

**CORN, GRAIN
SORGHUM & WHEAT
2024
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2023-03**

November 2023

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 2024 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.

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Will Maples, MSU-ES, Co-Chair
Brian Mills, MSU-ES, Co-Chair
Erick Larson, MSU-ES/MAFES
Jason Bond, MSU-ES/MAFES
Don Cook, MAFES
Whitney Crow, MSU-ES
Drew Gholson, MSU-ES/MAFES
Tyler Towles, MSU-ES/MAFES
Corey Bryant, MSU-ES/MAFES

Cotton

Will Maples, MSU-ES, Co-Chair
Brian Mills, MSU-ES, Co-Chair
Brian Pieralisi, MSU-ES
Jason Bond, MSU-ES/MAFES
Don Cook, MAFES
Whitney Crow, MSU-ES
Tyler Towles, MSU-ES/MAFES
Corey Bryant, MSU-ES/MAFES

Peanuts

Will Maples, MSU-ES, Co-Chair
Brian Mills, MSU-ES, Co-Chair
Tyler Towles, 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
Tyler Towles, MSU-ES/MAFES
Hunter Bowman, MSU-ES/MAFES

Soybeans

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Brian Mills, MSU-ES, Co-Chair
Trent Irby, MSU-ES
Tom Allen, MSU-ES/MAFES
Jason Bond, MSU-ES/MAFES
Don Cook, MAFES
Whitney Crow, MSU-ES
Drew Gholson, MSU-ES/MAFES
Tyler Towles, MSU-ES/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

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2024 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 2023. (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 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
DIRECT EXPENSES				dollars			
CUSTOM SPRAY							
App by Air (5 gal)	appl	8.11	2.0000	16.22	_____		
App by Air (3 gal)	appl	6.87	0.2000	1.37	_____		
FERTILIZERS							
Phosphorus (46% P2O5)	cwt	39.25	1.9570	76.81	_____		
Potash (60% K2O)	cwt	36.20	1.5000	54.30	_____		
Fert 10-34-0	gal	4.66	4.0000	18.64	_____		
Zinc Plus	pt	3.50	2.0000	7.00	_____		
UAN + Sulfur (28%)	gal	3.46	32.1712	111.31	_____		
UAN (32%)	gal	4.00	30.0000	120.00	_____		
Urea, Solid (46% N)	cwt	31.69	1.0000	31.69	_____		
FUNGICIDES							
Trivapro	oz	1.48	13.7000	20.28	_____		
HERBICIDES							
Glyphosate 3lbs a.e.	oz	0.25	32.0000	8.00	_____		
Clarity	pt	14.29	0.5000	7.15	_____		
Select Max	pt	15.01	1.0000	15.01	_____		
Atrazine 4L	pt	2.71	4.0000	10.84	_____		
Halex GT	pt	9.63	3.6000	34.67	_____		
INSECTICIDES							
Bifenthrin	oz	0.56	1.2800	0.72	_____		
IRRIGATION SUPPLIES							
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____		
SEED/PLANTS							
Corn Seed BtRR	thous	3.61	34.0000	122.74	_____		
ADJUVANTS							
Surfactant	pt	3.30	0.6000	1.98	_____		
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	65.00	0.6660	43.29	_____		
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	17.94	0.4484	8.05	_____		
Harvesters	hour	17.94	0.1277	2.29	_____		
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	0.1462	1.33	_____		
UNALLOCATED LABOR							
hour	17.95	0.4478	8.04	_____			
DIESEL FUEL							
Tractors	gal	3.44	5.0106	17.24	_____		
Harvesters	gal	3.44	1.7419	5.99	_____		
Roll-Out Pipe Irr.	gal	3.44	10.5901	36.44	_____		
REPAIR & MAINTENANCE							
Implements	acre	13.41	1.0000	13.41	_____		
Tractors	acre	4.12	1.0000	4.12	_____		
Harvesters	acre	6.16	1.0000	6.16	_____		
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____		
INTEREST ON OP. CAP.	acre	40.86	1.0000	40.86	_____		
TOTAL DIRECT EXPENSES							
				939.99	_____		
FIXED EXPENSES							
Implements	acre	27.88	1.0000	27.88	_____		
Tractors	acre	31.86	1.0000	31.86	_____		
Harvesters	acre	29.49	1.0000	29.49	_____		
Roll-Out Pipe Irr.	acre	74.47	1.0000	74.47	_____		
TOTAL FIXED EXPENSES							
				163.70	_____		
TOTAL SPECIFIED EXPENSES							
				1103.69	_____		

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	220.0000	1124.20	_____
TOTAL INCOME				1124.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	17.59	1.0000	17.59	_____
FERTILIZERS	acre	419.75	1.0000	419.75	_____
FUNGICIDES	acre	20.28	1.0000	20.28	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	0.72	1.0000	0.72	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	122.74	1.0000	122.74	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.5761	10.34	_____
UNALLOCATED LABOR	hour	17.95	0.4478	8.04	_____
DIESEL FUEL	gal	3.44	17.3427	59.67	_____
REPAIR & MAINTENANCE	acre	30.85	1.0000	30.85	_____
INTEREST ON OP. CAP.	acre	40.86	1.0000	40.86	_____
TOTAL DIRECT EXPENSES				939.99	_____
RETURNS ABOVE DIRECT EXPENSES				184.21	_____
TOTAL FIXED EXPENSES				163.70	_____
TOTAL SPECIFIED EXPENSES				1103.69	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				20.51	_____

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	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				
Surfactant	pt					0.3000				
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				
Surfactant	pt					0.3000				
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				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Trivapro	oz					13.7000				
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 2023 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, 2024

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				0.27	3.60	3.60
Lime (Spread)	ton	43.29				3.57	46.86	46.86
Spin Spreader	5 ton		1.68	0.75	1.82	0.35	4.60	4.00
Phosphorus (46% P2O5)	cwt	76.81				6.34	83.15	83.15
Potash (60% K2O)	cwt	54.30				4.48	58.78	58.78
Bed/Disk w/roller	12R-30/40		2.49	2.37	2.13	0.58	7.57	10.50
App by Air (5 gal)	appl	8.11				0.45	8.56	8.56
Glyphosate 3lbs a.e.	oz	8.00				0.44	8.44	8.44
Clarity	pt	7.15				0.39	7.54	7.54
Select Max	pt	15.01				0.83	15.84	15.84
Surfactant	pt	0.99				0.05	1.04	1.04
Plant & Pre-Folding	16R-30		2.02	3.86	2.19	0.39	8.46	11.92
Corn Seed BtRR	thous	122.74				5.91	128.65	128.65
Fert 10-34-0	gal	18.64				0.90	19.54	19.54
Zinc Plus	pt	7.00				0.34	7.34	7.34
Custom Apply Fert	acre	7.50				0.31	7.81	7.81
UAN + Sulfur (28%)	gal	111.31				4.59	115.90	115.90
Spray (Broadcast)	60'		1.12	0.52	1.10	0.11	2.85	2.48
Atrazine 4L	pt	10.84				0.45	11.29	11.29
Halex GT	pt	34.67				1.43	36.10	36.10
Surfactant	pt	0.99				0.04	1.03	1.03
App by Air (3 gal)	appl	1.37				0.05	1.42	1.42
Bifenthrin	oz	0.72				0.02	0.74	0.74
Corn Consultant	acre	6.00				0.21	6.21	6.21
Fert Appl (Liquid)	12R-30		3.13	2.27	3.04	0.29	8.73	7.99
UAN (32%)	gal	120.00				4.13	124.13	124.13
App Fert by Air	cwt	8.00				0.22	8.22	8.22
Urea, Solid (46% N)	cwt	31.69				0.87	32.56	32.56
App by Air (5 gal)	appl	8.11				0.17	8.28	8.28
Trivapro	oz	20.28				0.42	20.70	20.70
Header - Corn	8R-30		5.99	9.32	4.35	0.14	19.80	35.41
Grain Cart Corn	700 bu		1.01	0.61	0.86	0.02	2.50	2.72
Haul Corn	bu	50.60				0.35	50.95	50.95
Stalk Shredder Flex	20'		3.29	3.19	2.81	0.06	9.35	7.96
Roll-Out Pipe Irr.	acre	7.92	38.94	7.96	4.94	1.69	61.45	80.72
TOTALS		785.37	59.67	30.85	23.24	0.00	40.86	939.99
								163.70
								1103.69

Note: Cost of production estimates are based on 2023 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, 2024

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	1124.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	1.37	0.00	8.11	0.00	0.00
FERTILIZERS	131.11	0.00	0.00	0.00	0.00	25.64	111.31	120.00	31.69	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	0.72	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	122.74	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	4.63	0.00	0.00	0.00	0.00	2.19	1.10	3.27	3.12	0.23	0.68	8.02
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	5.45	0.00	0.00	0.00	0.00	2.02	1.12	3.13	27.99	9.11	0.56	10.29
REPAIR & MAINTENANCE	3.51	0.00	0.00	0.00	0.00	3.86	0.52	2.27	6.33	1.05	0.19	13.12
INTEREST ON OP. CAP.	15.78	0.00	0.00	0.00	2.16	7.54	6.93	4.71	2.35	0.80	0.02	0.57
TOTAL DIRECT EXPENSES	207.10	0.00	0.00	0.00	41.42	163.99	174.98	141.47	87.40	39.58	1.45	82.60
NET INCOME	-207.10	0.00	0.00	0.00	-41.42	-163.99	-174.98	-141.47	-87.40	-39.58	-1.45	1041.60
NET INCOME TO DATE	-207.10	-207.10	-207.10	-207.10	-248.52	-412.51	-587.49	-728.96	-816.36	-855.94	-857.39	184.21

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-492 -656	-464 -628	-436 -600	-408 -572	-380 -544	-352 -516	-324 -488	-296 -459	-268 -431	-239 -403	-211 -375
60	132.00	bu	-413 -577	-379 -543	-346 -509	-312 -476	-278 -442	-245 -408	-211 -375	-177 -341	-143 -307	-110 -273	-76 -240
70	154.00	bu	-334 -498	-295 -458	-255 -419	-216 -380	-177 -340	-137 -301	-98 -262	-59 -222	-19 -183	19 -144	58 -104
80	176.00	bu	-255 -418	-210 -374	-165 -329	-120 -284	-75 -239	-30 -194	14 -149	59 -104	104 -59	149 -14	194 30
90	198.00	bu	-176 -339	-125 -289	-74 -238	-24 -187	26 -137	76 -86	127 -36	178 14	228 64	279 115	329 166
100	220.00	bu	-96 -260	-40 -204	15 -148	71 -91	128 -35	184 20	240 76	296 132	352 189	409 245	465 301
110	242.00	bu	-17 -181	44 -119	106 -57	167 4	229 66	291 127	353 189	415 251	477 313	538 375	600 436
120	264.00	bu	61 -102	129 -34	196 32	263 100	331 167	398 235	466 302	533 370	601 437	668 504	736 572
130	286.00	bu	140 -22	213 50	286 123	360 196	433 269	506 342	579 415	652 488	725 561	798 634	871 707
140	308.00	bu	220 56	298 135	377 213	456 292	534 371	613 449	692 528	770 607	849 685	928 764	1006 843
150	330.00	bu	299 135	383 219	467 304	552 388	636 472	720 557	805 641	889 725	973 810	1058 894	1142 978

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 2023 input prices.

Table 2.A Estimated costs per acre
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal
 Non-irrigated, Delta Area, Mississippi, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	1.0000	8.11	_____
App by Air (3 gal)	appl	6.87	0.2000	1.37	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	39.25	1.6300	63.98	_____
Potash (60% K2O)	cwt	36.20	1.2500	45.25	_____
Fert 10-34-0	gal	4.66	4.0000	18.64	_____
Zinc Plus	pt	3.50	2.0000	7.00	_____
UAN + Sulfur (28%)	gal	3.46	19.3063	66.80	_____
UAN (32%)	gal	4.00	36.7200	146.88	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.25	32.0000	8.00	_____
Clarity	pt	14.29	0.5000	7.15	_____
Select Max	pt	15.01	1.0000	15.01	_____
Atrazine 4L	pt	2.71	4.0000	10.84	_____
Halex GT	pt	9.63	3.6000	34.67	_____
INSECTICIDES					
Bifenthrin	oz	0.56	1.2800	0.72	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.61	28.0000	101.08	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
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	65.00	0.6660	43.29	_____
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	17.94	0.3457	6.21	_____
Harvesters	hour	17.94	0.1009	1.81	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR					
hour	17.93	0.4020	7.21	_____	
DIESEL FUEL					
Tractors	gal	3.44	4.0040	13.78	_____
Harvesters	gal	3.44	1.3770	4.74	_____
REPAIR & MAINTENANCE					
Implements	acre	10.53	1.0000	10.53	_____
Tractors	acre	3.34	1.0000	3.34	_____
Harvesters	acre	4.87	1.0000	4.87	_____
INTEREST ON OP. CAP.	acre	33.45	1.0000	33.45	_____

TOTAL DIRECT EXPENSES				723.86	_____
FIXED EXPENSES					
Implements	acre	20.49	1.0000	20.49	_____
Tractors	acre	25.82	1.0000	25.82	_____
Harvesters	acre	23.31	1.0000	23.31	_____

TOTAL FIXED EXPENSES				69.62	_____

TOTAL SPECIFIED EXPENSES				793.48	_____

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	170.0000	868.70	_____
TOTAL INCOME				868.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	9.48	1.0000	9.48	_____
FERTILIZERS	acre	348.55	1.0000	348.55	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	0.72	1.0000	0.72	_____
SEED/PLANTS	acre	101.08	1.0000	101.08	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.4466	8.02	_____
UNALLOCATED LABOR	hour	17.93	0.4020	7.21	_____
DIESEL FUEL	gal	3.44	5.3810	18.52	_____
REPAIR & MAINTENANCE	acre	18.74	1.0000	18.74	_____
INTEREST ON OP. CAP.	acre	33.45	1.0000	33.45	_____
TOTAL DIRECT EXPENSES				723.86	_____
RETURNS ABOVE DIRECT EXPENSES				144.84	_____
TOTAL FIXED EXPENSES				69.62	_____
TOTAL SPECIFIED EXPENSES				793.48	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				75.22	_____

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	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				
Surfactant	pt						0.3000				
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				
Surfactant	pt						0.3000				
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 2023 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, 2024

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				0.27	3.60	3.60
Lime (Spread)	ton	43.29				3.57	46.86	46.86
Spin Spreader	5 ton		1.68	0.75	1.82	0.35	4.60	4.00
Phosphorus (46% P2O5)	cwt	63.98				5.28	69.26	69.26
Potash (60% K2O)	cwt	45.25				3.73	48.98	48.98
Bed/Disk w/roller	12R-30/40		2.49	2.37	2.13	0.58	7.57	10.50
App by Air (5 gal)	appl	8.11				0.45	8.56	8.56
Glyphosate 3lbs a.e.	oz	8.00				0.44	8.44	8.44
Clarity	pt	7.15				0.39	7.54	7.54
Select Max	pt	15.01				0.83	15.84	15.84
Surfactant	pt	0.99				0.05	1.04	1.04
Plant & Pre-Folding	12R-38		2.13	2.66	2.30	0.34	7.43	9.17
Corn Seed BtRR	thous	101.08				4.86	105.94	105.94
Fert 10-34-0	gal	18.64				0.90	19.54	19.54
Zinc Plus	pt	7.00				0.34	7.34	7.34
Custom Apply Fert	acre	7.50				0.31	7.81	7.81
UAN + Sulfur (28%)	gal	66.80				2.76	69.56	69.56
Spray (Broadcast)	60'		1.12	0.52	1.10	0.11	2.85	2.48
Atrazine 4L	pt	10.84				0.45	11.29	11.29
Halex GT	pt	34.67				1.43	36.10	36.10
Surfactant	pt	0.99				0.04	1.03	1.03
App by Air (3 gal)	appl	1.37				0.05	1.42	1.42
Bifenthrin	oz	0.72				0.02	0.74	0.74
Corn Consultant	acre	6.00				0.21	6.21	6.21
Fert Appl (Liquid)	12R-38		2.06	1.57	1.99	0.19	5.81	5.36
UAN (32%)	gal	146.88				5.05	151.93	151.93
Header - Corn	8R-38		4.74	7.07	3.44	0.10	15.35	27.43
Grain Cart Corn	700 bu		1.01	0.61	0.86	0.02	2.50	2.72
Haul Corn	bu	39.10				0.27	39.37	39.37
Stalk Shredder Flex	20'		3.29	3.19	2.81	0.06	9.35	7.96
TOTALS		636.70	18.52	18.74	16.45	0.00	33.45	723.86
								69.62
								793.48

Note: Cost of production estimates are based on 2023 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, 2024

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	868.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	1.37	0.00	0.00	0.00	0.00
FERTILIZERS	109.23	0.00	0.00	0.00	0.00	25.64	66.80	146.88	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	0.72	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	101.08	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	3.95	0.00	0.00	0.00	0.00	2.30	1.10	1.99	0.00	0.00	0.00	7.11
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	4.17	0.00	0.00	0.00	0.00	2.13	1.12	2.06	0.00	0.00	0.00	9.04
REPAIR & MAINTENANCE	3.12	0.00	0.00	0.00	0.00	2.66	0.52	1.57	0.00	0.00	0.00	10.87
INTEREST ON OP. CAP.	13.78	0.00	0.00	0.00	2.16	6.44	5.10	5.52	0.00	0.00	0.00	0.45
TOTAL DIRECT EXPENSES	180.87	0.00	0.00	0.00	41.42	140.25	128.64	166.11	0.00	0.00	0.00	66.57
NET INCOME	-180.87	0.00	0.00	0.00	-41.42	-140.25	-128.64	-166.11	0.00	0.00	0.00	802.13
NET INCOME TO DATE	-180.87	-180.87	-180.87	-180.87	-222.29	-362.54	-491.18	-657.29	-657.29	-657.29	-657.29	144.84

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38
PERCENT YIELD UNIT dollars													
50	85.00	bu	-378 -448	-356 -426	-334 -404	-313 -382	-291 -361	-269 -339	-248 -317	-226 -296	-204 -274	-182 -252	-161 -230
60	102.00	bu	-317 -386	-291 -360	-265 -334	-239 -308	-212 -282	-186 -256	-160 -230	-134 -204	-108 -178	-82 -152	-56 -126
70	119.00	bu	-255 -325	-225 -295	-195 -264	-164 -234	-134 -203	-103 -173	-73 -143	-43 -112	-12 -82	17 -51	48 -21
80	136.00	bu	-194 -264	-160 -229	-125 -194	-90 -160	-55 -125	-21 -90	13 -55	48 -21	83 13	117 48	152 83
90	153.00	bu	-133 -203	-94 -164	-55 -124	-16 -85	22 -46	61 -7	100 31	140 70	179 109	218 148	257 187
100	170.00	bu	-72 -141	-28 -98	14 -55	57 -11	101 31	144 75	188 118	231 162	275 205	318 248	362 292
110	187.00	bu	-11 -80	36 -32	84 14	132 62	179 110	227 158	275 205	323 253	371 301	418 349	466 397
120	204.00	bu	50 -19	102 32	154 84	206 136	258 188	310 241	362 293	414 345	467 397	519 449	571 501
130	221.00	bu	111 41	167 98	224 154	280 211	337 267	393 324	450 380	506 436	563 493	619 549	675 606
140	238.00	bu	172 102	233 163	294 224	354 285	415 346	476 406	537 467	598 528	658 589	719 650	780 710
150	255.00	bu	233 164	298 229	364 294	429 359	494 424	559 489	624 555	689 620	754 685	820 750	885 815

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 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	8.11	2.0000	16.22			
App by Air (3 gal)	appl	6.87	0.2000	1.37			
FERTILIZERS							
Phosphorus(46% P2O5)	cwt	39.25	1.9570	76.81			
Potash (60% K2O)	cwt	36.20	1.5000	54.30			
Fert 10-34-0	gal	4.66	4.0000	18.64			
Zinc Plus	pt	3.50	2.0000	7.00			
UAN + Sulfur (28%)	gal	3.46	32.1712	111.31			
UAN (32%)	gal	4.00	30.0000	120.00			
Urea, Solid (46% N)	cwt	31.69	1.0000	31.69			
FUNGICIDES							
Trivapro	oz	1.48	13.7000	20.28			
HERBICIDES							
Glyphosate 3lbs a.e.	oz	0.25	32.0000	8.00			
Clarity	pt	14.29	0.5000	7.15			
Select Max	pt	15.01	1.0000	15.01			
Atrazine 4L	pt	2.71	4.0000	10.84			
Halex GT	pt	9.63	3.6000	34.67			
INSECTICIDES							
Bifenthrin	oz	0.56	1.2800	0.72			
SEED/PLANTS							
Corn Seed BtRR	thous	3.61	34.0000	122.74			
ADJUVANTS							
Surfactant	pt	3.30	0.6000	1.98			
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	65.00	0.6660	43.29			
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	17.94	0.3699	6.64			
Harvesters	hour	17.94	0.1277	2.29			
IRRIGATE LABOR							
Special Labor	hour	9.06	0.2036	1.84			
HAND LABOR							
Implements	hour	9.06	0.1462	1.33			
UNALLOCATED LABOR							
hour	17.95	0.4478	8.04				
DIESEL FUEL							
Tractors	gal	3.44	4.2843	14.74			
Harvesters	gal	3.44	1.7419	5.99			
1/4-mi. Pivot Irr.	gal	3.44	11.2011	38.53			
REPAIR & MAINTENANCE							
Implements	acre	13.16	1.0000	13.16			
Tractors	acre	3.57	1.0000	3.57			
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	41.02	1.0000	41.02			
<hr/>							
TOTAL DIRECT EXPENSES				942.71			
FIXED EXPENSES							
Implements	acre	25.86	1.0000	25.86			
Tractors	acre	27.63	1.0000	27.63			
Harvesters	acre	29.49	1.0000	29.49			
1/4-mi. Pivot Irr.	acre	99.50	1.0000	99.50			
<hr/>							
TOTAL FIXED EXPENSES				182.48			
<hr/>							
TOTAL SPECIFIED EXPENSES				1125.19			
<hr/>							

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	220.0000	1124.20	_____
TOTAL INCOME				1124.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	17.59	1.0000	17.59	_____
FERTILIZERS	acre	419.75	1.0000	419.75	_____
FUNGICIDES	acre	20.28	1.0000	20.28	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	0.72	1.0000	0.72	_____
SEED/PLANTS	acre	122.74	1.0000	122.74	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.4976	8.93	_____
UNALLOCATED LABOR	hour	17.95	0.4478	8.04	_____
DIESEL FUEL	gal	3.44	17.2274	59.26	_____
REPAIR & MAINTENANCE	acre	44.84	1.0000	44.84	_____
INTEREST ON OP. CAP.	acre	41.02	1.0000	41.02	_____
TOTAL DIRECT EXPENSES				942.71	_____
RETURNS ABOVE DIRECT EXPENSES				181.49	_____
TOTAL FIXED EXPENSES				182.48	_____
TOTAL SPECIFIED EXPENSES				1125.19	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-0.99	_____

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	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				
Surfactant	pt					0.3000				
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				
Surfactant	pt					0.3000				
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				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Trivapro	oz					13.7000				
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				

TOTALS						0.49	0.49	0.84	0.44	

Note: Cost of production estimates are based on 2023 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, 2024

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				0.27	3.60	3.60
Lime (Spread)	ton	43.29				3.57	46.86	46.86
Spin Spreader	5 ton		1.68	0.75	1.82	0.35	4.60	4.00
Phosphorus (46% P2O5)	cwt	76.81				6.34	83.15	83.15
Potash (60% K2O)	cwt	54.30				4.48	58.78	58.78
Bed/Disk w/roller	12R-30/40		2.49	2.37	2.13	0.58	7.57	10.50
App by Air (5 gal)	appl	8.11				0.45	8.56	8.56
Glyphosate 3lbs a.e.	oz	8.00				0.44	8.44	8.44
Clarity	pt	7.15				0.39	7.54	7.54
Select Max	pt	15.01				0.83	15.84	15.84
Surfactant	pt	0.99				0.05	1.04	1.04
Plant & Pre-Folding	16R-30		2.02	3.86	2.19	0.39	8.46	11.92
Corn Seed BtRR	thous	122.74				5.91	128.65	128.65
Fert 10-34-0	gal	18.64				0.90	19.54	19.54
Zinc Plus	pt	7.00				0.34	7.34	7.34
Custom Apply Fert	acre	7.50				0.31	7.81	7.81
UAN + Sulfur (28%)	gal	111.31				4.59	115.90	115.90
Spray (Broadcast)	60'		1.12	0.52	1.10	0.11	2.85	2.48
Atrazine 4L	pt	10.84				0.45	11.29	11.29
Halex GT	pt	34.67				1.43	36.10	36.10
Surfactant	pt	0.99				0.04	1.03	1.03
App by Air (3 gal)	appl	1.37				0.05	1.42	1.42
Bifenthrin	oz	0.72				0.02	0.74	0.74
Corn Consultant	acre	6.00				0.21	6.21	6.21
Fert Appl (Liquid)	12R-30		3.13	2.27	3.04	0.29	8.73	7.99
UAN (32%)	gal	120.00				4.13	124.13	124.13
App Fert by Air	cwt	8.00				0.22	8.22	8.22
Urea, Solid (46% N)	cwt	31.69				0.87	32.56	32.56
App by Air (5 gal)	appl	8.11				0.17	8.28	8.28
Trivapro	oz	20.28				0.42	20.70	20.70
Header - Corn	8R-30		5.99	9.32	4.35	0.14	19.80	35.41
Grain Cart Corn	700 bu		1.01	0.61	0.86	0.02	2.50	2.72
Haul Corn	bu	50.60				0.35	50.95	50.95
Stalk Shredder Flex	20'		3.29	3.19	2.81	0.06	9.35	7.96
1/4-mi. Pivot Irr.	acre	38.53	21.95	1.84		1.85	64.17	99.50
TOTALS		777.45	59.26	44.84	20.14	0.00	41.02	942.71
								182.48
								1125.19

Note: Cost of production estimates are based on 2023 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, 2024

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	1124.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	1.37	0.00	8.11	0.00	0.00
FERTILIZERS	131.11	0.00	0.00	0.00	0.00	25.64	111.31	120.00	31.69	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	0.72	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	122.74	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	3.95	0.00	0.00	0.00	0.00	2.19	2.44	3.19	0.20	0.15	0.00	8.02
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	4.17	0.00	0.00	0.00	0.00	2.02	1.12	14.69	15.41	11.56	0.00	10.29
REPAIR & MAINTENANCE	3.12	0.00	0.00	0.00	0.00	3.86	0.52	20.74	1.99	1.49	0.00	13.12
INTEREST ON OP. CAP.	15.59	0.00	0.00	0.00	2.16	7.54	6.98	5.74	1.58	0.86	0.00	0.57
TOTAL DIRECT EXPENSES	204.56	0.00	0.00	0.00	41.42	163.99	176.37	172.45	58.87	42.45	0.00	82.60
NET INCOME	-204.56	0.00	0.00	0.00	-41.42	-163.99	-176.37	-172.45	-58.87	-42.45	0.00	1041.60
NET INCOME TO DATE	-204.56	-204.56	-204.56	-204.56	-245.98	-409.97	-586.34	-758.79	-817.66	-860.11	-860.11	181.49

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT		
													PRODUCT	PRICE	
Corn		3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38			
PERCENT YIELD UNIT ----- dollars -----															
50	110.00	bu	-495 -678	-467 -650	-439 -621	-411 -593	-383 -565	-355 -537	-327 -509	-298 -481	-270 -453	-242 -425	-214 -397		
60	132.00	bu	-416 -598	-382 -565	-348 -531	-315 -497	-281 -464	-247 -430	-214 -396	-180 -362	-146 -329	-112 -295	-79 -261		
70	154.00	bu	-337 -519	-297 -480	-258 -441	-219 -401	-179 -362	-140 -322	-101 -283	-61 -244	-22 -204	16 -165	56 -126		
80	176.00	bu	-258 -440	-213 -395	-168 -350	-123 -305	-78 -260	-33 -215	11 -170	56 -125	101 -80	146 -35	191 9		
90	198.00	bu	-178 -361	-128 -310	-77 -260	-27 -209	23 -158	74 -108	124 -57	175 -7	225 43	276 94	327 144		
100	220.00	bu	-99 -282	-43 -225	12 -169	69 -113	125 -57	181 -0	237 55	293 111	350 167	406 223	462 280		
110	242.00	bu	-20 -202	41 -140	103 -79	165 -17	226 44	288 106	350 168	412 229	474 291	536 353	597 415		
120	264.00	bu	58 -123	126 -56	193 11	261 78	328 146	396 213	463 281	531 348	598 416	665 483	733 550		
130	286.00	bu	138 -44	211 28	284 101	357 174	430 247	503 320	576 394	649 467	722 540	795 613	868 686		
140	308.00	bu	217 34	296 113	374 192	453 270	532 349	610 428	689 507	768 585	846 664	925 743	1004 821		
150	330.00	bu	296 114	380 198	465 282	549 367	633 451	718 535	802 619	886 704	971 788	1055 872	1139 957		

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 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	2.0000	16.22	_____
App by Air (3 gal)	appl	6.87	1.2000	8.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	39.25	1.9570	76.81	_____
Potash (60% K2O)	cwt	36.20	1.5000	54.30	_____
UAN + Sulfur (28%)	gal	3.46	32.1712	111.31	_____
UAN (32%)	gal	4.00	30.0000	120.00	_____
Urea, Solid (46% N)	cwt	31.69	1.0000	31.69	_____
FUNGICIDES					
Trivapro	oz	1.48	13.7000	20.28	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.25	32.0000	8.00	_____
Clarity	pt	14.29	0.5000	7.15	_____
Select Max	pt	15.01	1.0000	15.01	_____
Atrazine 4L	pt	2.71	4.0000	10.84	_____
Halex GT	pt	9.63	3.6000	34.67	_____
INSECTICIDES					
Bifenthrin	oz	0.56	1.2800	0.72	_____
Intrepid 2F	oz	1.99	4.0000	7.96	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed RR2	thous	4.26	34.0000	144.84	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
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	65.00	0.6660	43.29	_____
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	17.94	0.6423	11.52	_____
Harvesters	hour	17.94	0.1009	1.81	_____
Self-Propelled	hour	17.94	0.0176	0.32	_____
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	17.94	0.6141	11.02		
DIESEL FUEL					
Tractors	gal	3.44	7.2557	24.97	_____
Harvesters	gal	3.44	1.3770	4.74	_____
Self-Propelled	gal	3.44	0.1586	0.55	_____
Roll-Out Pipe Irr.	gal	3.44	10.5901	36.44	_____
REPAIR & MAINTENANCE					
Implements	acre	13.79	1.0000	13.79	_____
Tractors	acre	5.99	1.0000	5.99	_____
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.					

TOTAL DIRECT EXPENSES				967.14	_____
FIXED EXPENSES					
Implements	acre	31.95	1.0000	31.95	_____
Tractors	acre	46.33	1.0000	46.33	_____
Harvesters	acre	23.31	1.0000	23.31	_____
Self-Propelled	acre	1.63	1.0000	1.63	_____
Roll-Out Pipe Irr.	acre	74.47	1.0000	74.47	_____
TOTAL FIXED EXPENSES				-----	
TOTAL SPECIFIED EXPENSES				177.69	_____

				1144.83	_____

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.11	220.0000	1124.20	_____
TOTAL INCOME				1124.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.46	1.0000	24.46	_____
FERTILIZERS	acre	394.11	1.0000	394.11	_____
FUNGICIDES	acre	20.28	1.0000	20.28	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	8.68	1.0000	8.68	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	144.84	1.0000	144.84	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.7609	13.65	_____
UNALLOCATED LABOR	hour	17.94	0.6141	11.02	_____
DIESEL FUEL	gal	3.44	19.3816	66.70	_____
REPAIR & MAINTENANCE	acre	32.01	1.0000	32.01	_____
INTEREST ON OP. CAP.	acre	42.43	1.0000	42.43	_____
TOTAL DIRECT EXPENSES				967.14	_____
RETURNS ABOVE DIRECT EXPENSES				157.06	_____
TOTAL FIXED EXPENSES				177.69	_____
TOTAL SPECIFIED EXPENSES				1144.83	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-20.63	_____

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	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				
Surfactant	pt						0.3000				
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				
Surfactant	pt						0.3000				
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				
App by Air (5 gal)	appl				1.00	Jul	1.0000				
Trivapro	oz						13.7000				
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 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Subsoiler	3 shank		4.07	1.18	3.48		0.72	9.45
Disk Harrow	42'		1.86	2.33	1.60		0.48	6.27
Soil Test	acre	3.33					0.27	3.60
Lime (Spread)	ton	43.29					3.57	46.86
Spin Spreader	5 ton		1.68	0.75	1.82		0.35	4.60
Phosphorus (46% P2O5)	cwt	76.81					6.34	83.15
Potash (60% K2O)	cwt	54.30					4.48	58.78
Bed/Disk w/roller	12R-30/40		2.49	2.37	2.13		0.58	7.57
App by Air (5 gal)	appl	8.11					0.45	8.56
Glyphosate 3lbs a.e	oz	8.00					0.44	8.44
Clarity	pt	7.15					0.39	7.54
Select Max	pt	15.01					0.83	15.84
Surfactant	pt	0.99					0.05	1.04
Row Cond./Roll-Fold.	40'		1.87	1.12	1.60		0.22	4.81
Plant - Folding	12R-38		1.98	2.28	2.14		0.31	6.71
Corn Seed RR2	thous	144.84					6.97	151.81
Custom Apply Fert	acre	7.50					0.31	7.81
UAN + Sulfur (28%)	gal	111.31					4.59	115.90
Sprayer 600-750gal	60' 175hp		0.55	0.20	0.68		0.06	1.49
Atrazine 4L	pt	10.84					0.45	11.29
Halex GT	pt	34.67					1.43	36.10
Surfactant	pt	0.99					0.04	1.03
Corn Consultant	acre	6.00					0.21	6.21
App by Air (3 gal)	appl	1.37					0.05	1.42
Bifenthrin	oz	0.72					0.02	0.74
Fert Appl (Liquid)	12R-38		2.06	1.57	1.99		0.19	5.81
UAN (32%)	gal	120.00					4.13	124.13
Cultivate	12R-38		2.16	1.38	1.85		0.19	5.58
App Fert by Air	cwt	8.00					0.22	8.22
Urea, Solid (46% N)	cwt	31.69					0.87	32.56
App by Air (3 gal)	appl	6.87					0.19	7.06
Intrepid 2F	oz	7.96					0.22	8.18
App by Air (5 gal)	appl	8.11					0.17	8.28
Trivapro	oz	20.28					0.42	20.70
Header - Corn	8R-38		4.74	7.07	3.44		0.10	15.35
Grain Cart Corn	700 bu		1.01	0.61	0.86		0.02	2.50
Haul Corn	bu	50.60					0.35	50.95
Stalk Shredder Flex	20'		3.29	3.19	2.81		0.06	9.35
Roll-Out Pipe Irr.	acre	7.92	38.94	7.96	4.94		1.69	61.45
TOTALS		796.66	66.70	32.01	29.34	0.00	42.43	967.14
								177.69
								1144.83

Note: Cost of production estimates are based on 2023 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, 2024

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	1124.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	1.37	6.87	8.11	0.00	0.00
FERTILIZERS	131.11	0.00	0.00	0.00	0.00	0.00	111.31	120.00	31.69	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	0.72	7.96	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	144.84	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	9.71	0.00	0.00	0.00	0.00	3.74	0.68	4.07	3.12	0.23	0.68	7.11
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	11.38	0.00	0.00	0.00	0.00	3.85	0.55	4.22	27.99	9.11	0.56	9.04
REPAIR & MAINTENANCE	7.02	0.00	0.00	0.00	0.00	3.40	0.20	2.95	6.33	1.05	0.19	10.87
INTEREST ON OP. CAP.	16.98	0.00	0.00	0.00	2.16	7.50	6.88	4.80	2.76	0.80	0.02	0.53
TOTAL DIRECT EXPENSES	222.82	0.00	0.00	0.00	41.42	163.33	173.62	144.13	102.64	39.58	1.45	78.15
NET INCOME	-222.82	0.00	0.00	0.00	-41.42	-163.33	-173.62	-144.13	-102.64	-39.58	-1.45	1046.05
NET INCOME TO DATE	-222.82	-222.82	-222.82	-222.82	-264.24	-427.57	-601.19	-745.32	-847.96	-887.54	-888.99	157.06

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-520 -697	-491 -669	-463 -641	-435 -613	-407 -585	-379 -557	-351 -529	-323 -501	-295 -472	-267 -444	-239 -416
60	132.00	bu	-440 -618	-407 -584	-373 -551	-339 -517	-305 -483	-272 -449	-238 -416	-204 -382	-171 -348	-137 -315	-103 -281
70	154.00	bu	-361 -539	-322 -499	-282 -460	-243 -421	-204 -381	-164 -342	-125 -303	-86 -263	-46 -224	-7 -185	31 -145
80	176.00	bu	-282 -460	-237 -415	-192 -370	-147 -325	-102 -280	-57 -235	-12 -190	32 -145	77 -100	122 -55	167 -10
90	198.00	bu	-203 -380	-152 -330	-102 -279	-51 -229	-0 -178	49 -127	100 -77	150 -26	201 23	252 74	302 124
100	220.00	bu	-123 -301	-67 -245	-11 -189	44 -133	100 -76	157 -20	213 35	269 91	325 148	381 204	438 260
110	242.00	bu	-44 -222	17 -160	78 -98	140 -36	202 24	264 86	326 148	388 210	449 272	511 334	573 395
120	264.00	bu	34 -143	101 -75	169 -8	236 59	304 126	371 194	439 261	506 328	574 396	641 463	708 531
130	286.00	bu	113 -64	186 9	259 82	332 155	405 228	479 301	552 374	625 447	698 520	771 593	844 666
140	308.00	bu	192 15	271 93	350 172	428 251	507 329	586 408	665 487	743 566	822 644	901 723	979 802
150	330.00	bu	272 94	356 178	440 263	525 347	609 431	693 515	778 600	862 684	946 768	1030 853	1115 937

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 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	8.11	1.0000	8.11	_____		
App by Air (3 gal)	appl	6.87	1.2000	8.24	_____		
FERTILIZERS							
Phosphorus (46% P2O5)	cwt	39.25	1.6300	63.98	_____		
Potash (60% K2O)	cwt	36.20	1.2500	45.25	_____		
UAN + Sulfur (28%)	gal	3.46	19.3063	66.80	_____		
UAN (32%)	gal	4.00	36.7200	146.88	_____		
HERBICIDES							
Glyphosate 3lbs a.e.	oz	0.25	32.0000	8.00	_____		
Clarity	pt	14.29	0.5000	7.15	_____		
Select Max	pt	15.01	1.0000	15.01	_____		
Atrazine 4L	pt	2.71	4.0000	10.84	_____		
Halex GT	pt	9.63	3.6000	34.67	_____		
INSECTICIDES							
Bifenthrin	oz	0.56	1.2804	0.72	_____		
Intrepid 2F	oz	1.99	4.0000	7.96	_____		
SEED/PLANTS							
Corn Seed RR2	thous	4.26	28.0000	119.28	_____		
ADJUVANTS							
Surfactant	pt	3.30	0.6000	1.98	_____		
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	65.00	0.6660	43.29	_____		
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	17.94	0.4903	8.80	_____		
Harvesters	hour	17.94	0.1009	1.81	_____		
Self-Propelled	hour	17.94	0.0176	0.32	_____		
HAND LABOR							
Implements	hour	9.06	0.1175	1.06	_____		
Self-Propelled	hour	9.06	0.0088	0.08	_____		
UNALLOCATED LABOR							
hour		17.93	0.5480	9.83	_____		
DIESEL FUEL							
Tractors	gal	3.44	5.6788	19.55	_____		
Harvesters	gal	3.44	1.3770	4.74	_____		
Self-Propelled	gal	3.44	0.1586	0.55	_____		
REPAIR & MAINTENANCE							
Implements	acre	12.06	1.0000	12.06	_____		
Tractors	acre	4.74	1.0000	4.74	_____		
Harvesters	acre	4.87	1.0000	4.87	_____		
Self-Propelled	acre	0.20	1.0000	0.20	_____		
INTEREST ON OP. CAP.	acre	34.68	1.0000	34.68	_____		
<hr/>							
TOTAL DIRECT EXPENSES				747.38	_____		
FIXED EXPENSES							
Implements	acre	25.88	1.0000	25.88	_____		
Tractors	acre	36.61	1.0000	36.61	_____		
Harvesters	acre	23.31	1.0000	23.31	_____		
Self-Propelled	acre	1.63	1.0000	1.63	_____		
<hr/>							
TOTAL FIXED EXPENSES				87.43	_____		
<hr/>							
TOTAL SPECIFIED EXPENSES				834.81	_____		

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	170.0000	868.70	_____
TOTAL INCOME				868.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	16.35	1.0000	16.35	_____
FERTILIZERS	acre	322.91	1.0000	322.91	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	8.68	1.0000	8.68	_____
SEED/PLANTS	acre	119.28	1.0000	119.28	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.6089	10.93	_____
UNALLOCATED LABOR	hour	17.93	0.5480	9.83	_____
DIESEL FUEL	gal	3.44	7.2145	24.84	_____
REPAIR & MAINTENANCE	acre	21.87	1.0000	21.87	_____
INTEREST ON OP. CAP.	acre	34.68	1.0000	34.68	_____
TOTAL DIRECT EXPENSES				747.38	_____
RETURNS ABOVE DIRECT EXPENSES				121.32	_____
TOTAL FIXED EXPENSES				87.43	_____
TOTAL SPECIFIED EXPENSES				834.81	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				33.89	_____

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	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					
Glyphosate 3lbs a.e	oz						1.0000				
Clarity	pt						32.0000				
Select Max	pt						0.5000				
Surfactant	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					
UAN + Sulfur (28%)	gal						1.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr						
Atrazine 4L	pt						19.3063				
Halex GT	pt										
Surfactant	pt										
Corn Consultant	acre				1.00	May					
App by Air (3 gal)	appl				0.20	May					
Bifenthrin	oz										
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May			0.05	0.05	0.07	0.04
UAN (32%)	gal										
App by Air (3 gal)	appl					Jun					
Intrepid 2F	oz										
Header - Corn	8R-38	265 hp	0.100	1.00	Sep						
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep						
Haul Corn	bu										
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep						
TOTALS											
								0.60	0.59	0.73	0.54

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST			
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		4.07	1.18	3.48		0.72	9.45	8.27	17.72	
Disk Harrow	42'			1.86	2.33	1.60		0.48	6.27	8.47	14.74
Soil Test	acre	3.33					0.27	3.60		3.60	
Lime (Spread)	ton	43.29					3.57	46.86		46.86	
Spin Spreader	5 ton			1.68	0.75	1.82		0.35	4.60	4.00	8.60
Phosphorus (46% P2O5)	cwt	63.98					5.28	69.26		69.26	
Potash (60% K2O)	cwt	45.25					3.73	48.98		48.98	
Bed/Disk (Hipper)	12R-38			1.97	1.89	1.69		0.46	6.01	8.33	14.34
App by Air (5 gal)	appl	8.11					0.45	8.56		8.56	
Glyphosate 3lbs a.e	oz	8.00					0.44	8.44		8.44	
Clarity	pt	7.15					0.39	7.54		7.54	
Select Max	pt	15.01					0.83	15.84		15.84	
Surfactant	pt	0.99					0.05	1.04		1.04	
Row Cond Folding	38'			1.63	0.80	1.39		0.18	4.00	5.22	9.22
Plant - Folding	12R-38			1.98	2.28	2.14		0.31	6.71	8.04	14.75
Corn Seed RR2	thous	119.28					5.74	125.02		125.02	
Custom Apply Fert	acre	7.50					0.31	7.81		7.81	
UAN + Sulfur (28%)	gal	66.80					2.76	69.56		69.56	
Sprayer 600-750gal	60' 175hp			0.55	0.20	0.68		0.06	1.49	1.63	3.12
Atrazine 4L	pt	10.84					0.45	11.29		11.29	
Halex GT	pt	34.67					1.43	36.10		36.10	
Surfactant	pt	0.99					0.04	1.03		1.03	
Corn Consultant	acre	6.00					0.21	6.21		6.21	
App by Air (3 gal)	appl	1.37					0.05	1.42		1.42	
Bifenthrin	oz	0.72					0.02	0.74		0.74	
Fert Appl (Liquid)	12R-38			2.06	1.57	1.99		0.19	5.81	5.36	11.17
UAN (32%)	gal	146.88					5.05	151.93		151.93	
App by Air (3 gal)	appl	6.87					0.19	7.06		7.06	
Intrepid 2F	oz	7.96					0.22	8.18		8.18	
Header - Corn	8R-38			4.74	7.07	3.44		0.10	15.35	27.43	42.78
Grain Cart Corn	700 bu			1.01	0.61	0.86		0.02	2.50	2.72	5.22
Haul Corn	bu	39.10					0.27	39.37		39.37	
Stalk Shredder Flex	20'			3.29	3.19	2.81		0.06	9.35	7.96	17.31
TOTALS		644.09	24.84	21.87	21.90	0.00	34.68	747.38	87.43	834.81	

Note: Cost of production estimates are based on 2023 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, 2024

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	868.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	1.37	6.87	0.00	0.00	0.00
FERTILIZERS	109.23	0.00	0.00	0.00	0.00	0.00	66.80	146.88	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	0.72	7.96	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	119.28	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	8.59	0.00	0.00	0.00	0.00	3.53	0.68	1.99	0.00	0.00	0.00	7.11
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	9.58	0.00	0.00	0.00	0.00	3.61	0.55	2.06	0.00	0.00	0.00	9.04
REPAIR & MAINTENANCE	6.15	0.00	0.00	0.00	0.00	3.08	0.20	1.57	0.00	0.00	0.00	10.87
INTEREST ON OP. CAP.	14.86	0.00	0.00	0.00	2.16	6.23	5.05	5.52	0.41	0.00	0.00	0.45
TOTAL DIRECT EXPENSES	195.03	0.00	0.00	0.00	41.42	135.73	127.28	166.11	15.24	0.00	0.00	66.57
NET INCOME	-195.03	0.00	0.00	0.00	-41.42	-135.73	-127.28	-166.11	-15.24	0.00	0.00	802.13
NET INCOME TO DATE	-195.03	-195.03	-195.03	-195.03	-236.45	-372.18	-499.46	-665.57	-680.81	-680.81	-680.81	121.32

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-401 -489	-380 -467	-358 -445	-336 -424	-315 -402	-293 -380	-271 -359	-249 -337	-228 -315	-206 -293	-184 -272
60	102.00	bu	-340 -428	-314 -402	-288 -376	-262 -349	-236 -323	-210 -297	-184 -271	-158 -245	-132 -219	-106 -193	-80 -167
70	119.00	bu	-279 -366	-249 -336	-218 -306	-188 -275	-157 -245	-127 -214	-97 -184	-66 -154	-36 -123	-5 -93	24 -62
80	136.00	bu	-218 -305	-183 -270	-148 -236	-114 -201	-79 -166	-44 -131	-9 -97	24 -62	59 -27	94 7	129 41
90	153.00	bu	-157 -244	-117 -205	-78 -166	-39 -127	-0 -88	38 -49	77 -9	116 29	155 68	194 107	233 146
100	170.00	bu	-95 -183	-52 -139	-8 -96	34 -52	77 -9	121 33	164 77	208 120	251 164	295 207	338 251
110	187.00	bu	-34 -122	13 -74	60 -26	108 21	156 69	204 116	252 164	299 212	347 260	395 307	443 355
120	204.00	bu	26 -60	78 -8	130 43	182 95	235 147	287 199	339 251	391 304	443 356	495 408	547 460
130	221.00	bu	87 0	144 56	200 113	257 169	313 226	370 282	426 339	483 395	539 452	595 508	652 565
140	238.00	bu	149 61	209 122	270 183	331 244	392 304	453 365	513 426	574 487	635 548	696 608	757 669
150	255.00	bu	210 122	275 187	340 253	405 318	470 383	535 448	601 513	666 578	731 644	796 709	861 774

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 2023 input prices.

Table 6.A Estimated costs per acre
 Corn, conventional tillage, RR2, 12-row 38",
 220 bu yld goal, -pivot irrigated, 7.5 ac-in., Delta Area,
 Mississippi, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	dollars
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	2.0000	16.22	
App by Air (3 gal)	appl	6.87	1.2000	8.24	
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	39.25	1.9570	76.81	
Potash (60% K2O)	cwt	36.20	1.5000	54.30	
UAN + Sulfur (28%)	gal	3.46	32.1712	111.31	
UAN (32%)	gal	4.00	30.0000	120.00	
Urea, Solid (46% N)	cwt	31.69	1.0000	31.69	
FUNGICIDES					
Trivapro	oz	1.48	13.7000	20.28	
HERBICIDES					
Glyphosate 3lbs a.e.	oz	0.25	32.0000	8.00	
Clarity	pt	14.29	0.5000	7.15	
Select Max	pt	15.01	1.0000	15.01	
Atrazine 4L	pt	2.71	4.0000	10.84	
Halex GT	pt	9.63	3.6000	34.67	
INSECTICIDES					
Bifenthrin	oz	0.56	1.2800	0.72	
Intrepid 2F	oz	1.99	4.0000	7.96	
SEED/PLANTS					
Corn Seed RR2	thous	4.26	34.0000	144.84	
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	
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	65.00	0.6660	43.29	
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	17.94	0.5637	10.11	
Harvesters	hour	17.94	0.1009	1.81	
Self-Propelled	hour	17.94	0.0176	0.32	
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	17.94	0.6141	11.02		
DIESEL FUEL					
Tractors	gal	3.44	6.5294	22.47	
Harvesters	gal	3.44	1.3770	4.74	
Self-Propelled	gal	3.44	0.1586	0.55	
1/4-mi. Pivot Irr.	gal	3.44	11.2011	38.53	
REPAIR & MAINTENANCE					
Implements	acre	13.54	1.0000	13.54	
Tractors	acre	5.44	1.0000	5.44	
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	42.59	1.0000	42.59	
TOTAL DIRECT EXPENSES				969.86	
FIXED EXPENSES					
Implements	acre	29.93	1.0000	29.93	
Tractors	acre	42.10	1.0000	42.10	
Harvesters	acre	23.31	1.0000	23.31	
Self-Propelled	acre	1.63	1.0000	1.63	
1/4-mi. Pivot Irr.	acre	99.50	1.0000	99.50	
TOTAL FIXED EXPENSES				196.47	
TOTAL SPECIFIED EXPENSES				1166.33	

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	220.0000	1124.20	_____

TOTAL INCOME				1124.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.46	1.0000	24.46	_____
FERTILIZERS	acre	394.11	1.0000	394.11	_____
FUNGICIDES	acre	20.28	1.0000	20.28	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	8.68	1.0000	8.68	_____
SEED/PLANTS	acre	144.84	1.0000	144.84	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.6823	12.24	_____
UNALLOCATED LABOR	hour	17.94	0.6141	11.02	_____
DIESEL FUEL	gal	3.44	19.2663	66.29	_____
REPAIR & MAINTENANCE	acre	46.00	1.0000	46.00	_____
INTEREST ON OP. CAP.	acre	42.59	1.0000	42.59	_____

TOTAL DIRECT EXPENSES				969.86	_____
RETURNS ABOVE DIRECT EXPENSES				154.34	_____
TOTAL FIXED EXPENSES				196.47	_____

TOTAL SPECIFIED EXPENSES				1166.33	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-42.13	_____

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	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				
Surfactant	pt						0.3000				
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				
Surfactant	pt						0.3000				
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				
App by Air (5 gal)	appl				1.00	Jul	1.0000				
Trivapro	oz						13.7000				
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						1.0000				
TOTALS							0.68	0.66	1.01	0.61	

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Subsoiler	3 shank		4.07	1.18	3.48		0.72	9.45
Disk Harrow	42'		1.86	2.33	1.60		0.48	6.27
Soil Test	acre	3.33					0.27	3.60
Lime (Spread)	ton	43.29					3.57	46.86
Spin Spreader	5 ton		1.68	0.75	1.82		0.35	4.60
Phosphorus (46% P2O5)	cwt	76.81					6.34	83.15
Potash (60% K2O)	cwt	54.30					4.48	58.78
Bed/Disk w/roller	12R-30/40		2.49	2.37	2.13		0.58	7.57
App by Air (5 gal)	appl	8.11					0.45	8.56
Glyphosate 3lbs a.e	oz	8.00					0.44	8.44
Clarity	pt	7.15					0.39	7.54
Select Max	pt	15.01					0.83	15.84
Surfactant	pt	0.99					0.05	1.04
Row Cond./Roll-Fold.	40'		1.87	1.12	1.60		0.22	4.81
Plant - Folding	12R-38		1.98	2.28	2.14		0.31	6.71
Corn Seed RR2	thous	144.84					6.97	151.81
Custom Apply Fert	acre	7.50					0.31	7.81
UAN + Sulfur (28%)	gal	111.31					4.59	115.90
Sprayer 600-750gal	60' 175hp		0.55	0.20	0.68		0.06	1.49
Atrazine 4L	pt	10.84					0.45	11.29
Halex GT	pt	34.67					1.43	36.10
Surfactant	pt	0.99					0.04	1.03
Corn Consultant	acre	6.00					0.21	6.21
App by Air (3 gal)	appl	1.37					0.05	1.42
Bifenthrin	oz	0.72					0.02	0.74
Fert Appl (Liquid)	12R-38		2.06	1.57	1.99		0.19	5.81
UAN (32%)	gal	120.00					4.13	124.13
Cultivate	12R-38		2.16	1.38	1.85		0.19	5.58
App Fert by Air	cwt	8.00					0.22	8.22
Urea, Solid (46% N)	cwt	31.69					0.87	32.56
App by Air (3 gal)	appl	6.87					0.19	7.06
Intrepid 2F	oz	7.96					0.22	8.18
App by Air (5 gal)	appl	8.11					0.17	8.28
Trivapro	oz	20.28					0.42	20.70
Header - Corn	8R-38		4.74	7.07	3.44		0.10	15.35
Grain Cart Corn	700 bu		1.01	0.61	0.86		0.02	2.50
Haul Corn	bu	50.60					0.35	50.95
Stalk Shredder Flex	20'		3.29	3.19	2.81		0.06	9.35
1/4-mi. Pivot Irr.	acre	38.53	21.95	1.84			1.85	64.17
TOTALS		788.74	66.29	46.00	26.24	0.00	42.59	969.86
								196.47
								1166.33

Note: Cost of production estimates are based on 2023 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, 2024

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	1124.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	1.37	6.87	8.11	0.00	0.00
FERTILIZERS	131.11	0.00	0.00	0.00	0.00	0.00	111.31	120.00	31.69	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	0.72	7.96	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	144.84	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	9.03	0.00	0.00	0.00	0.00	3.74	2.02	3.99	0.20	0.15	0.00	7.11
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	10.10	0.00	0.00	0.00	0.00	3.85	0.55	15.78	15.41	11.56	0.00	9.04
REPAIR & MAINTENANCE	6.63	0.00	0.00	0.00	0.00	3.40	0.20	21.42	1.99	1.49	0.00	10.87
INTEREST ON OP. CAP.	16.79	0.00	0.00	0.00	2.16	7.50	6.93	5.83	1.99	0.86	0.00	0.53
TOTAL DIRECT EXPENSES	220.28	0.00	0.00	0.00	41.42	163.33	175.01	175.11	74.11	42.45	0.00	78.15
NET INCOME	-220.28	0.00	0.00	0.00	-41.42	-163.33	-175.01	-175.11	-74.11	-42.45	0.00	1046.05
NET INCOME TO DATE	-220.28	-220.28	-220.28	-220.28	-261.70	-425.03	-600.04	-775.15	-849.26	-891.71	-891.71	154.34

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Corn			3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-522 -719	-494 -691	-466 -663	-438 -634	-410 -606	-382 -578	-354 -550	-326 -522	-297 -494	-269 -466	-241 -438
60	132.00	bu	-443 -640	-409 -606	-376 -572	-342 -538	-308 -505	-274 -471	-241 -437	-207 -403	-173 -370	-140 -336	-106 -302
70	154.00	bu	-364 -560	-325 -521	-285 -482	-246 -442	-206 -403	-167 -364	-128 -324	-88 -285	-49 -246	-10 -206	29 -167
80	176.00	bu	-285 -481	-240 -436	-195 -391	-150 -346	-105 -301	-60 -256	-15 -211	29 -166	74 -121	119 -76	164 -31
90	198.00	bu	-205 -402	-155 -351	-104 -301	-54 -250	-3 -200	47 -149	97 -98	148 -48	198 2	249 52	299 103
100	220.00	bu	-126 -323	-70 -266	-14 -210	41 -154	98 -98	154 -42	210 14	266 70	322 126	379 182	435 238
110	242.00	bu	-47 -243	14 -182	76 -120	138 -58	199 3	261 65	323 127	385 188	447 250	508 312	570 374
120	264.00	bu	31 -164	99 -97	166 -29	234 37	301 105	368 172	436 239	503 307	571 374	638 442	706 509
130	286.00	bu	110 -85	184 -12	257 60	330 133	403 206	476 279	549 352	622 425	695 499	768 572	841 645
140	308.00	bu	190 -6	268 72	347 151	426 229	504 308	583 387	662 465	741 544	819 623	898 701	977 780
150	330.00	bu	269 72	353 157	438 241	522 325	606 410	690 494	775 578	859 663	943 747	1028 831	1112 916

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 2023 input prices.

Table 7.A Estimated costs per acre
 Corn, stale seedbed, RR2, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	1.0000	8.11	_____
App by Air (3 gal)	appl	6.87	1.2000	8.24	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	39.25	1.6300	63.98	_____
Potash (60% K2O)	cwt	36.20	1.2500	45.25	_____
UAN + Sulfur (28%)	gal	3.46	56.0263	193.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.25	32.0000	8.00	_____
Clarity	pt	14.29	0.5000	7.15	_____
Select Max	pt	15.01	1.0000	15.01	_____
Atrazine 4L	pt	2.71	4.0000	10.84	_____
Halex GT	pt	9.63	3.6000	34.67	_____
INSECTICIDES					
Bifenthrin	oz	0.56	1.2804	0.72	_____
Intrepid 2F	oz	1.99	4.0000	7.96	_____
SEED/PLANTS					
Corn Seed RR2	thous	4.26	28.0000	119.28	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
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	65.00	0.6660	43.29	_____
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	17.94	0.4295	7.71	_____
Harvesters	hour	17.94	0.1277	2.29	_____
Self-Propelled	hour	17.94	0.0176	0.32	_____
HAND LABOR					
implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
DIESEL FUEL					
Tractors	gal	3.44	4.9741	17.12	_____
Harvesters	gal	3.44	1.7419	5.99	_____
Self-Propelled	gal	3.44	0.1586	0.55	_____
REPAIR & MAINTENANCE					
implements	acre	12.81	1.0000	12.81	_____
Tractors	acre	4.15	1.0000	4.15	_____
Harvesters	acre	6.16	1.0000	6.16	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	33.59	1.0000	33.59	_____
TOTAL DIRECT EXPENSES				725.81	_____
FIXED EXPENSES					
implements	acre	25.65	1.0000	25.65	_____
Tractors	acre	32.07	1.0000	32.07	_____
Harvesters	acre	29.49	1.0000	29.49	_____
Self-Propelled	acre	1.63	1.0000	1.63	_____
TOTAL FIXED EXPENSES				88.84	_____
TOTAL SPECIFIED EXPENSES				814.65	_____

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	170.0000	868.70	_____
TOTAL INCOME				868.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	16.35	1.0000	16.35	_____
FERTILIZERS	acre	303.08	1.0000	303.08	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	8.68	1.0000	8.68	_____
SEED/PLANTS	acre	119.28	1.0000	119.28	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.5748	10.32	_____
UNALLOCATED LABOR	hour	17.91	0.5173	9.27	_____
DIESEL FUEL	gal	3.44	6.8748	23.66	_____
REPAIR & MAINTENANCE	acre	23.32	1.0000	23.32	_____
INTEREST ON OP. CAP.	acre	33.59	1.0000	33.59	_____
TOTAL DIRECT EXPENSES				725.81	_____
RETURNS ABOVE DIRECT EXPENSES				142.89	_____
TOTAL FIXED EXPENSES				88.84	_____
TOTAL SPECIFIED EXPENSES				814.65	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				54.05	_____

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	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				
Surfactant	pt						0.3000				
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				
Surfactant	pt						0.3000				
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 2023 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, 2024

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				0.27	3.60	3.60
Lime (Spread)	ton	43.29				3.57	46.86	46.86
Spin Spreader	5 ton		1.68	0.75	1.82	0.35	4.60	4.00
Phosphorus (46% P2O5)	cwt	63.98				5.28	69.26	69.26
Potash (60% K2O)	cwt	45.25				3.73	48.98	48.98
Disk Heavy	28'		3.02	2.30	2.58	0.65	8.55	9.80
Bed/Disk w/roller	12R-30/40		2.49	2.37	2.13	0.58	7.57	10.50
App by Air (5 gal)	appl	8.11				0.45	8.56	8.56
Glyphosate 3lbs a.e.	oz	8.00				0.44	8.44	8.44
Clarity	pt	7.15				0.39	7.54	7.54
Select Max	pt	15.01				0.83	15.84	15.84
Surfactant	pt	0.99				0.05	1.04	1.04
Plant - Rigid	12R-30		2.50	2.44	2.71	0.37	8.02	9.12
Corn Seed RR2	thous	119.28				5.74	125.02	125.02
Custom Apply Fert	acre	7.50				0.31	7.81	7.81
UAN + Sulfur (28%)	gal	66.80				2.76	69.56	69.56
Sprayer 600-750gal	60' 175hp		0.55	0.20	0.68	0.06	1.49	1.63
Atrazine 4L	pt	10.84				0.45	11.29	11.29
Halex GT	pt	34.67				1.43	36.10	36.10
Surfactant	pt	0.99				0.04	1.03	1.03
Fert Appl (Liquid)	12R-30		3.13	2.27	3.04	0.29	8.73	7.99
UAN + Sulfur (28%)	gal	127.05				4.37	131.42	131.42
Corn Consultant	acre	6.00				0.21	6.21	6.21
App by Air (3 gal)	appl	1.37				0.05	1.42	1.42
Bifenthrin	oz	0.72				0.02	0.74	0.74
App by Air (3 gal)	appl	6.87				0.19	7.06	7.06
Intrepid 2F	oz	7.96				0.22	8.18	8.18
Header - Corn	8R-30		5.99	9.32	4.35	0.14	19.80	35.41
Grain Cart Corn	500 bu		1.01	0.48	0.86	0.02	2.37	2.43
Haul Corn	bu	39.10				0.27	39.37	39.37
Stalk Shredder Flex	20'		3.29	3.19	2.81	0.06	9.35	7.96
TOTALS		624.26	23.66	23.32	20.98	0.00	33.59	725.81
								88.84
								814.65

Note: Cost of production estimates are based on 2023 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, 2024

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	868.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	1.37	6.87	0.00	0.00	0.00
FERTILIZERS	109.23	0.00	0.00	0.00	0.00	0.00	66.80	127.05	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	0.72	7.96	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	119.28	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	6.53	0.00	0.00	0.00	0.00	2.71	0.68	3.04	0.00	0.00	0.00	8.02
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	7.19	0.00	0.00	0.00	0.00	2.50	0.55	3.13	0.00	0.00	0.00	10.29
REPAIR & MAINTENANCE	5.42	0.00	0.00	0.00	0.00	2.44	0.20	2.27	0.00	0.00	0.00	12.99
INTEREST ON OP. CAP.	14.43	0.00	0.00	0.00	2.16	6.11	5.05	4.94	0.41	0.00	0.00	0.49
TOTAL DIRECT EXPENSES	189.42	0.00	0.00	0.00	41.42	133.04	127.28	148.52	15.24	0.00	0.00	70.89
NET INCOME	-189.42	0.00	0.00	0.00	-41.42	-133.04	-127.28	-148.52	-15.24	0.00	0.00	797.81
NET INCOME TO DATE	-189.42	-189.42	-189.42	-189.42	-230.84	-363.88	-491.16	-639.68	-654.92	-654.92	-654.92	142.89

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT		
													PRODUCT	PRICE	
Corn		3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38			
PERCENT YIELD UNIT dollars															
50	85.00	bu	-380 -469	-358 -447	-336 -425	-315 -404	-293 -382	-271 -360	-250 -338	-228 -317	-206 -295	-184 -273	-163 -252		
60	102.00	bu	-319 -407	-293 -381	-267 -355	-240 -329	-214 -303	-188 -277	-162 -251	-136 -225	-110 -199	-84 -173	-58 -147		
70	119.00	bu	-257 -346	-227 -316	-197 -285	-166 -255	-136 -225	-105 -194	-75 -164	-45 -133	-14 -103	15 -73	46 -42		
80	136.00	bu	-196 -285	-161 -250	-127 -216	-92 -181	-57 -146	-22 -111	11 -77	46 -42	81 -7	116 27	150 61		
90	153.00	bu	-135 -224	-96 -185	-57 -146	-18 -107	20 -67	59 -28	99 10	138 49	177 88	216 127	255 166		
100	170.00	bu	-74 -163	-30 -119	12 -76	56 -32	99 10	142 54	186 97	229 140	273 184	316 227	360 271		
110	187.00	bu	-13 -101	34 -54	82 -6	130 41	178 89	225 136	273 184	321 232	369 280	416 328	464 375		
120	204.00	bu	48 -40	100 11	152 63	204 115	256 167	308 219	360 272	413 324	465 376	517 428	569 480		
130	221.00	bu	109 20	165 76	222 133	278 189	335 246	391 302	448 359	504 415	561 472	617 528	674 585		
140	238.00	bu	170 81	231 142	292 203	353 264	413 324	474 385	535 446	596 507	657 568	717 629	778 689		
150	255.00	bu	231 142	296 208	362 273	427 338	492 403	557 468	622 533	687 599	753 664	818 729	883 794		

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 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
DIRECT EXPENSES							
CUSTOM SPRAY							
App by Air (5 gal)	appl	8.11	2.0000	16.22	_____		
App by Air (3 gal)	appl	6.87	1.2000	8.24	_____		
FERTILIZERS							
Phosphorus (46% P2O5)	cwt	39.25	1.6300	63.98	_____		
Potash (60% K2O)	cwt	36.20	1.2500	45.25	_____		
UAN + Sulfur (28%)	gal	3.46	56.0263	193.85	_____		
FUNGICIDES							
Trivapro	oz	1.48	13.7000	20.28	_____		
HERBICIDES							
Glyphosate 3lbs a.e	oz	0.25	32.0000	8.00	_____		
Clarity	pt	14.29	0.5000	7.15	_____		
Select Max	pt	15.01	1.0000	15.01	_____		
Atrazine 4L	pt	2.71	4.0000	10.84	_____		
Halex GT	pt	9.63	3.6000	34.67	_____		
INSECTICIDES							
Bifenthrin	oz	0.56	1.2804	0.72	_____		
Intrepid 2F	oz	1.99	4.0000	7.96	_____		
SEED/PLANTS							
Corn Seed RR2	thous	4.26	28.0000	119.28	_____		
ADJUVANTS							
Surfactant	pt	3.30	0.6000	1.98	_____		
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	65.00	0.6660	43.29	_____		
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	17.94	0.4137	7.43	_____		
Harvesters	hour	17.94	0.1277	2.29	_____		
Self-Propelled	hour	17.94	0.0176	0.32	_____		
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	17.92	0.5032	9.02	_____			
DIESEL FUEL							
Tractors	gal	3.44	4.7921	16.50	_____		
Harvesters	gal	3.44	1.7419	5.99	_____		
Self-Propelled	gal	3.44	0.1586	0.55	_____		
1/4-mi. Pivot Irr.	gal	3.44	11.2011	38.53	_____		
REPAIR & MAINTENANCE							
Implements	acre	13.91	1.0000	13.91	_____		
Tractors	acre	4.00	1.0000	4.00	_____		
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	36.09	1.0000	36.09	_____		
<hr/>							
TOTAL DIRECT EXPENSES				830.18	_____		
FIXED EXPENSES							
Implements	acre	28.30	1.0000	28.30	_____		
Tractors	acre	30.90	1.0000	30.90	_____		
Harvesters	acre	29.49	1.0000	29.49	_____		
Self-Propelled	acre	1.63	1.0000	1.63	_____		
1/4-mi. Pivot Irr.	acre	99.50	1.0000	99.50	_____		
<hr/>							
TOTAL FIXED EXPENSES				189.82	_____		
<hr/>							
TOTAL SPECIFIED EXPENSES				1020.00	_____		

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	220.0000	1124.20	_____
TOTAL INCOME				1124.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	24.46	1.0000	24.46	_____
FERTILIZERS	acre	303.08	1.0000	303.08	_____
FUNGICIDES	acre	20.28	1.0000	20.28	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	8.68	1.0000	8.68	_____
SEED/PLANTS	acre	119.28	1.0000	119.28	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.5591	10.04	_____
UNALLOCATED LABOR	hour	17.92	0.5032	9.02	_____
DIESEL FUEL	gal	3.44	17.8938	61.57	_____
REPAIR & MAINTENANCE	acre	46.22	1.0000	46.22	_____
INTEREST ON OP. CAP.	acre	36.09	1.0000	36.09	_____
TOTAL DIRECT EXPENSES				830.18	_____
RETURNS ABOVE DIRECT EXPENSES				294.02	_____
TOTAL FIXED EXPENSES				189.82	_____
TOTAL SPECIFIED EXPENSES				1020.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				104.20	_____

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	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				
Surfactant	pt						0.3000				
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				
Surfactant	pt						0.3000				
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				
App by Air (5 gal)	appl			1.00	Jul		1.0000				
Trivapro	oz						13.7000				
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						1.0000				
TOTALS								0.55	0.54	0.90	0.50

Note: Cost of production estimates are based on 2023 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, 2024

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					0.27	3.60
Lime (Spread)	ton	43.29					3.57	46.86
Spin Spreader	5 ton		1.68	0.75	1.82		0.35	4.60
Phosphorus (46% P2O5)	cwt	63.98					5.28	69.26
Potash (60% K2O)	cwt	45.25					3.73	48.98
Disk Heavy	28'		3.02	2.30	2.58		0.65	8.55
Bed/Disk w/roller	12R-30/40		2.49	2.37	2.13		0.58	7.57
App by Air (5 gal)	appl	8.11					0.45	8.56
Glyphosate 3lbs a.e.	oz	8.00					0.44	8.44
Clarity	pt	7.15					0.39	7.54
Select Max	pt	15.01					0.83	15.84
Surfactant	pt	0.99					0.05	1.04
Plant - Folding	16R-30		1.88	3.39	2.04		0.35	7.66
Corn Seed RR2	thous	119.28					5.74	125.02
Custom Apply Fert	acre	7.50					0.31	7.81
UAN + Sulfur (28%)	gal	66.80					2.76	69.56
Sprayer 600-750gal	60' 175hp		0.55	0.20	0.68		0.06	1.49
Atrazine 4L	pt	10.84					0.45	11.29
Halex GT	pt	34.67					1.43	36.10
Surfactant	pt	0.99					0.04	1.03
Fert Appl (Liquid)	12R-30		3.13	2.27	3.04		0.29	8.73
UAN + Sulfur (28%)	gal	127.05					4.37	131.42
Corn Consultant	acre	6.00					0.21	6.21
App by Air (3 gal)	appl	1.37					0.05	1.42
Bifenthrin	oz	0.72					0.02	0.74
App by Air (3 gal)	appl	6.87					0.19	7.06
Intrepid 2F	oz	7.96					0.22	8.18
App by Air (5 gal)	appl	8.11					0.17	8.28
Trivapro	oz	20.28					0.42	20.70
Header - Corn	8R-30		5.99	9.32	4.35		0.14	19.80
Grain Cart Corn	500 bu		1.01	0.48	0.86		0.02	2.37
Haul Corn	bu	50.60					0.35	50.95
Stalk Shredder Flex	20'		3.29	3.19	2.81		0.06	9.35
1/4-mi. Pivot Irr.	acre		38.53	21.95	1.84		1.85	64.17
TOTALS		664.15	61.57	46.22	22.15	0.00	36.09	830.18
								189.82
								1020.00

Note: Cost of production estimates are based on 2023 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, 2024

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	1124.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	1.37	6.87	8.11	0.00	0.00
FERTILIZERS	109.23	0.00	0.00	0.00	0.00	0.00	66.80	127.05	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	0.72	7.96	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	119.28	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	6.53	0.00	0.00	0.00	0.00	2.04	2.02	3.19	0.20	0.15	0.00	8.02
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	7.19	0.00	0.00	0.00	0.00	1.88	0.55	14.69	15.41	11.56	0.00	10.29
REPAIR & MAINTENANCE	5.42	0.00	0.00	0.00	0.00	3.39	0.20	20.74	1.99	1.49	0.00	12.99
INTEREST ON OP. CAP.	14.43	0.00	0.00	0.00	2.16	6.09	5.10	5.98	0.90	0.86	0.00	0.57
TOTAL DIRECT EXPENSES	189.42	0.00	0.00	0.00	41.42	132.68	128.67	179.74	33.33	42.45	0.00	82.47
NET INCOME	-189.42	0.00	0.00	0.00	-41.42	-132.68	-128.67	-179.74	-33.33	-42.45	0.00	1041.73
NET INCOME TO DATE	-189.42	-189.42	-189.42	-189.42	-230.84	-363.52	-492.19	-671.93	-705.26	-747.71	-747.71	294.02

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT		
													PRODUCT	PRICE	
Corn		3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38			
PERCENT YIELD UNIT															dollars
50	110.00	bu	-383 -572	-355 -544	-326 -516	-298 -488	-270 -460	-242 -432	-214 -404	-186 -376	-158 -348	-130 -320	-102 -291		
60	132.00	bu	-303 -493	-270 -460	-236 -426	-202 -392	-169 -358	-135 -325	-101 -291	-67 -257	-34 -223	-0 -190	33 -156		
70	154.00	bu	-224 -414	-185 -375	-145 -335	-106 -296	-67 -257	-27 -217	11 -178	50 -139	90 -99	129 -60	168 -21		
80	176.00	bu	-145 -335	-100 -290	-55 -245	-10 -200	34 -155	79 -110	124 -65	169 -20	214 24	259 69	304 114		
90	198.00	bu	-66 -256	-15 -205	34 -154	85 -104	136 -53	186 -3	237 47	287 98	338 148	389 199	439 249		
100	220.00	bu	12 -176	69 -120	125 -64	181 -8	237 47	294 104	350 160	406 216	462 272	518 329	575 385		
110	242.00	bu	92 -97	154 -35	215 26	277 87	339 149	401 211	463 273	525 335	586 397	648 458	710 520		
120	264.00	bu	171 -18	238 49	306 116	373 183	441 251	508 318	576 386	643 453	711 521	778 588	845 656		
130	286.00	bu	250 60	323 133	396 206	469 280	542 353	615 426	689 499	762 572	835 645	908 718	981 791		
140	308.00	bu	329 140	408 218	487 297	565 376	644 454	723 533	802 612	880 690	959 769	1038 848	1116 926		
150	330.00	bu	409 219	493 303	577 387	662 472	746 556	830 640	914 725	999 809	1083 893	1167 978	1252 1062		

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 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	1.0000	8.11	_____
App by Air (3 gal)	appl	6.87	1.0000	6.87	_____
FERTILIZERS					
DAP	cwt	47.21	1.6300	76.95	_____
Potash (60% K2O)	cwt	36.20	1.2500	45.25	_____
Fert 10-34-0	gal	4.66	5.0000	23.30	_____
UAN (32%)	gal	4.00	43.8348	175.34	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.25	32.0000	8.00	_____
Clarity	pt	14.29	0.5000	7.15	_____
Select Max	pt	15.01	1.0000	15.01	_____
Atrazine 4L	pt	2.71	4.0000	10.84	_____
Halex GT	pt	9.63	3.6000	34.67	_____
INSECTICIDES					
Bifenthrin	oz	0.56	6.4020	3.59	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.61	28.0000	101.08	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	65.00	0.6660	43.29	_____
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	17.94	0.3616	6.48	_____
Harvesters	hour	17.94	0.1277	2.29	_____
HAND LABOR					
Implements	hour	9.06	0.1832	1.66	_____
UNALLOCATED LABOR					
DIESEL FUEL					
Tractors	gal	3.44	4.1883	14.42	_____
Harvesters	gal	3.44	1.7419	5.99	_____
REPAIR & MAINTENANCE					
Implements	acre	10.46	1.0000	10.46	_____
Tractors	acre	3.50	1.0000	3.50	_____
Harvesters	acre	6.16	1.0000	6.16	_____
INTEREST ON OP. CAP.	acre	29.29	1.0000	29.29	_____
<hr/>					
TOTAL DIRECT EXPENSES				698.01	_____
FIXED EXPENSES					
Implements	acre	17.91	1.0000	17.91	_____
Tractors	acre	27.01	1.0000	27.01	_____
Harvesters	acre	29.49	1.0000	29.49	_____
<hr/>					
TOTAL FIXED EXPENSES				74.41	_____
<hr/>					
TOTAL SPECIFIED EXPENSES				772.42	_____

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	170.0000	868.70	_____
TOTAL INCOME				868.70	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	14.98	1.0000	14.98	_____
FERTILIZERS	acre	320.84	1.0000	320.84	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	3.59	1.0000	3.59	_____
SEED/PLANTS	acre	101.08	1.0000	101.08	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.4893	8.77	_____
UNALLOCATED LABOR	hour	17.93	0.4404	7.90	_____
DIESEL FUEL	gal	3.44	5.9303	20.41	_____
REPAIR & MAINTENANCE	acre	20.12	1.0000	20.12	_____
INTEREST ON OP. CAP.	acre	29.29	1.0000	29.29	_____
TOTAL DIRECT EXPENSES				698.01	_____
RETURNS ABOVE DIRECT EXPENSES				170.69	_____
TOTAL FIXED EXPENSES				74.41	_____
TOTAL SPECIFIED EXPENSES				772.42	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				96.28	_____

Note: Cost of production estimates are based on 2023 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, 2024

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				
Surfactant	pt					0.3000				
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				
Surfactant	pt					0.3000				
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 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33							0.27	3.60	3.60
Lime (Spread)	ton	43.29							3.57	46.86	46.86
App by Air (5 gal)	appl	8.11							0.45	8.56	8.56
Glyphosate 3lbs a.e	oz	8.00							0.44	8.44	8.44
Clarity	pt	7.15							0.39	7.54	7.54
Select Max	pt	15.01							0.83	15.84	15.84
Surfactant	pt	0.99							0.05	1.04	1.04
Spin Spreader	5 ton		1.68	0.75	1.82				0.20	4.45	4.00
DAP	cwt	76.95							3.70	80.65	80.65
Potash (60% K2O)	cwt	45.25							2.18	47.43	47.43
NT Plant&Pre-Rigid	12R-30		2.81	3.33	3.04				0.44	9.62	11.68
Corn Seed BtRR	thous	101.08							4.86	105.94	105.94
Fert 10-34-0	gal	23.30							1.12	24.42	24.42
Spray (Broadcast)	27'		2.50	0.78	2.41				0.23	5.92	4.94
Atrazine 4L	pt	10.84							0.45	11.29	11.29
Halex GT	pt	34.67							1.43	36.10	36.10
Surfactant	pt	0.99							0.04	1.03	1.03
Fert Appl (Liquid)	12R-30		3.13	2.27	3.04				0.35	8.79	7.99
UAN (32%)	gal	175.34							7.23	182.57	182.57
Corn Consultant	acre	6.00							0.21	6.21	6.21
App by Air (3 gal)	appl	6.87							0.24	7.11	7.11
Bifenthrin	oz	3.59							0.12	3.71	3.71
Header - Corn	8R-30		5.99	9.32	4.35				0.14	19.80	35.41
Grain Cart Corn	500 bu		1.01	0.48	0.86				0.02	2.37	2.43
Haul Corn	bu	39.10							0.27	39.37	39.37
Stalk Shredder Flex	20'		3.29	3.19	2.81				0.06	9.35	7.96
TOTALS		609.86	20.41	20.12	18.33	0.00	29.29	698.01	74.41	772.42	

Note: Cost of production estimates are based on 2023 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, 2024

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	868.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	6.87	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	145.50	175.34	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	3.59	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	101.08	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	4.86	5.45	0.00	0.00	0.00	0.00	8.02
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	4.49	5.63	0.00	0.00	0.00	0.00	10.29
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	4.08	3.05	0.00	0.00	0.00	0.00	12.99
INTEREST ON OP. CAP.	3.84	0.00	0.00	0.00	2.16	12.50	9.73	0.57	0.00	0.00	0.00	0.49
TOTAL DIRECT EXPENSES	50.46	0.00	0.00	0.00	41.42	272.51	245.70	17.03	0.00	0.00	0.00	70.89
NET INCOME	-50.46	0.00	0.00	0.00	-41.42	-272.51	-245.70	-17.03	0.00	0.00	0.00	797.81
NET INCOME TO DATE	-50.46	-50.46	-50.46	-50.46	-91.88	-364.39	-610.09	-627.12	-627.12	-627.12	-627.12	170.69

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT			
													PRODUCT	PRICE		
Corn		3.83	4.08	4.34	4.59	4.85	5.11	5.36	5.62	5.87	6.13	6.38				
PERCENT	YIELD	UNIT											dollars			
50	85.00	bu	-352 -426	-330 -405	-309 -383	-287 -361	-265 -340	-243 -318	-222 -296	-200 -274	-178 -253	-157 -231	-135 -209			
60	102.00	bu	-291 -365	-265 -339	-239 -313	-213 -287	-187 -261	-161 -235	-134 -209	-108 -183	-82 -157	-56 -131	-30 -105			
70	119.00	bu	-230 -304	-199 -274	-169 -243	-138 -213	-108 -182	-78 -152	-47 -122	-17 -91	13 -61	43 -30	73 -0			
80	136.00	bu	-168 -243	-134 -208	-99 -173	-64 -139	-29 -104	4 -69	39 -34	74 -0	109 34	143 69	178 104			
90	153.00	bu	-107 -182	-68 -143	-29 -103	9 -64	48 -25	87 13	126 52	165 91	205 130	244 169	283 208			
100	170.00	bu	-46 -120	-3 -77	40 -34	83 9	127 52	170 96	214 139	257 183	300 226	344 270	387 313			
110	187.00	bu	14 -59	62 -11	110 35	158 83	205 131	253 179	301 226	349 274	396 322	444 370	492 418			
120	204.00	bu	75 1	128 53	180 105	232 157	284 210	336 262	388 314	440 366	492 418	545 470	597 522			
130	221.00	bu	137 62	193 119	250 175	306 232	363 288	419 345	475 401	532 458	588 514	645 570	701 627			
140	238.00	bu	198 123	259 184	319 245	380 306	441 367	502 428	563 488	624 549	684 610	745 671	806 732			
150	255.00	bu	259 185	324 250	389 315	455 380	520 445	585 510	650 576	715 641	780 706	845 771	911 836			

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 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	2.0000	16.22	_____
App by Air (3 gal)	appl	6.87	1.0000	6.87	_____
FERTILIZERS					
DAP	cwt	47.21	1.6300	76.95	_____
Potash (60% K2O)	cwt	36.20	1.2500	45.25	_____
Fert 10-34-0	gal	4.66	5.0000	23.30	_____
UAN (32%)	gal	4.00	43.8348	175.34	_____
FUNGICIDES					
Trivapro	oz	1.48	13.7000	20.28	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.25	32.0000	8.00	_____
Clarity	pt	14.29	0.5000	7.15	_____
Select Max	pt	15.01	1.0000	15.01	_____
Atrazine 4L	pt	2.71	4.0000	10.84	_____
Halex GT	pt	9.63	3.6000	34.67	_____
INSECTICIDES					
Bifenthrin	oz	0.56	6.4020	3.59	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.61	28.0000	101.08	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	65.00	0.6660	43.29	_____
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	17.94	0.3616	6.48	_____
Harvesters	hour	17.94	0.1277	2.29	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1832	1.66	_____
UNALLOCATED LABOR	hour	17.93	0.4404	7.90	_____
DIESEL FUEL					
Tractors	gal	3.44	4.1883	14.42	_____
Harvesters	gal	3.44	1.7419	5.99	_____
1/4-mi. Pivot Irr.	gal	3.44	11.2011	38.53	_____
REPAIR & MAINTENANCE					
Implements	acre	10.46	1.0000	10.46	_____
Tractors	acre	3.50	1.0000	3.50	_____
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	31.81	1.0000	31.81	_____
TOTAL DIRECT EXPENSES					
				802.74	_____
FIXED EXPENSES					
Implements	acre	17.91	1.0000	17.91	_____
Tractors	acre	27.01	1.0000	27.01	_____
Harvesters	acre	29.49	1.0000	29.49	_____
1/4-mi. Pivot Irr.	acre	99.50	1.0000	99.50	_____
TOTAL FIXED EXPENSES					
				173.91	_____
TOTAL SPECIFIED EXPENSES					
				976.65	_____

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	5.11	220.0000	1124.20	_____
TOTAL INCOME				1124.20	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	23.09	1.0000	23.09	_____
FERTILIZERS	acre	320.84	1.0000	320.84	_____
FUNGICIDES	acre	20.28	1.0000	20.28	_____
HERBICIDES	acre	75.67	1.0000	75.67	_____
INSECTICIDES	acre	3.59	1.0000	3.59	_____
SEED/PLANTS	acre	101.08	1.0000	101.08	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.4893	8.77	_____
UNALLOCATED LABOR	hour	17.93	0.4404	7.90	_____
DIESEL FUEL	gal	3.44	17.1314	58.94	_____
REPAIR & MAINTENANCE	acre	42.07	1.0000	42.07	_____
INTEREST ON OP. CAP.	acre	31.81	1.0000	31.81	_____
TOTAL DIRECT EXPENSES				802.74	_____
RETURNS ABOVE DIRECT EXPENSES				321.46	_____
TOTAL FIXED EXPENSES				173.91	_____
TOTAL SPECIFIED EXPENSES				976.65	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				147.55	_____

Note: Cost of production estimates are based on 2023 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, 2024

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				
Surfactant	pt					0.3000				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Mar			0.04	0.04	0.08
DAP	cwt					1.6300				0.03
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
Corn Seed BtRR	thous					28.0000				0.06
Fert 10-34-0	gal					5.0000				
Spray (Broadcast)	27'	MFWD 225	0.062	1.00	Apr			0.06	0.06	0.09
Atrazine 4L	pt					4.0000				0.05
Halex GT	pt					3.6000				
Surfactant	pt					0.3000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	Apr			0.07	0.07	0.11
UAN (32%)	gal					43.8348				0.07
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			1.00	May	1.0000				
Bifenthrin	oz					6.4020				
App by Air (5 gal)	appl			1.00	Jul	1.0000				
Trivapro	oz					13.7000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep			0.12	0.12	0.12
Grain Cart Corn	500 bu	MFWD 225	0.025	1.00	Sep			0.02	0.02	0.02
Haul Corn	bu					220.0000				0.02
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep			0.08	0.08	0.08
1/4-mi. Pivot Irr.	acre				Jul	1.0000			0.20	0.07
TOTALS								0.48	0.48	0.87
										0.44

Note: Cost of production estimates are based on 2023 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, 2024

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				0.27	3.60		3.60	
Lime (Spread)	ton	43.29				3.57	46.86		46.86	
App by Air (5 gal)	appl	8.11				0.45	8.56		8.56	
Glyphosate 3lbs a.e	oz	8.00				0.44	8.44		8.44	
Clarity	pt	7.15				0.39	7.54		7.54	
Select Max	pt	15.01				0.83	15.84		15.84	
Surfactant	pt	0.99				0.05	1.04		1.04	
Spin Spreader	5 ton		1.68	0.75	1.82	0.20	4.45	4.00	8.45	
DAP	cwt	76.95				3.70	80.65		80.65	
Potash (60% K2O)	cwt	45.25				2.18	47.43		47.43	
NT Plant&Pre-Rigid	12R-30		2.81	3.33	3.04	0.44	9.62	11.68	21.30	
Corn Seed BtRR	thous	101.08				4.86	105.94		105.94	
Fert 10-34-0	gal	23.30				1.12	24.42		24.42	
Spray (Broadcast)	27'		2.50	0.78	2.41	0.23	5.92	4.94	10.86	
Atrazine 4L	pt	10.84				0.45	11.29		11.29	
Halex GT	pt	34.67				1.43	36.10		36.10	
Surfactant	pt	0.99				0.04	1.03		1.03	
Fert Appl (Liquid)	12R-30		3.13	2.27	3.04	0.35	8.79	7.99	16.78	
UAN (32%)	gal	175.34				7.23	182.57		182.57	
Corn Consultant	acre	6.00				0.21	6.21		6.21	
App by Air (3 gal)	appl	6.87				0.24	7.11		7.11	
Bifenthrin	oz	3.59				0.12	3.71		3.71	
App by Air (5 gal)	appl	8.11				0.17	8.28		8.28	
Trivapro	oz	20.28				0.42	20.70		20.70	
Header - Corn	8R-30		5.99	9.32	4.35	0.14	19.80	35.41	55.21	
Grain Cart Corn	500 bu		1.01	0.48	0.86	0.02	2.37	2.43	4.80	
Haul Corn	bu	50.60				0.35	50.95		50.95	
Stalk Shredder Flex	20'		3.29	3.19	2.81	0.06	9.35	7.96	17.31	
1/4-mi. Pivot Irr.	acre	38.53	21.95	1.84		1.85	64.17	99.50	163.67	
TOTALS		649.75	58.94	42.07	20.17	0.00	31.81	802.74	173.91	976.65

Note: Cost of production estimates are based on 2023 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, 2024

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	1124.20
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	6.87	0.00	8.11	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	145.50	175.34	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.28	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	30.16	0.00	45.51	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	3.59	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	101.08	0.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.99	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	43.29	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	4.86	6.79	0.15	0.20	0.15	0.00	8.02
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	4.49	5.63	11.56	15.41	11.56	0.00	10.29
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	4.08	3.05	18.47	1.99	1.49	0.00	12.99
INTEREST ON OP. CAP.	3.84	0.00	0.00	0.00	2.16	12.50	9.78	1.61	0.49	0.86	0.00	0.57
TOTAL DIRECT EXPENSES	50.46	0.00	0.00	0.00	41.42	272.51	247.09	48.25	18.09	42.45	0.00	82.47
NET INCOME	-50.46	0.00	0.00	0.00	-41.42	-272.51	-247.09	-48.25	-18.09	-42.45	0.00	1041.73
NET INCOME TO DATE	-50.46	-50.46	-50.46	-50.46	-91.88	-364.39	-611.48	-659.73	-677.82	-720.27	-720.27	321.46

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT	PERCENT													
	75	80	85	90	95	100	105	110	115	120	125			
Corn	PRODUCT PRICE													
PERCENT	YIELD	UNIT	dollars											
50	110.00	bu	-355 -529	-327 -501	-299 -473	-271 -445	-243 -417	-215 -389	-187 -360	-158 -332	-130 -304	-102 -276	-74 -248	
60	132.00	bu	-276 -450	-242 -416	-209 -382	-175 -349	-141 -315	-107 -281	-74 -248	-40 -214	-6 -180	27 -146	60 -113	
70	154.00	bu	-197 -371	-157 -331	-118 -292	-79 -253	-39 -213	-0 -174	38 -135	78 -95	117 -56	156 -17	196 22	
80	176.00	bu	-118 -291	-73 -246	-28 -202	16 -157	61 -112	106 -67	151 -22	196 22	241 67	286 112	331 157	
90	198.00	bu	-38 -212	11 -162	62 -111	112 -60	163 -10	214 40	264 90	315 141	365 191	416 242	467 293	
100	220.00	bu	40 -133	96 -77	152 -21	209 35	265 91	321 147	377 203	433 259	490 316	546 372	602 428	
110	242.00	bu	119 -54	181 7	243 69	305 131	366 193	428 254	490 316	552 378	614 440	676 502	737 564	
120	264.00	bu	198 24	266 92	333 159	401 227	468 294	536 362	603 429	671 497	738 564	805 632	873 699	
130	286.00	bu	278 104	351 177	424 250	497 323	570 396	643 469	716 542	789 615	862 688	935 761	1008 834	
140	308.00	bu	357 183	435 262	514 340	593 419	672 498	750 576	829 655	908 734	986 812	1065 891	1144 970	
150	330.00	bu	436 262	520 346	605 431	689 515	773 599	858 684	942 768	1026 852	1111 937	1195 1021	1279 1105	

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 2023 input prices.

Table 11.A Estimated costs per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	1.0000	8.11	_____
FERTILIZERS					
DAP	cwt	47.21	1.3000	61.37	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
UAN + Sulfur (28%)	gal	3.46	38.2883	132.48	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.25	32.0000	8.00	_____
2,4-D Amine 4	pt	2.72	2.0000	5.44	_____
Select Max	pt	15.01	1.0000	15.01	_____
Lexar	pt	7.00	6.0000	42.00	_____
INSECTICIDES					
Sivanto Prime	oz	3.01	8.0000	24.08	_____
Warrior II	oz	2.74	1.5000	4.11	_____
Prevathon	oz	1.05	14.0000	14.70	_____
SEED/PLANTS					
Sorghum Concept+ Po	lb	4.16	4.5000	18.72	_____
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	65.00	0.6660	43.29	_____
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	17.94	0.2915	5.24	_____
Harvesters	hour	17.94	0.1021	1.83	_____
Self-Propelled	hour	17.94	0.0661	1.20	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0330	0.30	_____
UNALLOCATED LABOR					
	hour	17.88	0.4138	7.40	_____
DIESEL FUEL					
Tractors	gal	3.44	3.3766	11.62	_____
Harvesters	gal	3.44	1.3935	4.79	_____
Self-Propelled	gal	3.44	0.8505	2.95	_____
REPAIR & MAINTENANCE					
Implements	acre	7.17	1.0000	7.17	_____
Tractors	acre	2.82	1.0000	2.82	_____
Harvesters	acre	4.93	1.0000	4.93	_____
Self-Propelled	acre	1.05	1.0000	1.05	_____
INTEREST ON OP. CAP.	acre	20.08	1.0000	20.08	_____
TOTAL DIRECT EXPENSES					
				521.52	_____
FIXED EXPENSES					
Implements	acre	17.66	1.0000	17.66	_____
Tractors	acre	21.76	1.0000	21.76	_____
Harvesters	acre	23.59	1.0000	23.59	_____
Self-Propelled	acre	8.30	1.0000	8.30	_____
TOTAL FIXED EXPENSES					
				71.31	_____
TOTAL SPECIFIED EXPENSES					
				592.83	_____

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Grain Sorghum	bu	4.85	100.0000	485.00	_____
TOTAL INCOME				485.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.11	1.0000	8.11	_____
FERTILIZERS	acre	230.05	1.0000	230.05	_____
HERBICIDES	acre	70.45	1.0000	70.45	_____
INSECTICIDES	acre	42.89	1.0000	42.89	_____
SEED/PLANTS	acre	18.72	1.0000	18.72	_____
ADJUVANTS	acre	0.99	1.0000	0.99	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.4598	8.27	_____
UNALLOCATED LABOR	hour	17.88	0.4138	7.40	_____
DIESEL FUEL	gal	3.44	5.6208	19.36	_____
REPAIR & MAINTENANCE	acre	15.97	1.0000	15.97	_____
INTEREST ON OP. CAP.	acre	20.08	1.0000	20.08	_____
TOTAL DIRECT EXPENSES				521.52	_____
RETURNS ABOVE DIRECT EXPENSES				-36.52	_____
TOTAL FIXED EXPENSES				71.31	_____
TOTAL SPECIFIED EXPENSES				592.83	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-107.83	_____

Note: Cost of production estimates are based on 2023 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, 2024

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 Lexar	80' 250hp		0.013	1.00	Apr			0.01	0.01	0.01
Sorghum Consultant	acre			1.00	May	1.0000				
Fert Appl (Liquid) UAN + Sulfur (28%)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
Sprayer 800gal Sivanto Prime	80' 250hp		0.013	1.00	Jun			0.01	0.01	0.01
Sprayer 800gal Warrior II	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Sprayer 800gal Prevathon	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Sprayer 800gal Sivanto Prime	80' 250hp		0.013	1.00	Jul			0.01	0.01	0.01
Header Wheat/Sorghum Haul Sorghum	25' Rigid	265 hp	0.102	1.00	Sep	100.0000	0.10	0.10	0.10	0.09
TOTALS							0.45	0.39	0.63	0.41

Note: Cost of production estimates are based on 2023 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, 2024

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					0.27	3.60
Lime (Spread)	ton	43.29					3.57	46.86
Disk Harrow	32'		2.45	2.11	2.09		0.50	7.15
App by Air (5 gal)	appl	8.11					0.45	8.56
Glyphosate 3lbs a.e	oz	8.00					0.44	8.44
2,4-D Amine 4	pt	5.44					0.30	5.74
Select Max	pt	15.01					0.83	15.84
Surfactant	pt	0.99					0.05	1.04
Spin Spreader	5 ton		1.68	0.75	1.82		0.18	4.43
DAP	cwt	61.37					2.53	63.90
Potash (60% K2O)	cwt	36.20					1.49	37.69
Field Cultivate Fld	32'		1.86	1.17	1.59		0.19	4.81
Plant - Folding	12R-30		2.50	2.62	2.71		0.32	8.15
Sorghum Concept+ Po	lb	18.72					0.77	19.49
Sprayer 800gal	80' 250hp		0.59	0.21	0.51		0.05	1.36
Lexar	pt	42.00					1.73	43.73
Sorghum Consultant	acre	6.00					0.21	6.21
Fert Appl (Liquid)	12R-30		3.13	2.27	3.04		0.29	8.73
UAN + Sulfur (28%)	gal	132.48					4.55	137.03
Sprayer 800gal	80' 250hp		0.59	0.21	0.51		0.04	1.35
Sivanto Prime	oz	12.04					0.33	12.37
Sprayer 800gal	80' 250hp		0.59	0.21	0.51		0.03	1.34
Warrior II	oz	4.11					0.08	4.19
Sprayer 800gal	80' 250hp		0.59	0.21	0.51		0.03	1.34
Prevathon	oz	14.70					0.30	15.00
Sprayer 800gal	80' 250hp		0.59	0.21	0.51		0.03	1.34
Sivanto Prime	oz	12.04					0.25	12.29
Header Wheat/Sorghum	25' Rigid		4.79	6.00	3.48		0.10	14.37
Haul Sorghum	bu	25.00					0.17	25.17
TOTALS		448.83	19.36	15.97	17.28	0.00	20.08	521.52
								71.31
								592.83

Note: Cost of production estimates are based on 2023 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, 2024

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	485.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	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	97.57	132.48	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	28.45	0.00	42.00	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	12.04	30.85	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	18.72	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	43.29	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	2.09	0.00	0.00	0.00	0.00	6.63	3.04	0.51	1.53	0.00	3.48
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	2.45	0.00	0.00	0.00	0.00	6.63	3.13	0.59	1.77	0.00	4.79
REPAIR & MAINTENANCE	0.00	2.11	0.00	0.00	0.00	0.00	4.75	2.27	0.21	0.63	0.00	6.00
INTEREST ON OP. CAP.	3.84	0.50	0.00	0.00	2.07	0.00	7.26	5.05	0.37	0.72	0.00	0.27
TOTAL DIRECT EXPENSES	50.46	7.15	0.00	0.00	39.62	0.00	183.56	151.97	13.72	35.50	0.00	39.54
NET INCOME	-50.46	-7.15	0.00	0.00	-39.62	0.00	-183.56	-151.97	-13.72	-35.50	0.00	445.46
NET INCOME TO DATE	-50.46	-57.61	-57.61	-57.61	-97.23	-97.23	-280.79	-432.76	-446.48	-481.98	-481.98	-36.52

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT	PERCENT	75	80	85	90	95	100	105	110	115	120	125	PRODUCT PRICE			
													3.63	3.88	4.12	
PERCENT	YIELD	UNIT	dollars													
Grain Sorghum			-327	-314	-302	-290	-278	-266	-254	-242	-230	-217	-205			
			-398	-386	-374	-361	-349	-337	-325	-313	-301	-289	-277			
50	50.00	bu	-293	-278	-264	-249	-235	-220	-205	-191	-176	-162	-147			
			-364	-349	-335	-320	-306	-291	-277	-262	-248	-233	-219			
60	60.00	bu	-259	-242	-225	-208	-191	-174	-157	-140	-123	-106	-89			
			-330	-313	-296	-279	-262	-245	-228	-211	-194	-177	-160			
70	70.00	bu	-225	-206	-186	-167	-147	-128	-109	-89	-70	-50	-31			
			-296	-277	-257	-238	-219	-199	-180	-160	-141	-122	-102			
80	80.00	bu	-191	-169	-147	-126	-104	-82	-60	-38	-17	4	26			
			-262	-241	-219	-197	-175	-153	-131	-110	-88	-66	-44			
90	90.00	bu	-157	-133	-109	-85	-60	-36	-12	11	36	60	84			
			-229	-204	-180	-156	-132	-107	-83	-59	-35	-10	13			
100	100.00	bu	-123	-97	-70	-43	-17	9	36	62	89	116	142			
			-195	-168	-141	-115	-88	-61	-35	-8	18	44	71			
110	110.00	bu	-90	-60	-31	-2	26	55	84	113	142	171	200			
			-161	-132	-103	-74	-44	-15	13	42	71	100	129			
120	120.00	bu	-56	-24	6	38	69	101	132	164	196	227	259			
			-127	-95	-64	-32	-1	30	61	93	124	156	187			
130	130.00	bu	-22	11	45	79	113	147	181	215	249	283	317			
			-93	-59	-25	8	42	76	110	144	177	211	245			
140	140.00	bu	11	47	84	120	157	193	229	266	302	338	375			
			-59	-23	12	49	85	122	158	194	231	267	303			

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 2023 input prices.

Table 12.A Estimated costs per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	8.11	2.0000	16.22	_____
App by Air (3 gal)	appl	6.87	1.0000	6.87	_____
FERTILIZERS					
DAP	cwt	47.21	1.0000	47.21	_____
Potash (60% K2O)	cwt	36.20	0.7500	27.15	_____
Fert 41-0-0-4	cwt	38.00	3.0480	115.82	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	4.5000	34.34	_____
Miravis Ace	oz	1.78	13.7000	24.39	_____
HERBICIDES					
Axiom	oz	2.25	10.0000	22.50	_____
Harmony Extra SG	oz	11.00	0.7500	8.25	_____
Axial XL	oz	1.71	16.4000	28.04	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.34	90.0000	30.60	_____
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	65.00	0.6660	43.29	_____
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	17.94	0.2129	3.83	_____
Harvesters	hour	17.94	0.1021	1.83	_____
HAND LABOR					
Implements	hour	9.06	0.1049	0.95	_____
UNALLOCATED LABOR					
hour	17.92	0.2521	4.52	_____	
DIESEL FUEL					
Tractors	gal	3.44	2.4667	8.49	_____
Harvesters	gal	3.44	1.3935	4.79	_____
REPAIR & MAINTENANCE					
Implements	acre	5.93	1.0000	5.93	_____
Tractors	acre	2.06	1.0000	2.06	_____
Harvesters	acre	4.93	1.0000	4.93	_____
INTEREST ON OP. CAP.	acre	22.63	1.0000	22.63	-----
TOTAL DIRECT EXPENSES					
				516.05	_____
FIXED EXPENSES					
Implements	acre	16.18	1.0000	16.18	_____
Tractors	acre	15.89	1.0000	15.89	_____
Harvesters	acre	23.59	1.0000	23.59	-----
TOTAL FIXED EXPENSES					
				55.66	_____
TOTAL SPECIFIED EXPENSES					
				571.71	_____

Note: Cost of production estimates are based on 2023 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, 2024

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Wheat	bu	6.17	70.0000	431.90	_____
TOTAL INCOME				431.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	23.09	1.0000	23.09	_____
FERTILIZERS	acre	190.18	1.0000	190.18	_____
FUNGICIDES	acre	58.73	1.0000	58.73	_____
HERBICIDES	acre	58.79	1.0000	58.79	_____
SEED/PLANTS	acre	30.60	1.0000	30.60	_____
CUSTOM FERTILIZE	acre	24.38	1.0000	24.38	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	43.29	1.0000	43.29	_____
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	17.94	0.3151	5.66	_____
UNALLOCATED LABOR	hour	17.92	0.2521	4.52	_____
DIESEL FUEL	gal	3.44	3.8602	13.28	_____
REPAIR & MAINTENANCE	acre	12.92	1.0000	12.92	_____
INTEREST ON OP. CAP.	acre	22.63	1.0000	22.63	_____
TOTAL DIRECT EXPENSES				516.05	_____
RETURNS ABOVE DIRECT EXPENSES				-84.15	_____
TOTAL FIXED EXPENSES				55.66	_____
TOTAL SPECIFIED EXPENSES				571.71	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-139.81	_____

Note: Cost of production estimates are based on 2023 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, 2024

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						1.5240			
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				
Miravis Ace	oz					13.7000				
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 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33							0.23	3.56	3.56
Lime (Spread)	ton	43.29							2.98	46.27	46.27
Disk Harrow	32'		2.45	2.11	1.98				0.45	6.99	8.61
Spin Spreader	5 ton		1.68	0.75	1.74				0.29	4.46	4.00
DAP	cwt	47.21							3.25	50.46	50.46
Potash (60% K2O)	cwt	27.15							1.87	29.02	29.02
Field Cultivate Fld	32'		1.86	1.17	1.51				0.31	4.85	7.27
Grain Drill	30'		2.50	2.89	2.60				0.49	8.48	10.19
Wheat Seed Private	lb	30.60							1.89	32.49	32.49
CruiserMaxx Vibrance	oz	34.34							2.12	36.46	36.46
Wheat Consultant	acre	5.50							0.34	5.84	5.84
App by Air (5 gal)	appl	8.11							0.45	8.56	8.56
Axiom	oz	22.50							1.24	23.74	23.74
App by Air (3 gal)	appl	6.87							0.24	7.11	7.11
Warrior II	oz										
Harmony Extra SG	oz	8.25							0.28	8.53	8.53
Axial XL	oz	28.04							0.96	29.00	29.00
App Fert by Air	cwt	12.19							0.42	12.61	12.61
Fert 41-0-0-4	cwt	57.91							1.99	59.90	59.90
App Fert by Air	cwt	12.19							0.34	12.53	12.53
Fert 41-0-0-4	cwt	57.91							1.59	59.50	59.50
App by Air (5 gal)	appl	8.11							0.17	8.28	8.28
Miravis Ace	oz	24.39							0.50	24.89	24.89
Header Wheat/Sorghum	25' Rigid		4.79	6.00	3.30				0.10	14.19	25.59
Haul Wheat	bu	18.20							0.13	18.33	18.33
TOTALS		456.09	13.28	12.92	11.13	0.00	22.63	516.05	55.66	571.71	

Note: Cost of production estimates are based on 2023 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, 2024

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	431.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	8.11	0.00	0.00	6.87	0.00	8.11	0.00	0.00
FERTILIZERS	0.00	0.00	74.36	0.00	0.00	0.00	0.00	57.91	57.91	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	24.39	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.50	0.00	0.00	36.29	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	30.60	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	43.29	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	5.23	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
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	5.99	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.79
REPAIR & MAINTENANCE	0.00	0.00	4.03	2.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
INTEREST ON OP. CAP.	0.00	0.00	9.38	4.84	1.69	0.00	0.00	3.89	1.93	0.67	0.00	0.23
TOTAL DIRECT EXPENSES	0.00	0.00	145.61	83.27	32.30	0.00	0.00	117.15	72.03	33.17	0.00	32.52
NET INCOME	0.00	0.00	-145.61	-83.27	-32.30	0.00	0.00	-117.15	-72.03	-33.17	0.00	399.38
NET INCOME TO DATE	0.00	0.00	-145.61	-228.88	-261.18	-261.18	-261.18	-378.33	-450.36	-483.53	-483.53	-84.15

Note: Cost of production estimates are based on 2023 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, 2024

PRODUCT		75	80	85	90	95	100	105	110	115	120	125	PERCENT		
													PRODUCT PRICE		
Wheat		4.62	4.93	5.24	5.55	5.86	6.17	6.47	6.78	7.09	7.40	7.71			
PERCENT YIELD UNIT															dollars
50	35.00	bu	-344 -400	-334 -389	-323 -378	-312 -368	-301 -357	-290 -346	-280 -335	-269 -325	-258 -314	-247 -303	-236 -292		
60	42.00	bu	-314 -370	-301 -357	-288 -344	-275 -331	-262 -318	-249 -305	-236 -292	-223 -279	-210 -266	-197 -253	-184 -240		
70	49.00	bu	-283 -339	-268 -324	-253 -309	-238 -294	-223 -278	-208 -263	-193 -248	-177 -233	-162 -218	-147 -203	-132 -188		
80	56.00	bu	-253 -308	-235 -291	-218 -274	-201 -257	-184 -239	-166 -222	-149 -205	-132 -187	-115 -170	-97 -153	-80 -136		
90	63.00	bu	-222 -278	-203 -258	-183 -239	-164 -220	-144 -200	-125 -181	-106 -161	-86 -142	-67 -122	-47 -103	-28 -83		
100	70.00	bu	-192 -247	-170 -226	-148 -204	-127 -183	-105 -161	-84 -139	-62 -118	-40 -96	-19 -75	2 -53	23 -31		
110	77.00	bu	-161 -217	-137 -193	-114 -169	-90 -145	-66 -122	-42 -98	-19 -74	4 -50	28 -27	52 -3	75 20		
120	84.00	bu	-131 -186	-105 -160	-79 -134	-53 -108	-27 -83	-1 -57	24 -31	50 -5	76 20	102 46	128 72		
130	91.00	bu	-100 -156	-72 -128	-44 -99	-16 -71	11 -43	39 -15	67 12	96 40	124 68	152 96	180 124		
140	98.00	bu	-69 -125	-39 -95	-9 -65	20 -34	51 -4	81 25	111 55	141 86	171 116	202 146	232 176		
150	105.00	bu	-39 -94	-6 -62	25 -30	57 2	90 34	122 66	155 99	187 131	219 164	252 196	284 228		

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 2023 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, 2024

Item Name	Size	Purchase	Annual	Useful	Fuel	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use				Direct		Cost
		dollars	hours	years	gal/hr				\$/hour		
Combine (250-299 hp)	265 hp	463,000	300	8	13.64	17.94	46.92	48.22	113.09	230.93	344.02
Combine (300-349 hp)	325 hp	530,000	300	8	16.73	17.94	57.55	55.20	130.69	264.34	395.04
Combine (350-399 hp)	355 hp	549,000	300	8	18.27	17.94	62.84	57.18	137.97	273.82	411.80
Combine (400-449 hp)	425 hp	560,000	300	8	21.87	17.94	75.25	58.33	151.52	279.31	430.83
Combine (450-499hp)	475 hp	586,000	300	8	24.44	17.94	84.10	61.04	163.08	292.28	455.36
Tractor(20-39hp)CB	MFWD 30	37,100	600	8	1.54	17.94	5.31	1.15	24.41	8.68	33.09
Tractor(20-39hp)RB	MFWD 30	27,200	600	8	1.54	17.94	5.31	0.85	24.10	6.36	30.46
Tractor(40-59hp)CB	2WD 50	39,900	600	8	2.57	17.94	8.85	1.24	28.04	9.33	37.37
Tractor(40-59hp)CB	MFWD 50	50,300	600	8	2.57	17.94	8.85	1.57	28.36	11.77	40.13
Tractor(40-59hp)RB	2WD 50	28,100	600	8	2.57	17.94	8.85	0.87	27.67	6.57	34.24
Tractor(40-59hp)RB	MFWD 50	33,900	600	8	2.57	17.94	8.85	1.05	27.85	7.93	35.78
Tractor(60-89hp)CB	2WD 75	64,000	600	8	3.86	17.94	13.27	2.00	33.21	14.97	48.19
Tractor(60-89hp)CB	MFWD 75	74,900	600	8	3.86	17.94	13.27	2.34	33.56	17.52	51.08
Tractor(60-89hp)RB	2WD 75	59,800	600	8	3.86	17.94	13.27	1.86	33.08	13.99	47.08
Tractor(60-89hp)RB	MFWD 75	53,500	600	8	3.86	17.94	13.27	1.67	32.89	12.51	45.41
Tractor(90-119hp)CB	2WD 105	94,400	600	8	5.40	17.94	18.59	2.95	39.48	22.08	61.57
Tractor(90-119hp)CB	MFWD 105	102,500	600	8	5.40	17.94	18.59	3.20	39.73	23.98	63.71
Tractor(90-119hp)RB	2WD 105	84,000	600	8	5.40	17.94	18.59	2.62	39.15	19.65	58.81
Tractor(90-119hp)RB	MFWD 105	90,700	600	8	5.40	17.94	18.59	2.83	39.36	21.22	60.58
Tractor(120-139hp)CB	2WD 130	135,400	600	8	6.69	17.94	23.01	4.23	45.18	31.68	76.87
Tractor(120-139hp)CB	MFWD 130	170,900	600	8	6.69	17.94	23.01	5.34	46.29	39.99	86.28
Tractor(140-159hp)	2WD 150	137,500	600	8	7.72	17.94	26.55	4.29	48.79	32.17	80.97
Tractor(140-159hp)CB	MFWD 150	171,000	600	8	7.72	17.94	26.55	5.34	49.84	40.01	89.85
Tractor(160-179hp)CB	MFWD 170	201,000	600	8	8.75	17.94	30.10	6.28	54.32	48.58	102.90
Tractor(180-199hp)CB	MFWD 190	246,000	600	8	9.77	17.94	33.64	7.68	59.27	59.45	118.72
Tractor(200-249hp)CB	MFWD 225	309,000	600	8	11.58	17.94	39.83	9.65	67.43	74.68	142.11
Tractor(250-349hp)CB	4WD 300	432,000	600	8	15.44	17.94	53.11	13.50	84.55	104.41	188.97
Tractor(250-349hp)CB	MFWD 300	357,000	600	8	15.44	17.94	53.11	11.15	82.21	86.28	168.49
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	17.94	53.11	10.28	81.34	79.51	160.85
Tractor(350-449hp)	Track 400	625,000	600	8	20.58	17.94	70.82	19.53	108.29	151.05	259.35
Tractor(350-449hp)CB	4WD 400	480,000	600	8	20.58	17.94	70.82	15.00	103.76	116.01	219.77
Tractor(450-550hp)CB	4WD 500	426,000	600	8	25.73	17.94	88.53	13.31	119.78	102.96	222.74
Tractor(450-550hp)CB	Track 500	653,000	600	8	25.73	17.94	88.53	20.40	126.87	157.82	284.70
Utility Vehicle	800 CC	12,200	200	8	0.70	17.94	2.24	1.90	22.09	9.12	31.22
Utility Vehicle	900 CC	18,700	200	8	1.00	17.94	3.21	2.92	24.07	13.99	38.06

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, 2024

Item Name	Size	Purchase	Annual	Useful	Fuel	Perf	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use	Rate				Direct		Cost
		dollars	hours	years	gal/hr	hr/ac				\$/acre		
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	6.96	11.41	10.79	29.16	51.68	80.85
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.96	15.97	14.13	37.07	67.69	104.76
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	4.65	10.67	9.61	24.94	46.02	70.96
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	5.89	13.71	15.85	35.46	75.92	111.39
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.65	10.83	12.51	28.00	59.94	87.94
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.96	18.25	21.58	46.80	103.37	150.17
Cotton Picker/Module	6R-30 (500)	936,000	200	8	25.73	0.218	5.89	19.32	31.91	57.13	152.83	209.96
Cotton Picker/Module	6R-38 (500)	941,000	200	8	25.73	0.172	4.65	15.25	25.33	45.24	121.30	166.55
Dry Applicator SP	70'300cuft	469,000	350	8	16.98	0.015	0.33	0.88	0.37	1.60	3.02	4.63
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.39	0.54	0.20	1.14	1.62	2.77
Sprayer 600-825gal	80' 175hp	268,000	350	8	11.81	0.013	0.29	0.53	0.18	1.02	1.51	2.53
Sprayer 600-825gal	90' 250hp	331,000	350	8	12.73	0.011	0.26	0.51	0.20	0.98	1.66	2.65
Sprayer 800gal	100' 250hp	364,000	350	8	14.15	0.010	0.23	0.51	0.20	0.95	1.64	2.60
Sprayer 800gal	80' 250hp	294,000	350	8	12.86	0.013	0.29	0.58	0.20	1.09	1.66	2.75
Sprayer 1000-1400gal	90' 275hp	363,000	350	8	14.15	0.010	0.23	0.51	0.20	0.95	1.64	2.60
Sprayer 1000gal	100' 300hp	492,000	350	8	15.44	0.010	0.23	0.56	0.27	1.07	2.22	3.30
Sprayer 1200+gal	120' 300hp	472,000	350	8	15.44	0.008	0.19	0.46	0.22	0.88	1.77	2.66

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, 2024

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total	--Fixed---		Total
									Imp.	P.U.	Direct		Imp.	P.U.	
			dollars	hours	years	hr/ac			-----\$/acre-----						
Bed-Paratill w/ro	4R-30	MFWD 225	27,800	150	12	0.204	3.66	8.14	2.05	1.97	15.83	4.57	15.25	35.66	
Bed-Paratill w/ro	4R-38	MFWD 225	27,800	150	12	0.160	2.88	6.40	1.61	1.55	12.46	3.60	12.01	28.08	
Bed-Paratill w/ro	6R-38	MFWD 225	38,000	150	12	0.107	1.92	4.28	1.47	1.03	8.72	3.29	8.03	20.05	
Bed-Rip/Disk Fold.	8R-38	MFWD 190	71,000	300	20	0.073	1.31	2.45	0.25	0.56	4.59	1.72	4.34	10.65	
Bed-Rip/Disk Fold.	12R-30	MFWD 225	100,200	300	20	0.061	1.10	2.45	0.30	0.59	4.46	2.04	4.60	11.11	
Bed-Rip/Disk Fold.	12R-38	MFWD 225	100,200	300	20	0.046	0.82	1.84	0.23	0.44	3.34	1.53	3.45	8.33	
Bed-Rip/Disk Rigid	4R-30	MFWD 190	31,500	300	20	0.184	3.31	6.21	0.29	1.42	11.24	1.93	10.99	24.17	
Bed-Rip/Disk Rigid	4R-38	MFWD 190	31,500	300	20	0.146	2.63	4.93	0.23	1.12	8.92	1.53	8.72	19.18	
Bed-Rip/Disk Rigid	6R-30	MFWD 190	43,600	300	20	0.123	2.21	4.14	0.26	0.94	7.57	1.78	7.32	16.68	
Bed-Rip/Disk Rigid	6R-38	MFWD 190	43,600	300	20	0.097	1.74	3.27	0.21	0.74	5.97	1.40	5.78	13.17	
Bed-Rip/Disk Rigid	8R-30	MFWD 190	57,800	300	20	0.139	2.49	4.67	0.40	1.06	8.64	2.66	8.26	19.56	
Bed-Rip/Disk Rigid	8R-38	MFWD 190	57,800	300	20	0.073	1.31	2.45	0.21	0.56	4.54	1.40	4.34	10.28	
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	43,600	150	12	0.107	1.92	4.28	1.69	1.03	8.94	3.77	8.03	20.75	
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	49,300	150	12	0.080	1.44	3.21	1.43	0.77	6.88	3.20	6.03	16.12	
Bed-Subsoil Fold	8R-38	MFWD 225	71,000	150	12	0.080	1.44	3.21	2.07	0.77	7.51	4.61	6.03	18.16	
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	100,200	150	12	0.053	0.96	2.14	1.94	0.51	5.57	4.33	4.01	13.92	
Bed-Subsoil Fold	12R-38	MFWD 225	100,200	150	12	0.053	0.96	2.14	1.94	0.51	5.57	4.33	4.01	13.92	
Bed-Subsoil Rigid	4R-30	MFWD 225	26,100	150	12	0.204	3.66	8.14	1.92	1.97	15.70	4.29	15.25	35.26	
Bed-Subsoil Rigid	4R-38	MFWD 225	27,800	150	12	0.160	2.88	6.40	1.61	1.55	12.46	3.60	12.01	28.08	
Bed-Subsoil Rigid	6R-30	MFWD 225	36,300	150	12	0.136	2.44	5.42	1.78	1.31	10.97	3.98	10.17	25.12	
Bed-Subsoil Rigid	6R-38	MFWD 225	37,700	150	12	0.107	1.92	4.28	1.46	1.03	8.71	3.26	8.03	20.01	
Bed-Subsoil Rigid	8R-30	MFWD 225	48,500	150	12	0.102	1.83	4.07	1.78	0.98	8.67	3.99	7.63	20.30	
Bed-Subsoil Rigid	8R-38	MFWD 225	50,100	150	12	0.080	1.44	3.21	1.46	0.77	6.90	3.25	6.03	16.19	
Bed/Disk (Hipper)	4R-38	MFWD 150	15,700	160	10	0.147	2.64	3.92	0.57	0.78	7.93	1.91	5.90	15.76	
Bed/Disk (Hipper)	6R-38	MFWD 170	23,900	160	10	0.098	1.77	2.97	0.58	0.61	5.95	1.94	4.79	12.69	
Bed/Disk (Hipper)	8R-30	MFWD 190	33,100	160	10	0.093	1.68	3.15	0.77	0.72	6.33	2.56	5.57	14.47	
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	114,000	160	10	0.049	0.88	1.65	1.40	0.37	4.33	4.64	2.93	11.91	
Bed/Disk (Hipper)	12R-30	MFWD 225	87,500	160	10	0.062	1.12	2.48	1.36	0.60	5.58	4.51	4.66	14.76	
Bed/Disk (Hipper)	12R-38	MFWD 225	114,000	160	10	0.049	0.88	1.96	1.40	0.47	4.73	4.64	3.68	13.06	
Bed/Disk (Hipper)	16R40	MFWD 300	135,000	160	10	0.035	0.63	1.87	1.19	0.39	4.10	3.94	3.05	11.10	
Bed/Disk (Hipper) Fl	8R-38	MFWD 190	45,800	160	10	0.074	1.32	2.49	0.84	0.56	5.24	2.80	4.40	12.45	
Bed/Disk (Hipper) Rd	8R-38	MFWD 190	36,100	160	10	0.074	1.32	2.49	0.66	0.56	5.06	2.21	4.40	11.67	
Bed/Disk w/roller	8R-30	MFWD 190	59,900	160	10	0.093	1.68	3.15	1.40	0.72	6.96	4.63	5.57	17.17	
Bed/Disk w/roller	8R-38	MFWD 190	68,500	160	10	0.074	1.32	2.49	1.26	0.56	5.66	4.19	4.40	14.26	
Bed/Disk w/roller	12R-30/40	MFWD 225	113,000	160	10	0.062	1.12	2.48	1.76	0.60	5.98	5.83	4.66	16.48	
Bed/Lister	4R-38	MFWD 150	31,900	160	8	0.228	4.09	6.06	1.70	1.22	13.09	6.60	9.13	28.83	
Bed/Lister	6R-38	MFWD 150	36,000	160	8	0.120	2.15	3.19	1.01	0.64	7.00	3.92	4.80	15.73	
Bed/Lister	8R-30	MFWD 190	48,300	160	8	0.114	2.04	3.84	1.29	0.87	8.06	4.99	6.78	19.84	
Bed/Lister	8R-38	MFWD 190	48,700	160	8	0.090	1.61	3.03	1.03	0.69	6.38	3.98	5.36	15.73	
Bed/Lister	8R-38 2x1	MFWD 190	81,500	160	8	0.060	1.07	2.02	1.14	0.46	4.71	4.43	3.57	12.72	
Bed/Lister	12R-38	MFWD 225	81,500	160	8	0.060	1.07	2.39	1.14	0.58	5.20	4.43	4.48	14.12	
Bed/Lister	16R-30	MFWD 225	94,300	160	8	0.035	0.63	1.39	0.77	0.33	3.14	3.00	2.62	8.77	
Bed/Lister	16R40	MFWD 300	99,200	160	8	0.043	0.77	2.28	1.00	0.48	4.54	3.87	3.71	12.13	
Bed/Lister-Roll-Fo	8R-38	MFWD 190	30,100	160	10	0.095	1.72	3.22	0.72	0.73	6.40	2.38	5.70	14.49	
Bed/Lister-Roll-Fo	12R-30	MFWD 225	65,100	160	10	0.080	1.45	3.22	1.31	0.78	6.77	4.34	6.04	17.16	
Bed/Lister-Roll-Fo	12R-38	MFWD 225	48,400	160	10	0.063	1.14	2.54	0.77	0.61	5.07	2.55	4.76	12.39	
Bed/Lister-Roll-Fo	16R-30	MFWD 225	56,800	160	10	0.060	1.08	2.41	0.86	0.58	4.95	2.84	4.53	12.32	
Bed/Lister-Roll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.72	3.22	0.59	0.73	6.28	1.98	5.70	13.96	
Blade-Box	6'-7'	MFWD 105	2,080	200	20	0.020	0.35	0.37	0.01	0.05	0.80	0.02	0.42	1.25	
Boll Buggy	4R-38 (250)	MFWD 190	30,500	200	10	0.257	4.62	8.67	1.96	1.98	17.24	5.06	15.32	37.63	
Boll Buggy	4R-38 (350)	MFWD 190	30,500	200	10	0.257	4.62	8.67	1.96	1.98	17.24	5.06	15.32	37.63	
Boll Buggy	4R2x1 (350)	MFWD 190	30,500	200	10	0.172	3.09	5.79	1.31	1.32	11.52	3.38	10.24	25.15	
Boll Buggy	6R-30 (355)	MFWD 190	30,500	200	10	0.218	3.91	7.34	1.66	1.67	14.59	4.28	12.97	31.86	
Boll Buggy	6R-38 (355)	MFWD 190	30,500	200	10	0.172	3.09	5.79	1.31	1.32	11.52	3.38	10.24	25.15	
Chisel Plow-Folding	24'	MFWD 190	57,300	150	12	0.076	1.37	2.57	1.58	0.58	6.11	3.52	4.54	14.18	
Chisel Plow-Folding	32'	MFWD 225	72,800	150	12	0.057	1.03	2.30	1.51	0.55	5.41	3.38	4.31	13.11	
Chisel Plow-Folding	42'	MFWD 225	86,400	150	12	0.044	0.78	1.75	1.37	0.42	4.34	3.06	3.28	10.69	
Chisel Plow-Folding	50'	MFWD 225	108,100	150	12	0.036	0.66	1.47	1.44	0.35	3.93	3.21	2.76	9.91	
Chisel Plow-Folding	61'	MFWD 225	135,400	150	12	0.030	0.54	1.20	1.48	0.29	3.52	3.30	2.26	9.09	
Chisel Plow-Rigid	10'	MFWD 170	15,300	150	12	0.184	3.31	5.56	1.02	1.16	11.06	2.27	8.98	22.32	
Chisel Plow-Rigid	15'	2WD 130	20,300	150	12	0.123	2.21	2.83	0.90	0.52	6.47	2.01	3.90	12.39	
Chisel Plow-Rigid	20'	MFWD 225	13,400	150	12	0.102	1.84	4.09	0.49	0.99	7.42	1.10	7.67	16.20	
Cultivate	4R-30	2WD 105	21,500	150	10	0.206	3.70	3.83	1.18	0.60	9.32	3.90	4.55	17.78	
Cultivate	4R-38	2WD 105	21,500	150	10	0.162	2.91	3.01	0.93	0.42	7.29	3.07	3.19	13.55	
Cultivate	6R-30	MFWD 150	28,100	150	10	0.137	2.46	3.65	1.03	0.73	7.88	3.40	5.50	16.79	
Cultivate	6R-38	MFWD 150	28,000	150	10	0.108	1.94	2.88	0.81	0.58	6.22	2.67	4.34	13.24	
Cultivate	8R-30	MFWD 190	38,400	150	10	0.103	1.85	3.46	1.05	0.79	7.16	3.48	6.13	16.79	
Cultivate	8R-38	MFWD 190	38,300	150	10	0.073	1.32	2.47	0.75	0.56	5.11	2.48	4.37	11.98	
Cultivate	8R-38 2x1	MFWD 190	59,100	150	10	0.054	0.97	1.82	0.85	0.41	4.07	2.82	3.22	10.12	
Cultivate	12R-30	MFWD 225	62,000	150	10	0.068	1.23	2.73	1.13	0.66	5.77	3.75	5.13	14.66	
Cultivate	12R-38	MFWD 225	59,100	150	10	0.054	0.97	2.16	0.85	0.52	4.51	2.82	4.05	11.39	
Cultivate	16R-30	MFWD 225	83,400	150	10	0.051	0.92	2.05	1.14	0.49	4.62	3.78	3		

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2024 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	--Fixed--	Total Cost
									Imp.	P.U.	Direct			
			dollars	hours	years	hr/ac			\$/acre					
Cultivate & Post	12R-30	MFWD 225	67,800	150	10	0.073	1.64	2.92	1.32	0.70	6.60	4.38	5.47	16.46
Cultivate & Post	12R-38	MFWD 225	64,900	150	10	0.057	1.30	2.30	1.00	0.55	5.16	3.31	4.32	12.80
Cultivate & Post	16R-30	MFWD 225	89,200	150	10	0.055	1.23	2.19	1.30	0.53	5.26	4.32	4.10	13.69
Disk & Incorporate	14'	2WD 130	45,300	200	10	0.149	3.36	3.44	2.03	0.63	9.47	4.48	4.74	18.69
Disk & Incorporate	20'	MFWD 190	96,900	200	10	0.092	2.07	3.10	2.68	0.71	8.58	5.92	5.49	20.00
Disk & Incorporate	24'	MFWD 190	77,700	200	10	0.087	1.96	2.93	2.03	0.67	7.60	4.48	5.19	17.27
Disk & Incorporate	28'	MFWD 225	80,500	200	10	0.074	1.68	2.98	1.80	0.72	7.19	3.98	5.58	16.76
Disk & Incorporate	32'	MFWD 225	95,100	200	10	0.065	1.47	2.60	1.86	0.63	6.58	4.11	4.89	15.58
Disk Harrow	14'	2WD 130	39,400	180	10	0.140	2.51	3.22	1.53	0.59	7.87	4.05	4.44	16.38
Disk Harrow	20'	MFWD 190	91,100	180	10	0.098	1.76	3.30	2.48	0.75	8.30	6.57	5.83	20.71
Disk Harrow	24'	MFWD 190	71,900	180	10	0.081	1.46	2.75	1.63	0.62	6.48	4.32	4.86	15.67
Disk Harrow	28'	MFWD 225	74,700	180	10	0.070	1.25	2.79	1.45	0.67	6.18	3.84	5.23	15.27
Disk Harrow	32'	MFWD 225	89,300	180	10	0.061	1.10	2.44	1.52	0.59	5.66	4.02	4.58	14.27
Disk Harrow	42'	MFWD 225	145,000	180	10	0.046	0.83	1.86	1.88	0.45	5.03	4.98	3.49	13.51
Disk Harrow 40-100hp	14'	2WD 75	23,100	180	10	0.140	2.51	1.86	0.90	0.26	5.54	2.38	1.96	9.88
Disk Heavy	14'	MFWD 150	39,400	180	10	0.145	2.61	3.87	1.59	0.77	8.87	4.22	5.83	18.93
Disk Heavy	20'	MFWD 190	91,100	180	10	0.097	1.74	3.27	2.46	0.74	8.22	6.50	5.78	20.52
Disk Heavy	28'	MFWD 225	74,700	180	10	0.075	1.35	3.01	1.57	0.73	6.67	4.15	5.65	16.47
Disk Ripper	15'	MFWD 225	60,400	180	10	0.136	2.44	5.42	2.28	1.31	11.47	6.04	10.17	27.68
Ditcher		2WD 130	8,760	200	10	0.020	0.35	0.46	0.07	0.08	0.97	0.11	0.63	1.72
Ditcher (1m/160a)		2WD 130	8,760	200	10	0.009	0.16	0.21	0.03	0.03	0.45	0.05	0.29	0.80
Fert Appl (Liquid)	4R-38	MFWD 150	25,400	150	8	0.154	3.47	4.10	2.61	0.82	11.02	3.67	6.18	20.89
Fert Appl (Liquid)	6R-30	MFWD 170	25,300	150	8	0.130	2.94	3.94	2.20	0.82	9.91	3.10	6.36	19.37
Fert Appl (Liquid)	6R-38	MFWD 170	25,300	150	8	0.103	2.32	3.11	1.74	0.64	7.82	2.44	5.02	15.29
Fert Appl (Liquid)	8R-30	MFWD 190	26,300	150	8	0.098	2.20	3.30	1.72	0.75	7.98	2.41	5.83	16.24
Fert Appl (Liquid)	8R-38	MFWD 190	29,500	150	8	0.077	1.74	2.61	1.52	0.59	6.48	2.14	4.61	13.24
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	32,900	150	8	0.051	1.16	1.73	1.13	0.39	4.43	1.59	3.07	9.09
Fert Appl (Liquid)	12R-30	MFWD 225	28,800	150	8	0.078	1.76	3.13	1.50	0.75	7.16	2.11	5.86	15.14
Fert Appl (Liquid)	12R-38	MFWD 225	31,100	150	8	0.051	1.16	2.05	1.07	0.49	4.79	1.50	3.86	10.15
Field Cult & Inc	42'	MFWD 225	91,300	100	10	0.037	0.84	1.50	0.86	0.36	3.58	4.55	2.82	10.95
Field Cult & Inc	50'	MFWD 225	92,600	100	10	0.031	0.71	1.26	0.73	0.30	3.01	3.88	2.36	9.27
Field Cult & Inc Fld	24'	MFWD 170	44,400	100	10	0.066	1.48	1.98	0.73	0.41	4.62	3.88	3.21	11.71
Field Cult & Inc Fld	32'	MFWD 190	67,200	100	10	0.049	1.11	1.66	0.83	0.38	3.99	4.40	2.94	11.34
Field Cult & Inc Rdg	12'	2WD 150	23,000	100	10	0.132	2.97	3.51	0.76	0.56	7.81	4.01	4.25	16.08
Field Cultivate Fld	24'	MFWD 170	38,600	100	10	0.062	1.11	1.87	0.60	0.39	3.98	3.17	3.02	10.17
Field Cultivate Fld	32'	MFWD 190	61,400	100	10	0.046	0.83	1.56	0.71	0.35	3.48	3.78	2.77	10.04
Field Cultivate Fld	42'	MFWD 225	80,900	100	10	0.035	0.63	1.41	0.71	0.34	3.11	3.80	2.65	9.57
Field Cultivate Fld	50'	MFWD 225	82,900	100	10	0.029	0.53	1.18	0.61	0.28	2.63	3.27	2.23	8.13
Field Cultivate Rdg	12'	2WD 150	17,200	100	10	0.124	2.23	3.30	0.53	0.53	6.60	2.82	4.00	13.43
Grain Cart Corn	500 bu	MFWD 190	35,100	200	12	0.025	0.45	0.85	0.24	0.19	1.74	0.53	1.50	3.78
Grain Cart Corn	700 bu	MFWD 190	54,400	200	12	0.025	0.45	0.85	0.37	0.19	1.87	0.83	1.50	4.20
Grain Cart Corn	1000 bu	MFWD 225	74,000	200	12	0.025	0.45	1.00	0.50	0.24	2.21	1.13	1.88	5.23
Grain Cart Rice	500 bu	MFWD 190	35,100	200	12	0.062	1.12	2.10	0.59	0.48	4.29	1.32	3.71	9.33
Grain Cart Rice	700 bu	MFWD 190	54,400	200	12	0.055	0.98	1.85	0.81	0.42	4.07	1.80	3.27	9.14
Grain Cart Rice	1000 bu	MFWD 190	74,000	200	12	0.045	0.82	1.54	0.91	0.35	3.63	2.04	2.72	8.40
Grain Cart Soybean	500 bu	MFWD 190	35,100	200	12	0.025	0.45	0.85	0.24	0.19	1.75	0.54	1.51	3.81
Grain Cart Soybean	700 bu	MFWD 190	54,400	200	12	0.021	0.38	0.71	0.31	0.16	1.57	0.69	1.26	3.53
Grain Cart Soybean	1000 bu	MFWD 190	74,000	200	12	0.021	0.38	0.71	0.42	0.16	1.68	0.94	1.26	3.89
Grain Cart Wht/Sor	500 bu	MFWD 190	35,100	200	12	0.025	0.45	0.85	0.24	0.19	1.75	0.54	1.51	3.81
Grain Cart Wht/Sor	700 bu	MFWD 190	54,400	200	12	0.021	0.38	0.71	0.31	0.16	1.57	0.69	1.26	3.53
Grain Cart Wht/Sor	1000 bu	MFWD 190	74,000	200	12	0.021	0.38	0.71	0.42	0.16	1.68	0.94	1.26	3.89
Grain Drill	10'	2WD 130	42,700	150	8	0.188	5.09	4.34	3.01	0.79	13.24	7.28	5.97	26.51
Grain Drill	12'	2WD 130	51,400	150	8	0.157	4.24	3.61	3.02	0.66	11.55	7.31	4.97	23.84
Grain Drill	15'	MFWD 150	46,800	150	8	0.125	3.39	3.33	2.20	0.67	9.61	5.32	5.03	19.96
Grain Drill	20'	MFWD 170	53,500	150	8	0.094	2.54	2.83	1.89	0.59	7.86	4.56	4.58	17.01
Grain Drill	24'	MFWD 190	80,300	150	8	0.078	2.12	2.64	2.36	0.60	7.73	5.71	4.67	18.11
Grain Drill	30'	MFWD 225	96,600	150	8	0.062	1.69	2.50	2.27	0.60	7.08	5.49	4.69	17.27
Grain Drill	35'	MFWD 225	114,000	150	8	0.053	1.45	2.14	2.30	0.52	6.42	5.56	4.02	16.00
Grain Drill & Pre	10'	2WD 130	48,500	150	8	0.203	5.48	4.67	3.69	0.85	14.71	8.91	6.43	30.06
Grain Drill & Pre	12'	2WD 130	57,200	150	8	0.169	4.56	3.89	3.62	0.71	12.81	8.76	5.36	26.93
Grain Drill & Pre	15'	MFWD 150	52,600	150	8	0.135	3.65	3.59	2.67	0.72	10.64	6.44	5.41	22.50
Grain Drill & Pre	20'	MFWD 170	59,300	150	8	0.101	2.74	3.05	2.25	0.63	8.69	5.45	4.93	19.07
Grain Drill & Pre	24'	MFWD 190	86,100	150	8	0.084	2.28	2.84	2.73	0.65	8.51	6.59	5.03	20.14
Grain Drill & Pre	30'	MFWD 225	102,000	150	8	0.067	1.82	2.69	2.58	0.65	7.76	6.24	5.05	19.07
Grain Drill & Pre	35'	MFWD 225	120,000	150	8	0.058	1.56	2.31	2.61	0.56	7.04	6.30	4.33	17.68
Grain Drill & Pre T	8R-38	MFWD 225	57,000	150	8	0.062	1.69	2.50	1.34	0.60	6.15	3.24	4.69	14.09
Harrow - Folding	24'	MFWD 190	13,800	200	10	0.064	1.16	2.17	0.31	0.49	4.14	0.59	3.84	8.58
Harrow - Folding	30'	MFWD 190	15,300	200	10	0.051	0.92	1.74	0.27	0.39	3.34	0.52	3.07	6.94
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.69	1.30	0.28	0.29	2.59	0.54	2.30	5.44
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.58	1.28	0.29	0.31	2.47	0.55	2.41	5.44
Header - Corn	6R-30	265 hp	72,300	300	8	0.170	3.05	7.98	3.07	8.21	22.33	5.76	39.32	67.41
Header - Corn	6R-38	265 hp	73,500	300	8	0.134	2.41	6.30	2.47	6.48	17.67	4.62	31.04	53.34
Header - Corn	8R-30	265 hp	99,100	300	8	0.127	2.29	5.99	3.16	6.15	17.60	5.92	29.49	53.02
Header - Corn	8R-38	325 hp	87,300	300	8	0.100	1.81	5.81	2.20	5.57	15.39	4.12	26.68	4

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2024 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total	--Fixed---		Total
									Imp.	P.U.	Direct		Imp.	P.U.	
			dollars	hours	years	hr/ac			-----\$/acre-----						
Header - Draper (CL)	36' Rigid	355 hp	89,900	300	8	0.141	2.53	8.86	2.90	8.06	22.36	5.73	38.61	66.72	
Header - Draper (CL)	40' Rigid	425 hp	95,200	300	8	0.126	2.27	9.55	2.76	7.40	22.00	5.46	35.45	62.91	
Header - Draper (SL)	25' Rigid	325 hp	83,200	300	8	0.176	3.15	10.12	3.35	9.71	26.35	6.62	46.52	79.51	
Header - Draper (SL)	30' Rigid	325 hp	85,600	300	8	0.146	2.63	8.44	2.87	8.09	22.04	5.68	38.77	66.50	
Header - Draper (SL)	36' Rigid	355 hp	89,900	300	8	0.122	2.19	7.68	2.51	6.98	19.38	4.97	33.46	57.82	
Header - Draper (SL)	40' Rigid	425 hp	95,200	300	8	0.110	1.97	8.27	2.39	6.41	19.06	4.73	30.72	54.53	
Header - RiceStrp(CL)	20'	265 hp	50,600	300	8	0.253	4.55	11.91	3.21	12.24	31.91	6.01	58.62	96.55	
Header - RiceStrp(CL)	24'	325 hp	54,000	300	8	0.211	3.79	12.17	2.85	11.67	30.50	5.34	55.92	91.77	
Header - RiceStrp(CL)	32'	325 hp	70,800	300	8	0.158	2.84	9.13	2.80	8.75	23.54	5.25	41.93	70.73	
Header - RiceStrp(SL)	20'	265 hp	50,600	300	8	0.220	3.94	10.32	2.78	10.61	27.66	5.20	50.80	83.67	
Header - RiceStrp(SL)	24'	325 hp	54,000	300	8	0.183	3.28	10.55	2.47	10.12	26.43	4.63	48.46	79.53	
Header - RiceStrp(SL)	32'	325 hp	70,800	300	8	0.137	2.46	7.91	2.43	7.59	20.40	4.55	36.34	61.30	
Header - Soybean	22' Flex	265 hp	42,600	300	8	0.116	2.08	5.44	1.23	5.59	14.36	2.31	26.81	43.49	
Header - Soybean	25' Flex	325 hp	42,000	300	8	0.102	1.83	5.88	1.07	5.64	14.42	2.00	27.00	43.44	
Header - Soybean	30' Flex	325 hp	48,600	300	8	0.085	1.52	4.89	1.03	4.70	12.16	1.93	22.50	36.60	
Header - Soybean	35' Flex	355 hp	58,300	300	8	0.072	1.30	4.58	1.06	4.17	11.13	1.99	19.98	33.10	
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	2.08	5.44	0.57	5.59	13.70	1.07	26.81	41.59	
Header Wheat/Sorghum	25' Rigid	325 hp	41,800	300	8	0.102	1.83	5.88	1.06	5.64	14.42	1.99	27.00	43.42	
Header Wheat/Sorghum	30' Rigid	325 hp	55,100	300	8	0.085	1.52	4.89	1.17	4.70	12.30	2.19	22.50	37.00	
Land Plane	50'x16'	MFWD 190	13,500	200	10	0.151	2.72	5.10	0.40	1.16	9.39	1.35	9.01	19.76	
Levee Pull & Seed	8 Blade	MFWD 170	17,600	100	10	0.003	0.06	0.10	0.01	0.02	0.20	0.08	0.17	0.46	
Levee Pull (Im/80a)	8 blade	MFWD 170	8,370	100	10	0.003	0.06	0.10	0.00	0.02	0.19	0.03	0.17	0.41	
Levee Splitter (1/80)	32"	MFWD 150	9,220	100	10	0.004	0.07	0.11	0.00	0.02	0.21	0.05	0.16	0.43	
Module Builder	4R-38 (250)	MFWD 190	34,700	200	10	0.257	6.96	8.67	2.23	1.98	19.85	5.76	15.32	40.93	
Module Builder	4R-38 (350)	MFWD 190	34,700	200	10	0.257	6.96	8.67	2.23	1.98	19.85	5.76	15.32	40.93	
Module Builder	4R2x1 (350)	MFWD 190	34,700	200	10	0.172	4.65	5.79	1.49	1.32	13.26	3.85	10.24	27.36	
Module Builder	6R-30 (355)	MFWD 190	34,700	200	10	0.218	5.89	7.34	1.89	1.67	16.80	4.87	12.97	34.66	
Module Builder	6R-38 (355)	MFWD 190	34,700	200	10	0.172	4.65	5.79	1.49	1.32	13.26	3.85	10.24	27.36	
NT Grain Drill	10'	2WD 130	42,400	150	8	0.235	6.36	5.42	3.74	0.99	16.53	9.04	7.46	33.04	
NT Grain Drill	12'	2WD 130	57,200	150	8	0.163	4.41	3.76	3.51	0.69	12.39	8.47	5.18	26.05	
NT Grain Drill	15'	MFWD 150	73,300	150	8	0.130	3.53	3.47	3.59	0.69	11.31	8.68	5.23	25.24	
NT Grain Drill	20'	MFWD 170	98,900	150	8	0.098	2.65	2.95	3.64	0.61	9.86	8.79	4.77	23.43	
NT Grain Drill	24'	MFWD 190	111,300	150	8	0.081	2.20	2.75	3.41	0.62	9.00	8.24	4.86	22.12	
NT Grain Drill	30'	MFWD 225	110,200	150	8	0.065	1.76	2.60	2.70	0.63	7.71	6.53	4.89	19.13	
NT Grain Drill & Pre	10'	2WD 130	48,200	150	8	0.211	5.71	4.86	3.82	0.89	15.29	9.22	6.70	31.23	
NT Grain Drill & Pre	12'	2WD 130	63,000	150	8	0.176	4.75	4.05	4.16	0.74	13.72	10.05	5.58	29.36	
NT Grain Drill & Pre	15'	MFWD 150	79,100	150	8	0.141	3.80	3.74	4.18	0.75	12.49	10.09	5.64	28.23	
NT Grain Drill & Pre	20'	MFWD 170	105,000	150	8	0.105	2.85	3.18	4.16	0.66	10.86	10.05	5.13	26.06	
NT Grain Drill & Pre	24'	MFWD 190	117,000	150	8	0.088	2.37	2.96	3.86	0.67	9.88	9.33	5.24	24.46	
NT Grain Drill & Pre	30'	MFWD 225	116,000	150	8	0.070	1.90	2.80	3.06	0.68	8.46	7.40	5.26	21.13	
NT Plant&Pre-Folding	8R-38	MFWD 170	83,600	150	8	0.083	2.25	2.51	2.62	0.52	7.92	6.32	4.06	18.30	
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	119,000	150	8	0.055	1.50	1.67	2.48	0.34	6.01	5.99	2.70	14.71	
NT Plant&Pre-Folding	12R-20	MFWD 190	82,800	150	8	0.105	2.85	3.55	3.28	0.81	10.51	7.92	6.28	24.72	
NT Plant&Pre-Folding	12R-30	MFWD 190	108,000	150	8	0.070	1.90	2.37	2.85	0.54	7.67	6.89	4.19	18.75	
NT Plant&Pre-Folding	12R-38	MFWD 190	119,000	150	8	0.055	1.50	1.87	2.48	0.42	6.28	5.99	3.30	15.59	
NT Plant&Pre-Folding	16R-30	MFWD 190	193,000	150	8	0.052	1.42	1.77	3.82	0.40	7.44	9.23	3.14	19.82	
NT Plant&Pre-Folding	23R-15	MFWD 190	218,000	150	8	0.073	1.98	2.47	6.00	0.56	11.02	14.49	4.36	29.88	
NT Plant&Pre-Folding	24R-20	MFWD 190	254,000	150	8	0.052	1.42	1.77	5.03	0.40	8.65	12.15	3.14	23.95	
NT Plant&Pre-Folding	24R-30	MFWD 190	227,000	150	8	0.035	0.95	1.18	3.00	0.27	5.41	7.24	2.09	14.75	
NT Plant&Pre-Folding	31R-15	MFWD 225	267,000	150	8	0.054	1.47	2.17	5.47	0.52	9.65	13.21	4.08	26.94	
NT Plant&Pre-Folding	32R-15	MFWD 225	272,000	150	8	0.052	1.42	2.10	5.39	0.51	9.43	13.02	3.94	26.40	
NT Plant&Pre-Rigid	4R-30	2WD 130	41,900	150	8	0.211	5.71	4.86	3.32	0.89	14.79	8.02	6.70	29.52	
NT Plant&Pre-Rigid	4R-38	2WD 130	37,500	150	8	0.166	4.49	3.83	2.34	0.70	11.37	5.65	5.27	22.31	
NT Plant&Pre-Rigid	6R-30	MFWD 150	50,800	150	8	0.141	3.80	3.74	2.68	0.75	10.99	6.48	5.64	23.12	
NT Plant&Pre-Rigid	6R-38	MFWD 150	49,500	150	8	0.111	3.00	2.95	2.06	0.59	8.62	4.98	4.45	18.06	
NT Plant&Pre-Rigid	8R-30	MFWD 170	65,200	150	8	0.105	2.85	3.18	2.58	0.66	9.29	6.24	5.13	20.67	
NT Plant&Pre-Rigid	8R-38	MFWD 170	62,300	150	8	0.083	2.25	2.51	1.95	0.52	7.25	4.71	4.06	16.02	
NT Plant&Pre-Rigid	11R-15	MFWD 170	70,000	150	8	0.143	3.88	4.33	3.77	0.90	12.89	9.11	6.99	29.00	
NT Plant&Pre-Rigid	11R-20	MFWD 170	73,800	150	8	0.115	3.12	3.47	3.19	0.72	10.52	7.72	5.61	23.86	
NT Plant&Pre-Rigid	12R-20	MFWD 190	78,700	150	8	0.105	2.85	3.55	3.12	0.81	10.34	7.53	6.28	24.17	
NT Plant&Pre-Rigid	12R-30	MFWD 190	100,400	150	8	0.070	1.90	2.37	2.65	0.54	7.47	6.40	4.19	18.07	
NT Plant&Pre-Rigid	15R-15	MFWD 190	96,800	150	8	0.113	3.05	3.80	4.10	0.86	11.83	9.91	6.72	28.47	
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	173,000	150	8	0.055	1.50	2.21	3.61	0.53	7.87	8.71	4.15	20.74	
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	135,300	150	8	0.083	2.25	3.33	4.24	0.80	10.63	10.24	6.24	27.12	
NT Plant-Folding	8R-38	MFWD 170	77,700	150	8	0.077	2.09	2.33	2.26	0.48	7.18	5.46	3.77	16.41	
NT Plant-Folding	8R-38 2x1	MFWD 170	109,000	150	8	0.051	1.39	1.55	2.11	0.32	5.38	5.10	2.51	13.00	
NT Plant-Folding	12R-20	MFWD 190	77,500	150	8	0.098	2.65	3.30	2.85	0.75	9.56	6.88	5.83	22.29	
NT Plant-Folding	12R-30	MFWD 190	97,600	150	8	0.065	1.76	2.20	2.39	0.50	6.87	5.78	3.89	16.54	
NT Plant-Folding	12R-38	MFWD 190	109,000	150	8	0.051	1.39	1.73	2.11	0.39	5.64	5.10	3.07	13.81	
NT Plant-Folding	16R-30	MFWD 190	182,000	150	8	0.049	1.32	1.65	3.35	0.37	6.70	8.09	2.91	17.71	
NT Plant-Folding	23R-15	MFWD 190	207,000	150	8	0.068	1.84	2.29	5.29	0.52	9.95	12.77	4.05	26.78	
NT Plant-Folding	24R-20	MFWD 190	244,000	150	8	0.049	1.32	1.65	4.49	0.37	7.84	10.84	2.91	21.61	
NT Plant															

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2024 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Imp.	--Fixed---		Total Cost						
									Imp.	P.U.	Direct	Imp.	P.U.							
				dollars	hours	years	hr/ac		-----\$/acre-----											
NT Plant-Rigid	8R-30	MFWD 170	59,400	150	8	0.098	2.65	2.95	2.18	0.61	8.41	5.28	4.77	18.46						
NT Plant-Rigid	8R-38	MFWD 170	56,500	150	8	0.077	2.09	2.33	1.64	0.48	6.56	3.97	3.77	14.30						
NT Plant-Rigid	11R-15	MFWD 170	64,200	150	8	0.133	3.60	4.02	3.21	0.83	11.68	7.76	6.49	25.94						
NT Plant-Rigid	11R-20	MFWD 170	68,000	150	8	0.107	2.89	3.23	2.73	0.67	9.54	6.60	5.21	21.36						
NT Plant-Rigid	12R-20	MFWD 190	72,900	150	8	0.098	2.65	3.30	2.68	0.75	9.39	6.48	5.83	21.71						
NT Plant-Rigid	12R-30	MFWD 190	90,000	150	8	0.065	1.76	2.20	2.20	0.50	6.68	5.33	3.89	15.91						
NT Plant-Rigid	15R-15	MFWD 190	86,500	150	8	0.105	2.83	3.53	3.40	0.80	10.58	8.22	6.24	25.05						
NT Plant-TwinRow	12R-30/40	MFWD 225	163,000	150	8	0.051	1.39	2.05	3.15	0.49	7.11	7.62	3.86	18.60						
NT Plant-TwinRow	8R-30/40	MFWD 225	130,000	150	8	0.077	2.09	3.09	3.78	0.74	9.72	9.13	5.79	24.65						
Peanut Cond. & Lifter	6-Row	MFWD 190	15,200	300	20	0.100	1.79	3.36	0.25	0.76	6.18	0.51	5.94	12.64						
Peanut Conditioner	6-Row	MFWD 190	24,800	300	20	0.100	1.79	3.36	0.49	0.76	6.42	0.78	5.94	13.15						
Peanut Dig/Invertor	4R-30	MFWD 190	45,300	300	15	0.235	4.23	7.93	2.65	1.81	16.63	4.09	14.02	34.75						
Peanut Dig/Invertor	4R-38	MFWD 190	45,300	300	15	0.186	3.34	6.26	2.09	1.43	13.13	3.23	11.07	27.44						
Peanut Dig/Invertor	6R-38	MFWD 190	64,100	300	15	0.124	2.22	4.17	1.39	0.95	8.74	3.05	7.37	19.17						
Peanut Dump Cart	6-Row	MFWD 190	70,000	300	20	0.310	5.56	10.42	1.26	2.38	19.63	7.19	18.43	45.26						
Peanut Harvester	4R-30	MFWD 225	175,000	300	20	0.849	15.24	33.86	8.42	8.20	65.74	47.27	63.48	176.50						
Peanut Harvester	4R-38	MFWD 225	175,000	300	20	0.934	16.76	37.23	9.26	9.02	72.29	53.10	69.79	195.18						
Peanut Harvester	6R-38	MFWD 225	194,000	300	20	0.625	11.21	24.89	5.86	6.03	48.00	39.36	46.67	134.05						
Peanut Lifter	6-Row	MFWD 225	9,960	300	20	0.100	1.79	3.98	0.20	0.96	6.94	0.31	7.46	14.73						
Peanut Plt&Pre Fold.	12R-38	MFWD 190	107,000	150	8	0.080	2.17	2.70	3.22	0.61	8.72	7.78	4.78	21.29						
Peanut Plt&Pre Rigid	8R-30	MFWD 190	57,100	150	8	0.152	4.12	5.13	3.27	1.17	13.71	7.89	9.08	30.69						
Peanut Plt&Pre Rigid	8R-38	MFWD 190	54,200	150	8	0.120	3.26	4.06	2.45	0.92	10.70	5.92	7.18	23.81						
Peanut Plt&PreTwin	8R-30/40	MFWD 190	127,000	150	8	0.120	3.26	4.06	5.75	0.92	14.00	13.88	7.18	35.06						
Pipe Spool 160ac	1/4m roll	2WD 130	6,480	15	12	0.003	0.11	0.07	0.01	0.01	0.20	0.16	0.09	0.47						
Pipe Trailer 1m/160a	30'	2WD 130	2,700	100	15	0.003	0.20	0.08	0.00	0.01	0.30	0.01	0.11	0.43						
Plant & Pre-Folding	8R-38	MFWD 170	75,400	150	8	0.080	2.16	2.41	2.26	0.50	7.35	5.47	3.89	16.73						
Plant & Pre-Folding	8R-38 2x1	MFWD 170	107,000	150	8	0.053	1.44	1.60	2.14	0.33	5.53	5.17	2.59	13.30						
Plant & Pre-Folding	12R-20	MFWD 190	70,600	150	8	0.101	2.74	3.41	2.68	0.78	9.62	6.48	6.03	22.15						
Plant & Pre-Folding	12R-30	MFWD 190	95,700	150	8	0.067	1.82	2.27	2.42	0.52	7.05	5.86	4.02	16.94						
Plant & Pre-Folding	12R-38	MFWD 190	107,000	150	8	0.053	1.44	1.79	2.14	0.41	5.79	5.17	3.17	14.14						
Plant & Pre-Folding	16R-30	MFWD 190	177,000	150	8	0.050	1.37	1.70	3.36	0.39	6.83	8.13	3.01	17.99						
Plant & Pre-Folding	23R-15	MFWD 190	194,000	150	8	0.070	1.90	2.37	5.12	0.54	9.94	12.38	4.19	26.52						
Plant & Pre-Folding	24R-20	MFWD 190	229,000	150	8	0.050	1.37	1.70	4.35	0.39	7.82	10.52	3.01	21.37						
Plant & Pre-Folding	24R-30	MFWD 190	202,000	150	8	0.033	0.91	1.13	2.56	0.26	4.87	6.18	2.01	13.07						
Plant & Pre-Folding	31R-15	MFWD 225	235,000	150	8	0.052	1.41	2.09	4.62	0.50	8.63	11.16	3.91	23.71						
Plant & Pre-Folding	32R-15	MFWD 225	239,000	150	8	0.050	1.37	2.02	4.55	0.49	8.43	10.98	3.79	23.20						
Plant & Pre-Rigid	4R-30	2WD 130	37,800	150	8	0.203	5.48	4.67	2.87	0.85	13.89	6.94	6.43	27.27						
Plant & Pre-Rigid	4R-38	2WD 130	33,400	150	8	0.159	4.31	3.68	2.00	0.67	10.67	4.83	5.06	20.57						
Plant & Pre-Rigid	6R-30	MFWD 150	44,700	150	8	0.135	3.65	3.59	2.26	0.72	10.24	5.47	5.41	21.13						
Plant & Pre-Rigid	6R-38	MFWD 150	43,300	150	8	0.106	2.88	2.83	1.73	0.57	8.03	4.18	4.27	16.49						
Plant & Pre-Rigid	8R-30	MFWD 170	57,100	150	8	0.101	2.74	3.05	2.17	0.63	8.61	5.24	4.93	18.79						
Plant & Pre-Rigid	8R-38	MFWD 170	54,200	150	8	0.080	2.16	2.41	1.63	0.50	6.71	3.93	3.89	14.55						
Plant & Pre-Rigid	11R-15	MFWD 170	58,800	150	8	0.148	4.00	4.46	3.26	0.93	12.66	7.88	7.20	27.75						
Plant & Pre-Rigid	11R-20	MFWD 170	62,600	150	8	0.110	2.99	3.34	2.60	0.69	9.63	6.28	5.39	21.31						
Plant & Pre-Rigid	12R-20	MFWD 190	66,500	150	8	0.101	2.74	3.41	2.53	0.78	9.47	6.11	6.03	21.61						
Plant & Pre-Rigid	12R-30	MFWD 190	88,100	150	8	0.067	1.82	2.27	2.23	0.52	6.86	5.39	4.02	16.28						
Plant & Pre-Rigid	15R-15	MFWD 190	81,500	150	8	0.108	2.93	3.65	3.31	0.83	10.73	8.01	6.45	25.20						
Plant & Pre-TwinRow	12R-30/40	MFWD 225	161,000	150	8	0.053	1.44	2.12	3.22	0.51	7.31	7.78	3.99	19.09						
Plant & Pre-TwinRow	8R-30/40	MFWD 225	127,000	150	8	0.080	2.16	3.19	3.82	0.77	9.96	9.22	5.99	25.18						
Plant - Folding	8R-38	MFWD 170	69,600	150	8	0.074	2.01	2.24	1.94	0.46	6.66	4.69	3.62	14.98						
Plant - Folding	8R-38 2x1	MFWD 170	96,500	150	8	0.049	1.33	1.49	1.79	0.31	4.94	4.33	2.41	11.68						
Plant - Folding	12R-20	MFWD 190	65,200	150	8	0.094	2.54	3.17	2.30	0.72	8.74	5.56	5.60	19.91						
Plant - Folding	12R-30	MFWD 190	85,400	150	8	0.062	1.69	2.11	2.01	0.48	6.30	4.85	3.73	14.90						
Plant - Folding	12R-38	MFWD 190	96,500	150	8	0.049	1.33	1.66	1.79	0.38	5.18	4.33	2.95	12.47						
Plant - Folding	16R-30	MFWD 190	166,000	150	8	0.047	1.27	1.58	2.93	0.36	6.15	7.08	2.80	16.04						
Plant - Folding	23R-15	MFWD 190	184,000	150	8	0.065	1.76	2.20	4.51	0.50	8.99	10.90	3.89	23.79						
Plant - Folding	24R-20	MFWD 190	219,000	150	8	0.047	1.27	1.58	3.87	0.36	7.09	9.34	2.80	19.24						
Plant - Folding	24R-30	MFWD 190	184,000	150	8	0.031	0.84	1.05	2.16	0.24	4.31	5.23	1.86	11.41						
Plant - Folding	31R-15	MFWD 225	225,000	150	8	0.048	1.31	1.94	4.11	0.47	7.83	9.92	3.63	21.40						
Plant - Folding	32R-15	MFWD 225	229,000	150	8	0.047	1.27	1.87	4.04	0.45	7.65	9.77	3.52	20.94						
Plant - Rigid	4R-30	2WD 130	32,000	150	8	0.188	5.09	4.34	2.26	0.79	12.49	5.46	5.97	23.92						
Plant - Rigid	4R-38	2WD 130	27,600	150	8	0.148	4.00	3.41	1.53	0.62	9.59	3.70	4.70	18.00						
Plant - Rigid	6R-30	MFWD 150	38,900	150	8	0.125	3.39	3.33	1.83	0.67	9.23	4.42	5.03	18.69						
Plant - Rigid	6R-38	MFWD 150	37,500	150	8	0.099	2.67	2.63	1.39	0.53	7.24	3.36	3.97	14.58						
Plant - Rigid	8R-30	MFWD 170	51,300	150	8	0.094	2.54	2.83	1.81	0.59	7.79	4.37	4.58	16.74						
Plant - Rigid	8R-38	MFWD 170	48,400	150	8	0.074	2.01	2.24	1.35	0.46	6.07	3.26	3.62	12.96						
Plant - Rigid	11R-15	MFWD 170	53,000	150	8	0.137	3.71	4.14	2.73	0.86	11.45	6.60	6.68	24.74						
Plant - Rigid	11R-20	MFWD 170	56,800	150	8	0.103	2.78	3.10	2.19	0.64	8.72	5.29	5.00	19.02						
Plant - Rigid	12R-20	MFWD 190	60,700	150	8	0.094	2.54	3.17	2.14	0.72	8.58	5.18	5.60	19.37						
Plant - Rigid	12R-30	MFWD 190	77,800	150	8	0.062	1.69	2.11	1.83	0.48	6.12	4.42	3.73	14.29						
Plant - Rigid	15R-15	2WD 150	71,200	150	8	0.094	2.54	2.50	2.51	0.40	7.97	6.07	3.03	17.08						
Plant - TwinRow	12R-30/40	MFWD 225	150,000	150	8	0.0														

Appendix Table 3. Towed Equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2024 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---			Total	--Fixed--		Total
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost	
dollars hours years hr/ac -----\$/acre-----															
Rotary Cutter	7'	MFWD 130	6580	185	10	0.168	3.02	3.87	0.89	0.89	8.69	0.79	6.73	16.21	
Rotary Cutter	12'	2WD 150	20,200	185	10	0.098	1.76	2.60	1.60	0.42	6.40	1.41	3.15	10.97	
Rotary Cutter-Flex	15'	MFWD 150	27,300	185	10	0.078	1.40	2.08	1.73	0.41	5.65	1.53	3.14	10.33	
Rotary Cutter-Flex	20'	MFWD 150	40,500	185	10	0.058	1.05	1.56	1.93	0.31	4.87	1.70	2.35	8.93	
Row Cond & Inc-Fold.	26'	MFWD 190	37,600	100	10	0.063	1.42	2.13	0.59	0.48	4.64	3.15	3.77	11.57	
Row Cond & Inc-Fold.	38'	MFWD 225	49,800	100	10	0.043	0.97	1.72	0.54	0.41	3.66	2.85	3.24	9.76	
Row Cond & Inc-Rigid	13'	2WD 130	18,700	100	10	0.126	2.85	2.92	0.59	0.53	6.90	3.13	4.02	14.06	
Row Cond & Inc-Rigid	21'	2WD 170	26,900	100	10	0.078	1.76	2.36	0.52	0.29	4.95	2.79	2.25	10.00	
Row Cond & Inc-Rigid	26'	MFWD 190	29,300	100	10	0.026	0.59	0.89	0.19	0.20	1.89	1.03	1.58	4.50	
Row Cond Folding	26'	MFWD 225	31,900	100	10	0.059	1.07	2.37	0.47	0.57	4.50	2.51	4.46	11.48	
Row Cond Folding	38'	MFWD 225	40,100	100	10	0.040	0.73	1.62	0.40	0.39	3.16	2.16	3.05	8.38	
Row Cond Rigid	13'	2WD 130	12,900	100	10	0.119	2.14	2.74	0.38	0.50	5.78	2.03	3.78	11.60	
Row Cond Rigid	21'	2WD 170	21,200	100	10	0.073	1.32	2.22	0.39	0.27	4.21	2.07	2.12	8.41	
Row Cond Rigid	26'	MFWD 190	23,600	100	10	0.059	1.07	2.00	0.35	0.45	3.89	1.86	3.55	9.30	
Row Cond./Roll-Fol	30'	MFWD 190	69,000	160	10	0.062	1.12	2.10	1.07	0.48	4.78	3.56	3.71	12.06	
Row Cond./Roll-Fold.	26'	MFWD 190	38,000	160	10	0.072	1.29	2.42	0.68	0.55	4.95	2.26	4.28	11.51	
Row Cond./Roll-Fold.	40'	MFWD 225	57,100	160	10	0.046	0.84	1.86	0.66	0.45	3.83	2.21	3.50	9.54	
Row Cond./Roll-Rig	21'	MFWD 190	38,400	160	10	0.089	1.60	3.00	0.85	0.68	6.14	2.83	5.30	14.29	
Row Cond./Roll-Rig	26'	MFWD 190	42,300	160	10	0.072	1.29	2.42	0.76	0.55	5.03	2.52	4.28	11.84	
Spin Spreader	5 ton	MFWD 190	14,500	100	8	0.042	1.13	1.41	0.34	0.32	3.21	0.85	2.50	6.57	
Spray (ATV Ropewick)	75"	800 CC	730	200	8	0.260	5.85	0.58	0.08	0.49	7.02	0.13	2.37	9.53	
Spray (ATV)	20'	800 CC	1,440	200	8	0.084	1.90	0.19	0.05	0.16	2.30	0.08	0.77	3.16	
Spray (Band)	27' Fold	MFWD 170	5,810	200	8	0.062	1.40	1.88	0.17	0.39	3.85	0.25	3.04	7.16	
Spray (Band)	40' Fold	MFWD 170	10,350	200	8	0.042	0.95	1.27	0.20	0.26	2.69	0.30	2.05	5.05	
Spray (Band)	50' Fold	MFWD 170	9,670	200	8	0.033	0.76	1.01	0.15	0.21	2.14	0.22	1.64	4.01	
Spray (Band)	60' Fold	MFWD 170	18,600	200	8	0.028	0.63	0.84	0.24	0.17	1.90	0.36	1.37	3.64	
Spray (Bcast/HB)	13' Rigid	MFWD 150	8,890	200	8	0.130	2.92	3.45	0.54	0.69	7.62	0.81	5.20	13.64	
Spray (Bcast/HB)	20' Rigid	MFWD 150	10,400	200	8	0.084	1.90	2.24	0.41	0.45	5.01	0.61	3.38	9.01	
Spray (Bcast/HB)	27' Fold	MFWD 170	13,000	200	8	0.062	1.40	1.88	0.38	0.39	4.07	0.57	3.04	7.68	
Spray (Bcast/HB)	27' Rigid	MFWD 170	12,200	200	8	0.062	1.40	1.88	0.35	0.39	4.04	0.53	3.04	7.62	
Spray (Bcast/HB)	30' Fold	MFWD 170	18,700	200	8	0.056	1.26	1.69	0.49	0.35	3.81	0.74	2.74	7.29	
Spray (Bcast/HB)	40' Fold	MFWD 170	22,600	200	8	0.042	0.95	1.27	0.44	0.26	2.93	0.67	2.05	5.66	
Spray (Broadcast)	27'	MFWD 170	5,810	200	8	0.062	1.40	1.88	0.17	0.39	3.85	0.25	3.04	7.16	
Spray (Broadcast)	40'	MFWD 170	10,350	200	8	0.042	0.95	1.27	0.20	0.26	2.69	0.30	2.05	5.05	
Spray (Broadcast)	50'	MFWD 170	9,670	200	8	0.033	0.76	1.01	0.15	0.21	2.14	0.22	1.64	4.01	
Spray (Broadcast)	60'	MFWD 170	18,600	200	8	0.028	0.63	0.84	0.24	0.17	1.90	0.36	1.37	3.64	
Spray (Direct/Hood)	8R-30	MFWD 170	19,000	200	8	0.084	1.90	2.54	0.75	0.53	5.73	1.12	4.11	10.97	
Spray (Direct/Hood)	8R-38	MFWD 170	19,800	200	8	0.066	1.50	2.01	0.62	0.42	4.55	0.92	3.24	8.73	
Spray (Direct/Hood)	12R-30	MFWD 170	26,100	200	8	0.056	1.26	1.69	0.69	0.35	4.01	1.03	2.74	7.78	
Spray (Direct/Hood)	12R-38	MFWD 170	27,200	200	8	0.044	1.00	1.34	0.56	0.27	3.18	0.85	2.16	6.20	
Spray (Direct/Layby)	8R-30	MFWD 170	19,500	200	8	0.084	1.90	2.54	0.77	0.53	5.75	1.15	4.11	11.02	
Spray (Direct/Layby)	8R-38	MFWD 170	19,500	200	8	0.066	1.50	2.01	0.61	0.42	4.54	0.91	3.24	8.71	
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	29,500	200	8	0.044	1.00	1.34	0.61	0.27	3.23	0.92	2.16	6.32	
Spray (Direct/Layby)	12R-30	MFWD 170	29,500	200	8	0.056	1.26	1.69	0.78	0.35	4.09	1.16	2.74	8.00	
Spray (Direct/Layby)	12R-38	MFWD 170	29,500	200	8	0.044	1.00	1.34	0.61	0.27	3.23	0.92	2.16	6.32	
Spray (Direct/Layby)	16R-20/30	MFWD 225	34,600	200	8	0.062	1.40	2.49	1.01	0.60	5.52	1.52	4.68	11.73	
Spray (Levee Leaper)	50'	MFWD 225	21,200	200	8	0.033	0.76	1.34	0.33	0.32	2.77	0.50	2.52	5.80	
Spray (Pull Type)	60'	MFWD 225	75,100	200	8	0.028	0.63	1.12	0.99	0.27	3.02	1.48	2.10	6.61	
Spray (Pull Type)	80'	MFWD 225	69,400	200	8	0.021	0.47	0.84	0.68	0.20	2.21	1.03	1.57	4.82	
Spray (Pull Type)	90'	MFWD 225	70,400	200	8	0.018	0.42	0.74	0.62	0.18	1.97	0.92	1.40	4.30	
Spray (Pull Type)	120'	MFWD 225	101,700	200	8	0.014	0.31	0.56	0.67	0.13	1.68	1.00	1.05	3.74	
Spray (Ropewick)	20'	MFWD 190	3,630	200	8	0.084	1.90	2.84	0.14	0.65	5.54	0.21	5.03	10.78	
Spray (Spot)	27'	MFWD 170	5,810	200	8	0.062	1.40	1.88	0.17	0.39	3.85	0.25	3.04	7.16	
Spray (Spot)	40'	MFWD 170	10,350	200	8	0.042	0.95	1.27	0.20	0.26	2.69	0.30	2.05	5.05	
Spray (Spot)	50'	MFWD 170	9,670	200	8	0.033	0.76	1.01	0.15	0.21	2.14	0.22	1.64	4.01	
Spray (Spot)	60'	MFWD 225	18,600	200	8	0.028	0.63	1.12	0.24	0.27	2.27	0.36	2.10	4.75	
Stalk Shredder	14'	MFWD 150	36,300	200	10	0.117	2.11	3.13	3.74	0.62	9.61	2.82	4.71	17.16	
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.48	2.19	2.38	0.44	6.50	1.80	3.30	11.60	
Stalk Shredder-Flail	12'	MFWD 150	30,000	200	10	0.137	2.46	3.65	3.60	0.73	10.46	2.72	5.50	18.69	
Stalk Shredder-Flail	15'	MFWD 150	34,400	200	10	0.110	1.97	2.92	3.31	0.58	8.79	2.50	4.40	15.69	
Stalk Shredder-Flail	18'	MFWD 150	53,400	200	10	0.091	1.64	2.43	4.28	0.48	8.85	3.23	3.66	15.75	
Stalk Shredder-Flail	20'	MFWD 150	43,900	200	10	0.082	1.48	2.19	3.16	0.44	7.28	2.39	3.30	12.97	
Stalk Shredder-Flail	25'	MFWD 150	69,600	200	10	0.066	1.18	1.75	4.01	0.35	7.30	3.03	2.64	12.98	
Strip Till	8R-38	MFWD 225	66,000	150	10	0.061	1.10	2.45	1.76	0.59	5.91	3.58	4.60	14.10	
Strip Till	12R-30	MFWD 225	112,000	150	10	0.061	1.10	2.45	2.99	0.59	7.14	6.08	4.60	17.82	
Strip Till	12R-40	MFWD 225	113,000	150	10	0.046	0.82	1.84	2.26	0.44	5.38	4.60	3.45	13.43	
Subsoiler	3 shank	MFWD 190	5,690	100	15	0.204	3.66	6.87	0.38	1.57	12.49	1.27	12.14	25.92	
Subsoiler	4 shank	MFWD 225	14,800	100	15	0.153	2.75	6.12	0.75	1.48	11.11	2.49	11.47	25.08	
Subsoiler	5 shank	MFWD 225	18,300	100	15	0.122	2.19	4.87	0.74	1.18	8.99	2.45	9.13	20.59	
Subsoiler low-till	6 shank	MFWD 225	26,600	100	15	0.102	1.83	4.07	0.90	0.98	7.79	2.98	7.63	18.41	
Subsoiler low-till	8 shank	MFWD 225	25,700	100	15	0.076	1.37	3.04	0.65	0.73	5.81	2.15	5.71	13.69	

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, 2024

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
dollars					dollars
ADJUVANTS			Avaris	oz	1.41
Agri-Dex	pt	3.00	Avicta 500 Soybean	oz	2.14
AMS SuperMax	pt	3.81	Bravo Weather Stick	pt	5.62
Class Act NG	pt	5.00	Captan 4L	pt	4.50
Crop Oil Conc.(Pet.)	pt	2.86	Convoy	oz	1.44
Crop Oil Conc.(Veg.)	pt	2.90	Cotton Seed Trt.	acre	20.00
Dyne-A-Pak	pt	6.88	CruiserMaxx Vibrance	oz	7.63
Fire-Zone	pt	3.94	Elatus	oz	3.81
Herbimax	pt	2.75	Flint Extra	oz	10.11
Induce	pt	5.00	Headline EC	oz	5.98
MSO	pt	1.34	Miravis Ace	oz	1.78
Penetrator Plus	pt	2.32	Miravis Top	oz	6.09
Surfactant	pt	3.30	Priaxor Xemium	oz	4.06
CLEANING			Propimax EC	pt	12.50
Cleaning Peanuts	ton	18.00	Prosaro	oz	1.89
CROP CONSULTANT			Provost Optimum	oz	2.17
Corn Consultant	acre	6.00	Provost Silver	oz	1.52
Cotton Consultant	acre	8.00	Quadris	oz	6.25
Peanut Consultant	acre	9.25	Quadris Top	oz	3.00
Rice Consultant	acre	8.00	Quadris Top SBX	oz	3.13
Sorghum Consultant	acre	6.00	Quilt	pt	4.00
Soybeans Consultant	acre	6.50	Quilt XCEL	pt	21.75
Wheat Consultant	acre	5.50	Stratego	pt	22.50
CUSTOM FERTILIZE			Stratego YLD	oz	2.65
App Fert by Air	cwt	8.00	Tilt 3.6 EC	oz	1.02
App Fert by Air(Mi	appl	8.00	Tilt/ Bravo SE	oz	0.81
Custom Apply Fert	acre	7.50	Trivapro	oz	1.48
CUSTOM LIME			GINNING		
Lime (Spread)	ton	65.00	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	oz	0.09
Custom Plant Air	cwt	8.43	Mepichlor 4.2%	oz	0.17
CUSTOM SPRAY			Mepiquat	oz	0.07
App by Air (3 gal)	appl	6.87	Mepstar 6	oz	0.09
App by Air (5 gal)	appl	8.11	Palisade	oz	1.47
App by Air (10 gal)	appl	10.57	Pentia	oz	0.41
Custom Spray Ground	acre	7.00	Pix WSG	oz	1.36
DRYING			Stance	oz	1.40
Dry Corn	bu	0.19	Veto	oz	0.07
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	oz	0.99
Dry Rice	bu	0.40	Boll Buster	oz	0.34
ERADICATION FEE			Def/Folex	pt	11.25
Eradication	acre	1.00	Defol 5	gal	8.61
FERTILIZERS			Display	oz	10.59
Agroatin Ultra	pt	12.50	Ethephon 6E	pt	3.38
Amm Sulfate (21% N)	cwt	26.00	Finish 6	pt	10.93
Boron Plus	pt	5.10	Folex 6EC	pt	11.25
DAP	cwt	47.21	Freefall SC	oz	0.89
Fert 10-34-0	cwt	40.00	Ginstar EC	pt	29.72
Fert 10-34-0	gal	4.66	Gramoxone SL	oz	0.33
Fert 11-37-0	cwt	41.25	Sharpen	oz	7.91
Fert 41-0-0-4	cwt	38.00	Sodium Chlorate 5L	gal	8.61
Lime	ton	55.00	SuperBoll	oz	0.18
NBPT	pt	18.00	Thidiazuron 4lb	oz	1.14
Phosphorus(46% P205)	cwt	39.25	Tribufos 6lb	pt	11.25
Potash (60% K2O)	cwt	36.20	Vacate	oz	1.39
Sulfur Plus	pt	2.62	HAULING		
UAN (32% N)	cwt	36.15	Haul Corn	bu	0.23
UAN (32%)	gal	4.00	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	cwt	31.10	Haul Rice	bu	0.35
UAN + Sulfur (28%)	gal	3.46	Haul Sorghum	bu	0.25
Urea, Solid (46% N)	cwt	31.69	Haul Soybeans	bu	0.27
Zinc Plus	pt	3.50	Haul Wheat	bu	0.26
FUNGICIDES			HERBICIDES		
Abound	oz	1.87	2,4-D Amine 4	pt	2.72
Alfa Guard	lb	1.62	2,4-D Ester	pt	4.87
Allegiance Flowabl	oz	6.33	AAtrex 4L	pt	3.00
Ameristar Top	oz	2.52	Accent Q	oz	23.39
Approach Prima	pt	34.50	Acuron	oz	0.56
Apron Maxx RTA	oz	1.02			
Artisan	oz	0.70			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2024 (continued)

ITEM	NAME	UNIT	PRICE	ITEM	NAME	UNIT	PRICE
dollars							
Aim		oz	8.13	Halomax		oz	21.11
Aim 2EC		oz	8.13	Harmony Extra SG		oz	11.00
Anthem Flex		oz	5.57	Helmet		oz	0.48
Anthem Maxx		oz	4.50	Huskie		oz	0.94
Armezon Pro		oz	1.12	Impact		oz	19.64
Atrazine 4L		pt	2.71	Intimidator		oz	0.64
Atrazine 90DF		lb	5.09	Leadoff		oz	7.96
Authority First		lb	37.75	League		oz	8.06
Authority Elite		pt	14.50	Lexar		pt	7.00
Authority Maxx		lb	68.82	Liberty 280		oz	0.64
Authority MTZ		lb	19.75	Loyant		oz	2.29
Avatar		pt	8.04	Makaze		oz	0.16
Avenger		pt	10.01	Metolachlor		pt	8.23
Axial XL		oz	1.71	Metribuzin 4L		pt	21.13
Axiom		oz	2.25	Metribuzin 75		lb	10.90
Banvel		pt	10.94	MSMA		pt	6.18
Barrage		pt	4.13	Newpath		oz	4.28
Basagran		pt	5.43	Obey		oz	1.08
Boundary		pt	12.00	Osprey		oz	3.58
Brake		oz	1.48	Outlook		pt	15.75
Broadaxe		pt	14.50	Panther Pro		oz	6.61
Broadhead		lb	58.21	Parallel		pt	7.76
Bucaneer Plus		pt	3.13	Paraquat		oz	0.23
Buctril		pt	4.28	Parazone 3SL		oz	0.61
Butyrac 200 (2,4-DB)		pt	3.52	Permit		oz	19.50
Cadre		oz	1.87	Permit Plus		oz	22.89
Callisto		oz	2.99	PowerFlex		oz	7.21
Canopy		oz	3.25	Preface		oz	4.99
Caparol		pt	4.97	Prefix		pt	7.81
Capreno		oz	4.00	Provisia		oz	0.88
Cinch		pt	14.18	Prowl 3.3 EC		pt	6.63
Cinch ATZ		pt	6.26	Quelex		oz	11.30
Clarity		pt	14.29	RealmQ		oz	4.63
Classic		oz	16.67	RebelEx		oz	2.00
Clearpath		oz	4.24	Reflex		pt	7.34
Clethodim 2E		oz	0.33	Regiment		oz	45.96
Clincher SF		oz	2.54	Resicore		oz	0.60
Cobra		oz	1.50	Resource		oz	2.07
Command 3ME		pt	17.50	RiceBeaux		pt	6.91
Corvus		oz	5.53	Riceshot		pt	4.68
Cotoran		pt	5.24	Ricestar HT		pt	26.01
Cotton Pro		pt	3.45	Ringside		pt	5.63
Dicamba		pt	5.32	Roundup Power Max		oz	0.28
Direx		pt	5.46	Roundup PowerMax		pt	4.50
Diuron		pt	4.25	Roundup PowerMax ii		oz	0.31
Dual II Magnum		pt	13.25	Roundup Pro		pt	0.20
Dual Magnum		pt	10.75	Scepter 70 DG		oz	4.64
Duet		pt	6.09	Select Max		pt	15.01
Engenia		oz	0.80	Sencor/Tricor.Metrib	lb	23.95	
Enlist Duo		pt	5.92	Sequence		pt	7.14
Enlist One		pt	7.66	Sharpen		oz	7.91
Envive		oz	3.90	Sinister		pt	13.77
Envoke		oz	115.00	Sonic		oz	4.58
Facet L		pt	17.50	Stalwart		pt	6.39
Fierce		oz	7.75	Stam 80 EDF		lb	9.45
Fierce XLT		oz	4.47	Stam M4	qt		8.00
Finesse		oz	15.75	Staple LX		oz	3.95
Firestorm		pt	3.44	Storm		pt	17.07
First Rate		oz	34.50	Strada		oz	7.34
Flexstar		pt	9.75	Strada Pro		oz	8.20
Flexstar GT		pt	7.25	Strada XT2		oz	3.26
Fusilade DX		oz	1.33	Superwham	qt		9.82
Gambit		oz	16.50	Suprend	lb		13.52
Glyphosate 3lbs a.e		pt	4.03	SureStart II		oz	0.39
Glyphosate 3lbs a.e		oz	0.25	Surveil		oz	6.70
Goal 2XL		pt	10.75	Synchrony XP		oz	13.00
Gramoxone SL 2.0		oz	0.33	Tavium		gal	57.02
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	9.63				

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2024 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
dollars					dollars
Trifluralin	pt	4.36	Mustang Max	oz	1.18
Triflurex	pt	3.47	Nuprid 4F	oz	1.04
Ultra Blazer	pt	7.50	Oberon	oz	3.28
Valor EZ	oz	5.23	Orthene 97	lb	29.33
Valor SX	oz	3.06	Permethrin	oz	0.79
Valor XLT	oz	3.59	Portal XLO	oz	0.74
Vamos	pt	6.49	Pounce 25WP	lb	19.96
Verdict	oz	1.61	Prevathon	oz	1.05
Veritas	pt	7.49	Python WDG	oz	19.25
Villain	pt	5.24	Radiant	oz	9.60
Volunteer	pt	10.63	Sevin SL	pt	12.25
Warrant	pt	4.00	Sevin XLR Plus	qt	21.50
XtendiMax	oz	0.48	Sivanto Prime	oz	3.01
Zidua SC	oz	5.58	Tempest	oz	1.70
Zidua WG	oz	8.76	Tenchi SG	oz	1.13
INOCULANT			Transform WG	oz	9.34
Inoculant -Soybean	acre	1.55	Up-Cyde	oz	0.49
Optimize LIFT	oz	0.15	Warrior ZT	oz	3.02
INSECTICIDES			Zeal	oz	8.42
Abamectin .15EC	oz	0.30	IRRIGATION SUPPLIES		
Acephate 90%	lb	8.25	Roll-Out Pipe	ft	0.24
Acephate 90SP	lb	8.25	SEED/PLANTS		
Admire Pro	oz	2.56	Corn Seed BtRR	thous	3.61
Agri-Mek	oz	3.44	Corn Seed Conv.	thous	3.80
Asana .66 XL	oz	0.62	Corn Seed Op Leptra	thous	4.95
Avenger	oz	0.28	Corn Seed RR2	thous	4.26
Baythroid XL	oz	1.32	Corn Seed VT2P	thous	4.80
Belt	oz	6.41	Cot. Seed B3XF/W3FE	thous	2.52
Besiege	oz	2.75	Cotton Seed B3XF	thous	2.60
Bidrin 8EC	oz	1.51	Cotton Seed GLB2	thous	1.89
Bifenthrin	oz	0.56	Cotton Seed W3FE	thous	2.43
Bifenture 2EC	oz	0.58	Cotton Seed W3RF	thous	1.50
Brigade EC	pt	20.27	Peanut Seed	lb	0.87
Capture LFR	oz	1.37	Rice Conv Hyb Trt	lb	6.31
Centric 40WG	oz	5.95	Rice Fullpage Hyb Tr	lb	6.34
Cypermethrin	oz	0.57	Rice Seed CF(Levees)	lb	1.30
Declare	oz	2.03	Rice Seed Clearfield	lb	1.30
Diamond .83EC	oz	1.26	Rice Seed Conv.	lb	0.33
Dimethoate 4E	pt	13.50	Rice Seed Cv(Levees)	lb	0.33
Dimilin 2L	oz	1.63	Rice Seed CvH(Levee)	lb	1.93
Endigo	oz	1.76	Rice Seed FPH(Levee)	lb	6.34
Force 3G	lb	7.28	Rice Seed Provisia	lb	1.40
Hero	oz	1.35	Rice Seed Trt/Insect	lbseed	0.29
Imidacloprid 4F	oz	0.79	Sorghum Concept	lb	2.84
Imidan 70 WSB	oz	1.13	Sorghum Concept+ Po	lb	4.16
IncidentalPestTrt \$8 acre	acre	8.00	Soybean Elist E3	lb	1.07
IncidentalPestTrt\$15 acre	acre	15.00	Soybean Seed LL	lb	1.16
IncidentalPestTrt\$22 acre	acre	22.00	Soybean Seed RR2	lb	1.12
IncidentalPestTrt\$30 acre	acre	30.00	Soybean Seed RR2X	lb	1.15
Intrepid 2F	oz	1.99	Wheat Seed Private	lb	0.34
Intruder 70WSP	oz	1.13	SOIL TEST		
Lambda	oz	0.39	Soil Test	acre	10.00
Lannate LV	pt	8.33	SURVEY & MARK LEVEES		
Macho	oz	0.62	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, 2024

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	3.44
Gasoline	gal	3.21
INTEREST RATES		
Short-term	%	8.25
Intermediate-term	%	8.50

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2024

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	17.94
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, 2024

Crop	unit	Futures Contract Month	Futures Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '24	5.17	-0.06	5.11	2.35	5.11
Cotton Lint	lb	Dec '24	0.8151	-0.0123	0.8028	0.52	0.8028
Cottonseed	lb						0.11 ^f
Grain Sorghum	bu				4.85	4.09	4.85
Peanuts	ton				550.00	354.89	550.00
Soybeans	bu	Nov '24	12.61	0.06	12.67	6.41 ⁵	12.67
Rice	bu	Nov '24	5.83	-0.17	5.66	3.21	5.66
Wheat	bu	Jul '24	6.32	-0.15	6.17	3.60	6.17

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2023 for the stated contract months.

^b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2023 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 2023 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2023 Farm-stored Loan Rate for long grain rough rice. National 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Set Up Engine								
IRRIGATE LABOR	hour				0.27		0.01	0.28
Maintenance								
IRRIGATE LABOR	hour				1.07		0.04	1.11
Apply Water								
IRRIGATE LABOR	hour				0.15		0.01	0.16
Apply Water								
IRRIGATE LABOR	hour				0.20		0.01	0.21
Apply Water								
IRRIGATE LABOR	hour				0.15		0.15	0.15
Pivot, 1/4 CP	each			13.48			0.46	13.94
Well & Pump, 1/4 CP	each			3.50			0.12	3.62
Engine, 1/4 CP, 65	each							14.01
June Irr. 3app@.75"	ac-in		11.56	1.49			0.45	13.50
July Irr. 4app@.75"	ac-in		15.41	1.99			0.48	17.88
Aug Irr. 3app@.75"	ac-in		11.56	1.49			0.27	13.32
TOTALS		0.00	38.53	21.95	1.84	0.00	1.85	64.17
								99.50
								163.67

Note: Cost of production estimates are based on 2023 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, 2024

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER				
-----dollars-----											
Land Plane	50'x16'		1.28	0.39	0.68		0.19	2.54	2.59	5.13	
Set Up Engine											
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24	
Ditcher (1m/160a)			0.28	0.09	0.17		0.01	0.55	0.51	1.06	
Roll-Out Pipe	ft	7.92					0.22	8.14		8.14	
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.38	0.13	0.45		0.03	0.99	1.26	2.25	
IRRIGATE LABOR	hour				1.81		0.05	1.86		1.86	
Apply Water											
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24	
Apply Water											
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24	
Apply Water											
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24	
Apply Water											
IRRIGATE LABOR	hour				0.23			0.23		0.23	
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.56	0.19	0.68		0.02	1.45	1.89	3.34	
Land Forming (\$450)	each								43.97	43.97	
Well & Pump, Furrow	each				2.96			0.08	3.04	12.03	15.07
Main Line Pipe	each									6.65	6.65
Engine, RPF, Corn	each									11.82	11.82
1st June Irrigation	ac-in		9.11	1.05			0.28	10.44		10.44	
2nd June Irrigation	ac-in		9.11	1.05			0.28	10.44		10.44	
3rd June Irrigation	ac-in		9.11	1.05			0.28	10.44		10.44	
1st July Irrigation	ac-in		9.11	1.05			0.21	10.37		10.37	
TOTALS		7.92	38.94	7.96	4.94	0.00	1.69	61.45	80.72	142.17	

Note: Cost of production estimates are based on 2023 input prices.

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