0.48	5.52	2.05	3.44	11.02
Row Cond./Roll-Fold.	40'	MFWD 225	57,100	160	10	0.046	0.77	2.43	0.66	0.40	4.28	2.00	2.85	9.14
Row Cond./Roll-Rig	21'	MFWD 190	38,400	160	10	0.089	1.47	3.91	0.85	0.60	6.84	2.56	4.26	13.68
Row Cond./Roll-Rig	26'	MFWD 190	42,300	160	10	0.072	1.19	3.15	0.76	0.48	5.60	2.28	3.44	11.33
Spin Spreader	5 ton	MFWD 190	14,500	100	8	0.042	1.07	1.84	0.34	0.28	3.54	0.77	2.00	6.33
Spray (ATV Ropewick)	75"	800 CC	720	200	8	0.260	5.48	0.58	0.08	0.49	6.65	0.11	2.18	8.95
Spray (ATV)	20'	800 CC	1,440	200	8	0.084	1.78	0.18	0.05	0.16	2.19	0.07	0.70	2.97
Spray (Band)	27' Fold	MFWD 170	5,700	200	8	0.062	1.32	2.45	0.16	0.36	4.30	0.22	2.57	7.11
Spray (Band)	40' Fold	MFWD 170	9,740	200	8	0.042	0.89	1.65	0.19	0.24	2.98	0.26	1.73	4.99
Spray (Band)	50' Fold	MFWD 170	9,590	200	8	0.033	0.71	1.32	0.15	0.19	2.38	0.20	1.39	3.98
Spray (Band)	60' Fold	MFWD 170	16,700	200	8	0.028	0.59	1.10	0.22	0.16	2.08	0.30	1.15	3.54
Spray (Bcast/HB)	13' Rigid	MFWD 150	8,700	200	8	0.130	2.74	4.50	0.53	0.64	8.41	0.72	4.37	13.51
Spray (Bcast/HB)	20' Rigid	MFWD 150	10,200	200	8	0.084	1.78	2.92	0.40	0.41	5.53	0.55	2.84	8.92
Spray (Bcast/HB)	27' Fold	MFWD 170	14,700	200	8	0.062	1.32	2.45	0.43	0.36	4.57	0.58	2.57	7.73
Spray (Bcast/HB)	27' Rigid	MFWD 170	14,800	200	8	0.062	1.32	2.45	0.43	0.36	4.57	0.59	2.57	7.74
Spray (Bcast/HB)	30' Fold	MFWD 170	19,900	200	8	0.056	1.18	2.21	0.52	0.32	4.25	0.71	2.31	7.28
Spray (Bcast/HB)	40' Fold	MFWD 170	21,500	200	8	0.042	0.89	1.65	0.42	0.24	3.22	0.58	1.73	5.54
Spray (Broadcast)	27'	MFWD 170	5,720	200	8	0.062	1.32	2.45	0.16	0.36	4.31	0.22	2.57	7.11
Spray (Broadcast)	40'	MFWD 170	9,740	200	8	0.042	0.89	1.65	0.19	0.24	2.98	0.26	1.73	4.99
Spray (Broadcast)	50'	MFWD 170	9,600	200	8	0.033	0.71	1.32	0.15	0.19	2.38	0.20	1.39	3.98
Spray (Broadcast)	60'	MFWD 170	16,700	200	8	0.028	0.59	1.10	0.22	0.16	2.08	0.30	1.15	3.54
Spray (Direct/Hood)	8R-30	MFWD 170	20,700	200	8	0.084	1.78	3.31	0.82	0.49	6.41	1.11	3.47	11.00
Spray (Direct/Hood)	8R-38	MFWD 170	21,500	200	8	0.066	1.40	2.62	0.67	0.38	5.09	0.91	2.74	8.76
Spray (Direct/Hood)	12R-30	MFWD 170	28,200	200	8	0.056	1.18	2.21	0.74	0.32	4.47	1.01	2.31	7.80
Spray (Direct/Hood)	12R-38	MFWD 170	28,600	200	8	0.044	0.93	1.74	0.59	0.25	3.53	0.81	1.83	6.18
Spray (Direct/Layby)	8R-30	MFWD 170	19,500	200	8	0.084	1.78	3.31	0.77	0.49	6.36	1.05	3.47	10.89
Spray (Direct/Layby)	8R-38	MFWD 170	19,500	200	8	0.066	1.40	2.62	0.61	0.38	5.03	0.83	2.74	8.61
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	29,500	200	8	0.044	0.93	1.74	0.61	0.25	3.55	0.83	1.83	6.22
Spray (Direct/Layby)	12R-30	MFWD 170	29,500	200	8	0.056	1.18	2.21	0.78	0.32	4.50	1.06	2.31	7.88
Spray (Direct/Layby)	12R-38	MFWD 170	29,500	200	8	0.044	0.93	1.74	0.61	0.25	3.55	0.83	1.83	6.22
Spray (Direct/Layby)	16R-20/30	MFWD 225	34,600	200	8	0.062	1.32	3.25	1.01	0.54	6.12	1.38	3.82	11.33
Spray (Levee Leaper)	50'	MFWD 225	16,900	200	8	0.033	0.71	1.75	0.26	0.29	3.02	0.36	2.06	5.45
Spray (Pull Type)	60'	MFWD 225	62,600	200	8	0.028	0.59	1.46	0.82	0.24	3.12	1.12	1.72	5.97
Spray (Pull Type)	80'	MFWD 225	61,500	200	8	0.021	0.44	1.09	0.60	0.18	2.33	0.83	1.28	4.45
Spray (Pull Type)	90'	MFWD 225	62,400	200	8	0.018	0.39	0.97	0.54	0.16	2.08	0.74	1.14	3.97
Spray (Pull Type)	120'	MFWD 225	106,200	200	8	0.014	0.29	0.73	0.70	0.12	1.85	0.95	0.85	3.66
Spray (Ropewick)	20'	MFWD 190	4,110	200	8	0.084	1.78	3.70	0.16	0.57	6.22	0.22	4.03	10.48
Spray (Spot)	27'	MFWD 170	5,720	200	8	0.062	1.32	2.45	0.16	0.36	4.31	0.22	2.57	7.11
Spray (Spot)	40'	MFWD 170	9,740	200	8	0.042	0.89	1.65	0.19	0.24	2.98	0.26	1.73	4.99
Spray (Spot)	50'	MFWD 170	9,600	200	8	0.033	0.71	1.32	0.15	0.19	2.38	0.20	1.39	3.98
Spray (Spot)	60'	MFWD 225	16,700	200	8	0.028	0.59	1.46	0.22	0.24	2.52	0.30	1.72	4.54
Stalk Shredder	14'	MFWD 150	36,300	200	10	0.117	1.94	4.07	3.74	0.58	10.35	2.56	3.96	16.87
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.36	2.85	2.38	0.40	7.01	1.63	2.77	11.42
Stalk Shredder-Flail	12'	MFWD 150	26,200	200	10	0.137	2.27	4.75	3.15	0.67	10.86	2.15	4.62	17.64
Stalk Shredder-Flail	15'	MFWD 150	31,000	200	10	0.110	1.81	3.80	2.98	0.54	9.15	2.04	3.69	14.89
Stalk Shredder-Flail	18'	MFWD 150	47,300	200	10	0.091	1.51	3.17	3.79	0.45	8.93	2.59	3.08	14.61
Stalk Shredder-Flail	20'	MFWD 150	40,200	200	10	0.082	1.36	2.85	2.90	0.40	7.52	1.98	2.77	12.28
Stalk Shredder-Flail	25'	MFWD 150	66,400	200	10	0.066	1.09	2.28	3.83	0.32	7.53	2.62	2.21	12.38
Strip Till	8R-38	MFWD 225	58,200	150	10	0.061	1.01	3.19	1.55	0.53	6.30	2.86	3.75	12.92
Strip Till	12R-30	MFWD 225	98,900	150	10	0.061	1.01	3.19	2.64	0.53	7.38	4.87	3.75	16.01
Strip Till	12R-40	MFWD 225	99,800	150	10	0.046	0.76	2.39	1.99	0.39	5.56	3.68	2.81	12.06
Subsoiler	3 shank	MFWD 190	5,400	100	15	0.204	3.37	8.95	0.36	1.37	14.07	1.07	9.75	24.90
Subsoiler	4 shank	MFWD 225	12,200	100	15	0.153	2.54	7.97	0.62	1.32	12.46	1.81	9.36	23.65
Subsoiler	5 shank	MFWD 225	17,100	100	15	0.122	2.02	6.34	0.69	1.05	10.12	2.03	7.46	19.61
Subsoiler low-till	6 shank	MFWD 225	16,400	100	15	0.102	1.68	5.30	0.55	0.88	8.43	1.62	6.23	16.28
Subsoiler low-till	8 shank	MFWD 225	24,300	100	15	0.076	1.26	3.97	0.61	0.66	6.51	1.80	4.66	12.98

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, 2023

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Artisan	oz	0.23
Agri-Dex	pt	5.28	Avaris	oz	1.68
AMS SuperMax	pt	3.81	Avicta 500 Soybean	oz	2.14
Class Act NG	pt	4.75	Bravo Weather Stick	pt	6.32
Crop Oil Conc. (Pet.)	pt	2.86	Captan 50 WP	lb	6.13
Crop Oil Conc. (Veg.)	pt	2.90	Convoy	oz	1.13
Dyne-A-Pak	pt	6.01	Cotton Seed Trt.	acre	20.00
Fire-Zone	pt	2.42	CruiserMaxx Vibrance	oz	7.63
Herbimax	pt	2.75	Elatus	oz	3.81
Induce	pt	5.00	Flint Extra	oz	9.41
MSO	pt	1.34	Headline EC	oz	4.46
Penetrator Plus	pt	2.32	Miravis Top	oz	5.31
Surfactant	pt	3.30	Prior Xemium	oz	2.17
CLEANING			Propimax EC	pt	12.50
Cleaning Peanuts	ton	18.00	Prosaro	oz	1.78
CROP CONSULTANT			Provost Optimum	oz	2.17
Corn Consultant	acre	6.00	Provost Silver	oz	1.41
Cotton Consultant	acre	8.00	Quadris	oz	6.73
Peanut Consultant	acre	9.25	Quadris Top	oz	3.05
Rice Consultant	acre	8.00	Quadris Top SBX	oz	3.35
Sorghum Consultant	acre	6.00	Quilt	pt	18.23
Soybeans Consultant	acre	6.50	Quilt XCEL	pt	25.08
Wheat Consultant	acre	5.50	Stratego	pt	23.93
CUSTOM FERTILIZE			Stratego YLD	oz	4.02
App Fert by Air	cwt	8.00	Tilt 3.6 EC	oz	1.00
App Fert by Air (Mi)	appl	8.00	Tilt/ Bravo SE	oz	0.72
Custom Apply Fert	acre	7.50	Trivapro	oz	1.43
CUSTOM LIME			GINNING		
Lime (Spread)	ton	58.00	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	oz	0.09
Custom Plant Air	cwt	8.00	Mepichlor 4.2%	oz	0.04
CUSTOM SPRAY			Mepiquat	oz	0.22
App by Air (3 gal)	appl	6.40	Mepstar 6	oz	0.09
App by Air (5 gal)	appl	7.60	Palisade	oz	1.41
App by Air (10 gal)	appl	9.70	Pentia	oz	0.41
Custom Spray Ground	acre	7.00	Pix WSB	oz	1.26
DRYING			Stance	oz	1.40
Dry Corn	bu	0.19	Veto	oz	0.06
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	oz	0.96
Dry Rice	bu	0.40	Boll Buster	oz	0.34
ERADICATION FEE			Def/Folex	pt	12.50
Eradication	acre	1.00	Defol 5	gal	8.61
FERTILIZERS			Display	oz	10.59
Agrotain Ultra	pt	20.99	Ethephon 6E	pt	3.56
Amm Sulfate (21% N)	cwt	50.00	Finish 6	pt	10.93
Boron Plus	pt	4.31	Folex 6EC	pt	12.50
DAP	cwt	55.40	Freefall SC	oz	1.52
Fert 10-34-0	cwt	45.99	Ginstar EC	pt	29.72
Fert 10-34-0	gal	5.36	Gramoxone SL	oz	0.37
Fert 11-37-0	cwt	50.15	Sharpen	oz	6.72
Fert 41-0-0-4	cwt	37.06	Sodium Chlorate 5L	gal	8.61
Lime	ton	48.00	SuperBoll	oz	0.32
NBPT	pt	18.00	Thidiazuron 4lb	oz	1.52
Phosphorus (46% P2O5)	cwt	50.00	Tribufos 6lb	pt	12.50
Potash (60% K2O)	cwt	46.60	Vacate	oz	1.39
Sulfur Plus	pt	2.62	HAULING		
UAN (32% N)	cwt	38.90	Haul Corn	bu	0.23
UAN (32%)	gal	4.30	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	cwt	39.65	Haul Rice	bu	0.35
UAN + Sulfur (28%)	gal	4.41	Haul Sorghum	bu	0.25
Urea, Solid (46% N)	cwt	41.58	Haul Soybeans	bu	0.27
Zinc Plus	pt	3.68	Haul Wheat	bu	0.26
FUNGICIDES			HERBICIDES		
Abound	oz	1.88	2,4-D Amine 4	pt	3.33
Alfa Guard	lb	1.41	2,4-D Ester	pt	5.03
Allegiance Flowable	oz	3.66	AAtrex 4L	pt	2.62
Ameristar Top	oz	2.41	Accent Q	oz	20.47
Approach Prima	pt	33.33	Acuron	oz	0.54
Apron Maxx RTA	oz	1.00			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2023 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Aim	oz	4.90	Harmony Extra SG	oz	10.34
Anthem Flex	oz	5.57	Helmet	oz	0.48
Anthem Maxx	oz	5.26	Huskie	oz	0.96
Armezon Pro	oz	1.03	Impact	oz	13.44
Atrazine 4L	pt	3.00	Intimidator	oz	0.64
Atrazine 90DF	lb	4.50	Leadoff	oz	6.79
Authority First	lb	40.00	League	oz	4.19
Authority Elite	pt	11.92	Lexar	pt	6.76
Authority Maxx	lb	68.82	Liberty 280	oz	0.76
Authority MTZ	lb	19.75	Loyant	oz	2.29
Avatar	pt	9.62	Makaze	oz	0.21
Avenger	pt	15.00	Metolachlor	pt	7.89
Axial XL	oz	1.71	Metribuzin 4L	pt	21.13
Axiom	oz	2.10	Metribuzin 75	lb	14.80
Banvel	pt	4.81	MSMA	pt	6.35
Barrage	pt	4.13	Newpath	oz	4.15
Basagran	pt	5.43	Obey	oz	1.08
Boundary	pt	11.75	Osprey	oz	3.58
Brake	oz	1.48	Outlook	pt	14.77
Broadaxe	pt	14.17	Panther Pro	oz	6.61
Broadhead	lb	58.21	Parallel	pt	8.32
Bucaneer Plus	pt	9.81	Paraquat	oz	0.23
Buctril	pt	4.28	Parazone 3SL	oz	0.18
Butyrac 200 (2,4-DB)	pt	4.06	Permit	oz	20.07
Cadre	oz	1.97	Permit Plus	oz	22.22
Canopy	oz	3.25	PowerFlex	oz	7.21
Caparol	pt	4.97	Preface	oz	4.99
Capreno	oz	4.49	Prefix	pt	5.26
Cinch	pt	14.18	Provisia	oz	0.82
Cinch ATZ	pt	6.26	Prowl 3.3 EC	pt	6.63
Clarity	pt	14.30	Quelex	oz	11.30
Classic	oz	18.50	RealmQ	oz	4.32
Clearpath	oz	4.24	RebelEx	oz	2.00
Clethodim 2E	oz	0.53	Reflex	pt	7.34
Clincher SF	oz	1.95	Regiment	oz	45.96
Cobra	oz	1.22	Resicore	oz	0.60
Command 3ME	pt	18.00	Resource	oz	2.03
Corvus	oz	5.30	RiceBeaux	pt	6.25
Cotoran	pt	6.37	Riceshot	pt	4.68
Cotton Pro	pt	3.45	Ricestar HT	pt	26.01
Dicamba	pt	5.88	Ringside	pt	5.63
Direx	pt	5.25	Roundup Power Max	oz	0.46
Diuron	pt	3.47	Roundup PowerMax	pt	7.33
Dual II Magnum	pt	11.60	Roundup PowerMax ii	oz	0.27
Dual Magnum	pt	11.45	Roundup Pro	pt	0.20
Duet	pt	6.09	Scepter 70 DG	oz	4.64
Engenia	oz	0.83	Select Max	pt	13.86
Enlist Duo	pt	8.60	Sencor/Tricor.Metrib	lb	17.78
Enlist One	pt	6.77	Sequence	pt	7.14
Envive	oz	3.78	Sharpen	oz	6.72
Envoke	oz	88.33	Sinister	pt	13.77
Facet L	pt	17.50	Sonic	oz	4.50
Fierce	oz	7.75	Stalwart	pt	3.82
Fierce XLT	oz	4.47	Stam 80 EDF	lb	9.45
Finesse	oz	18.64	Stam M4	qt	8.00
Firestorm	pt	3.44	Staple LX	oz	3.95
First Rate	oz	37.79	Storm	pt	12.65
Flexstar	pt	9.90	Strada	oz	7.34
Flexstar GT	pt	6.77	Strada Pro	oz	8.20
Fusilade DX	oz	1.19	Strada XT2	oz	3.26
Gambit	oz	16.50	Superwham	qt	9.82
Glyphosate 3lbs a.e	pt	5.38	Suprend	lb	13.52
Glyphosate 3lbs a.e	oz	0.34	SureStart II	oz	0.39
Goal 2XL	pt	8.75	Surveil	oz	6.70
Gramoxone SL 2.0	oz	0.37	Synchrony XP	oz	13.00
Grandstand R	pt	18.68	Tempest	pt	19.50
Grasp	oz	3.17	Touchdown Total	qt	10.21
Grasp Xtra	oz	1.61	Treflan	pt	4.36
Halex GT	pt	10.50			
Halomax	oz	21.11			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2023 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Trifluralin	pt	4.36	Mustang Max	oz	1.17
Triflurex	pt	3.47	Nuprid 4F	oz	1.04
Ultra Blazer	pt	7.50	Oberon	oz	3.10
Valor EZ	oz	5.23	Orthene 97	lb	11.66
Valor SX	oz	3.20	Permethrin	oz	0.47
Valor XLT	oz	3.64	Portal XLO	oz	0.74
Vamos	pt	6.49	Pounce 25WP	lb	19.96
Verdict	oz	1.53	Prevathon	oz	1.16
Veritas	pt	7.49	Python WDG	oz	20.19
Villain	pt	5.24	Radiant	oz	5.77
Volunteer	pt	10.63	Sevin 4F	pt	8.55
Warrant	pt	4.84	Sevin XLR Plus	qt	17.53
XtendiMax	oz	0.44	Sivanto Prime	oz	3.36
Zidua SC	oz	6.20	Tempest	oz	1.70
Zidua WG	oz	8.76	Tenchu SG	oz	1.13
INOCULANT			Transform WG	oz	8.82
Inoculant -Soybean	acre	1.55	Up-Cyde	oz	0.49
Optimize LIFT	oz	0.15	Warrior ZT	oz	3.13
INSECTICIDES			Zeal	oz	20.93
Abamectin .15EC	oz	0.30	IRRIGATION SUPPLIES		
Acephate 90%	lb	9.30	Roll-Out Pipe	ft	0.24
Acephate 90SP	lb	6.62	SEED/PLANTS		
Admire Pro	oz	1.76	Corn Seed BtRR	thous	3.75
Agri-Mek	oz	3.13	Corn Seed Conv.	thous	2.36
Asana .66 XL	oz	0.58	Corn Seed Op Leptra	thous	3.66
Avenger	oz	0.28	Corn Seed RR2	thous	2.93
Baythroid XL	oz	1.32	Corn Seed VT2P	thous	2.62
Belt	oz	6.80	Cot. Seed B3XF/W3FE	thous	2.34
Besiege	oz	2.75	Cotton Seed B3XF	thous	2.35
Bidrin 8EC	oz	1.43	Cotton Seed GLB2	thous	1.59
Bifenthrin	oz	1.13	Cotton Seed W3FE	thous	2.32
Bifenture 2EC	oz	0.47	Cotton Seed W3RF	thous	1.31
Brigade EC	pt	20.27	Peanut Seed	lb	0.84
Capture LFR	oz	1.37	Rice Conv Hyb Trt	lb	6.31
Centric 40WG	oz	5.95	Rice Fullpage Hyb Tr	lb	7.68
Cypermethrin	oz	1.31	Rice Seed CF(Levees)	lb	1.14
Declare	oz	2.03	Rice Seed Clearfield	lb	1.14
Diamond .83EC	oz	2.23	Rice Seed Conv.	lb	0.33
Dimethoate 4E	pt	6.45	Rice Seed Cv(Levees)	lb	0.33
Dimilin 2L	oz	1.63	Rice Seed CvH(Levee)	lb	1.93
Endigo	oz	2.10	Rice Seed FPH(Levee)	lb	7.68
Force 3G	lb	7.28	Rice Seed Provisia	lb	1.30
Hero	oz	1.35	Rice Seed Trt/Insect	lbseed	0.29
Imidacloprid 4F	oz	1.06	Sorghum Concept	lb	2.42
Imidan 70 WSB	oz	0.86	Sorghum Concept+ Po	lb	3.51
IncidentalPestTrt \$8	acre	8.00	Soybean Enlist E3	lb	1.20
IncidentalPestTrt\$15	acre	15.00	Soybean Seed LL	lb	1.16
IncidentalPestTrt\$22	acre	22.00	Soybean Seed RR2	lb	1.16
IncidentalPestTrt\$30	acre	30.00	Soybean Seed RR2X	lb	1.34
Intrepid 2F	oz	2.06	Wheat Seed Private	lb	0.38
Intruder 70WSP	oz	1.13	SOIL TEST		
Lambda	oz	2.08	Soil Test	acre	10.00
Lannate LV	pt	8.33	SURVEY & MARK LEVEES		
Macho	oz	1.28	Survey & Mark Levees	acre	4.50
Malathion 8E	pt	9.84	Survey & Mark Levees	acre	4.50

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2023

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	4.48
Gasoline	gal	3.19
INTEREST RATES		
Short-term	%	6.40
Intermediate-term	%	6.90

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2023

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	16.54
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, 2023

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '23	6.20	-0.05	6.15	2.35	6.15
Cotton Lint	lb	Dec '23	0.75	-0.011	0.7389	0.52	0.7389
Cottonseed	lb						0.11 ^f
Grain Sorghum	bu				5.84	4.09	5.84
Peanuts	ton				575.00	354.89	575.00
Soybeans	bu	Nov '23	13.54	0.12	13.66	6.41	13.66
Rice	bu	Nov '23	6.93	-0.18	6.75	3.21	6.75
Wheat	bu	Jul '23	9.03	0.13	8.90	3.60	8.90

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2021 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 2013 to 2022 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 2022 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2022 Farm-stored Loan Rate for long grain rough rice. National 2022 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 2008-2021.

Appendix Table 8 Estimated costs for field operations, per acre
 Irrigation with a 1/4-mile center pivot system
 135-acre system, 7.5 ac-in., Delta Area, Mississippi, 2023

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				0.36	13.84	76.97
Well & Pump, 1/4 CP	each			3.50				0.09	3.59	16.00
Engine, 1/4 CP, 65	each								12.42	12.42
June Irr. 3app@.75"	ac-in		15.05	1.49				0.44	16.98	16.98
July Irr. 4app@.75"	ac-in		20.07	1.99				0.47	22.53	22.53
Aug Irr. 3app@.75"	ac-in		15.05	1.49				0.26	16.80	16.80
TOTALS		0.00	50.17	21.95	1.84	0.00	1.66	75.62	87.96	163.58

Note: Cost of production estimates are based on 2022 input prices.

Appendix Table 9 Estimated costs for field operations, per acre
 Corn irrigated with roll-out pipe
 160-acre system, 13 ac-in., Delta Area, Mississippi, 2023

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'		1.66	0.36	0.63			0.17	2.82	2.11	4.93
Set Up Engine											
IRRIGATE LABOR	hour				0.23			0.01	0.24		0.24
Ditcher (1m/160a)			0.37	0.08	0.16			0.01	0.62	0.44	1.06
Roll-Out Pipe	ft	7.92						0.17	8.09		8.09
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.49	0.12	0.44			0.02	1.07	1.10	2.17
IRRIGATE LABOR	hour				1.81			0.04	1.85		1.85
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.74	0.18	0.65			0.02	1.59	1.65	3.24
Land Forming (\$450)	each									38.27	38.27
Well & Pump, Furrow	each			2.96				0.06	3.02	10.47	13.49
Main Line Pipe	each									5.79	5.79
Engine, RPF, Corn	each									10.48	10.48
1st June Irrigation	ac-in		11.86	1.05				0.28	13.19		13.19
2nd June Irrigation	ac-in		11.86	1.05				0.28	13.19		13.19
3rd June Irrigation	ac-in		11.86	1.05				0.28	13.19		13.19
1st July Irrigation	ac-in		11.86	1.05				0.21	13.12		13.12
TOTALS		7.92	50.70	7.90	4.84	0.00	1.55	72.91	70.31	143.22	

Note: Cost of production estimates are based on 2022 input prices.

Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968."
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2022 Planning Budgets." Budget Report No. 2021-03, Department of Agricultural Economics, Mississippi State University, November 2021.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
10. "Cotton 2022 Planning Budgets." Budget Report No. 2021-01, Department of Agricultural Economics, Mississippi State University, November 2021.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2023 Planning Budgets." Budget Report No. 2022-08, Department of Agricultural Economics, Mississippi State University, April 2022.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Peanuts 2022 Planning Budgets." Budget Report No. 2021-07, Department of Agricultural Economics, Mississippi State University, November 2021.
16. "Rice 2022 Planning Budgets." Budget Report No. 2021-04, Department of Agricultural Economics, Mississippi State University, November 2021.
17. "Soybeans 2022 Planning Budgets." Budget Report No. 2021-02, Department of Agricultural Economics, Mississippi State University, November 2021.
18. United States Department of Agriculture Farm Service Agency. *Commodity Loan Rates*. <https://www.fsa.usda.gov/programs-and-services/price-support/commodity-loan-rates/index>. Accessed October 22, 2021.
19. "Vegetables 2018 Planning Budgets." Budget Report No. 2017-09, Department of Agricultural Economics, Mississippi State University December 2017.



MISSISSIPPI STATE
UNIVERSITY™

Mark E. Keenum, President

Division of Agriculture, Forestry, and Veterinary Medicine
Keith H. Coble, Vice President

Department of Agricultural Economics
Sean Fox, Department Head

Mississippi State University is an equal opportunity institution. Discrimination in university employment, programs or activities based on race, color, ethnicity, sex, pregnancy, religion, national origin, disability, age, sexual orientation, genetic information, status as a U.S. veteran, or any other status protected by applicable law is prohibited. For more information, please contact the Office of Compliance and Integrity.