

**CORN, GRAIN
SORGHUM & WHEAT
2022
PLANNING BUDGETS**

**Mississippi State University
Department of Agricultural Economics
Budget Report 2021-03**

November 2021

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 2022 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.

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

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2022 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 2021. (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 2021 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, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	0.2000	1.12	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	27.75	1.9570	54.31	_____
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
Fert 10-34-0	gal	3.68	4.0000	14.72	_____
Zinc Plus	pt	3.40	2.0000	6.80	_____
UAN + Sulfur (28%)	gal	2.05	32.1712	65.95	_____
UAN (32%)	gal	2.10	30.0000	63.00	_____
Urea, Solid (46% N)	cwt	28.63	1.0000	28.63	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	34.0000	127.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.4484	6.85	_____
Harvesters	hour	15.27	0.1277	1.95	_____
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	15.29	0.4478	6.85	_____
DIESEL FUEL					
Tractors	gal	2.36	5.0106	11.83	_____
Harvesters	gal	2.36	1.7419	4.11	_____
Roll-Out Pipe Irr.	gal	2.36	10.5901	25.00	_____
REPAIR & MAINTENANCE					
Implements	acre	10.28	1.0000	10.28	_____
Tractors	acre	3.32	1.0000	3.32	_____
Harvesters	acre	5.20	1.0000	5.20	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____
TOTAL DIRECT EXPENSES				681.56	_____
FIXED EXPENSES					
Implements	acre	14.92	1.0000	14.92	_____
Tractors	acre	19.58	1.0000	19.58	_____
Harvesters	acre	19.30	1.0000	19.30	_____
Roll-Out Pipe Irr.	acre	49.28	1.0000	49.28	_____
TOTAL FIXED EXPENSES				103.08	_____
TOTAL SPECIFIED EXPENSES				784.64	_____

Note: Cost of production estimates are based on 2021 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, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____

TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.12	1.0000	8.12	_____
FERTILIZERS	acre	272.86	1.0000	272.86	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	1.10	1.0000	1.10	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	127.50	1.0000	127.50	_____
CUSTOM FERTILIZE	acre	15.00	1.0000	15.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.5761	8.80	_____
UNALLOCATED LABOR	hour	15.29	0.4478	6.85	_____
DIESEL FUEL	gal	2.36	17.3427	40.94	_____
REPAIR & MAINTENANCE	acre	25.96	1.0000	25.96	_____
INTEREST ON OP. CAP.	acre	13.05	1.0000	13.05	_____

TOTAL DIRECT EXPENSES				681.56	_____
RETURNS ABOVE DIRECT EXPENSES				455.84	_____
TOTAL FIXED EXPENSES				103.08	_____

TOTAL SPECIFIED EXPENSES				784.64	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				352.76	_____

Note: Cost of production estimates are based on 2021 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, 2022

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

Note: Cost of production estimates are based on 2021 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, 2022

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						0.12	3.45		3.45
Lime (Spread)	ton	39.29						1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60			0.12	3.54	2.56	6.10
Phosphorus (46% P2O5)	cwt	54.31						1.90	56.21		56.21
Potash (60% K2O)	cwt	39.45						1.38	40.83		40.83
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81			0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
Clarity	pt	5.50						0.13	5.63		5.63
Select Max	pt	12.73						0.30	13.03		13.03
Plant & Pre-Folding	16R-30		1.39	2.79	1.94			0.12	6.24	6.57	12.81
Corn Seed BtRR	thous	127.50						2.60	130.10		130.10
Fert 10-34-0	gal	14.72						0.30	15.02		15.02
Zinc Plus	pt	6.80						0.14	6.94		6.94
Custom Apply Fert	acre	7.50						0.13	7.63		7.63
UAN + Sulfur (28%)	gal	65.95						1.15	67.10		67.10
Spray (Broadcast)	60'		0.77	0.41	0.95			0.04	2.17	1.51	3.68
Atrazine 4L	pt	6.68						0.12	6.80		6.80
Halex GT	pt	20.95						0.37	21.32		21.32
App by Air (3 gal)	appl	1.12						0.02	1.14		1.14
Bifenthrin	oz	1.10						0.02	1.12		1.12
Corn Consultant	acre	6.00						0.09	6.09		6.09
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64			0.10	6.86	5.02	11.88
UAN (32%)	gal	63.00						0.92	63.92		63.92
App Fert by Air	cwt	7.50						0.09	7.59		7.59
Urea, Solid (46% N)	cwt	28.63						0.33	28.96		28.96
Header - Corn	8R-30		4.11	7.47	3.71			0.04	15.33	22.49	37.82
Grain Cart Corn	700 bu		0.69	0.51	0.74			0.01	1.95	1.65	3.60
Haul Corn	bu	50.60						0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11	12.80
Roll-Out Pipe Irr.	acre	7.92	26.72	7.83	4.73			0.55	47.75	53.36	101.11
TOTALS		581.10	40.94	25.96	20.51	0.00	13.05	681.56	103.08	784.64	

Note: Cost of production estimates are based on 2021 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, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00
FERTILIZERS	93.76	0.00	0.00	0.00	0.00	21.52	65.95	63.00	28.63	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	127.50	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	7.50	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	39.29	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	3.99	0.00	0.00	0.00	0.00	1.94	0.95	2.87	3.06	0.23	0.63	6.84
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	3.74	0.00	0.00	0.00	0.00	1.39	0.77	2.15	19.20	6.25	0.39	7.05
REPAIR & MAINTENANCE	2.27	0.00	0.00	0.00	0.00	2.79	0.41	1.97	6.29	1.05	0.17	11.01
INTEREST ON OP. CAP.	5.13	0.00	0.00	0.00	0.67	3.16	1.81	1.15	0.84	0.06	0.01	0.22
TOTAL DIRECT EXPENSES	151.51	0.00	0.00	0.00	29.42	158.30	105.02	79.36	73.44	7.59	1.20	75.72
NET INCOME	-151.51	0.00	0.00	0.00	-29.42	-158.30	-105.02	-79.36	-73.44	-7.59	-1.20	1061.68
NET INCOME TO DATE	-151.51	-151.51	-151.51	-151.51	-180.93	-339.23	-444.25	-523.61	-597.05	-604.64	-605.84	455.84

Note: Cost of production estimates are based on 2021 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, 2022

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
-----PRODUCT PRICE-----													
Corn	3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46		
PERCENT	YIELD	UNIT	-----dollars-----										
50	110.00	bu	-229	-201	-172	-144	-115	-87	-59	-30	-2	26	54
			-332	-304	-275	-247	-219	-190	-162	-133	-105	-76	-48
60	132.00	bu	-149	-115	-81	-47	-12	21	55	89	123	157	191
			-252	-218	-184	-150	-116	-81	-47	-13	20	54	88
70	154.00	bu	-69	-29	10	50	90	129	169	209	249	289	328
			-172	-132	-92	-52	-13	26	66	106	146	186	225
80	176.00	bu	11	56	102	147	193	238	284	329	374	420	465
			-92	-46	-1	44	89	135	180	226	271	317	362
90	198.00	bu	91	142	193	244	295	347	398	449	500	551	603
			-11	39	90	141	192	244	295	346	397	448	500
100	220.00	bu	171	228	285	342	398	455	512	569	626	683	740
			68	125	182	239	295	352	409	466	523	580	637
110	242.00	bu	251	314	376	439	501	564	627	689	752	814	877
			148	211	273	336	398	461	523	586	649	711	774
120	264.00	bu	331	400	468	536	604	673	741	809	877	946	1014
			228	297	365	433	501	570	638	706	774	843	911
130	286.00	bu	412	486	560	633	707	781	855	929	1003	1077	1151
			309	383	456	530	604	678	752	826	900	974	1048
140	308.00	bu	492	572	651	731	810	890	970	1049	1129	1208	1288
			389	468	548	628	707	787	867	946	1026	1105	1185
150	330.00	bu	572	657	743	828	913	999	1084	1169	1255	1340	1425
			469	554	640	725	810	896	981	1066	1152	1237	1322

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 2021 input prices.

Table 2.A Estimated costs per acre
 Corn, stale seedbed, BtRR, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	0.2000	1.12	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	27.75	1.6300	45.23	_____
Potash (60% K2O)	cwt	26.30	1.2500	32.88	_____
Fert 10-34-0	gal	3.68	4.0000	14.72	_____
Zinc Plus	pt	3.40	2.0000	6.80	_____
UAN + Sulfur (28%)	gal	2.05	19.3063	39.58	_____
UAN (32%)	gal	2.10	36.7200	77.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	28.0000	105.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.3457	5.28	_____
Harvesters	hour	15.27	0.1009	1.54	_____
HAND LABOR					
Implements	hour	9.06	0.1354	1.22	_____
UNALLOCATED LABOR	hour	15.27	0.4020	6.14	_____
DIESEL FUEL					
Tractors	gal	2.36	4.0040	9.44	_____
Harvesters	gal	2.36	1.3770	3.25	_____
REPAIR & MAINTENANCE					
Implements	acre	8.56	1.0000	8.56	_____
Tractors	acre	2.68	1.0000	2.68	_____
Harvesters	acre	4.11	1.0000	4.11	_____
INTEREST ON OP. CAP.	acre	10.73	1.0000	10.73	_____
TOTAL DIRECT EXPENSES				528.09	_____
FIXED EXPENSES					
Implements	acre	11.40	1.0000	11.40	_____
Tractors	acre	15.80	1.0000	15.80	_____
Harvesters	acre	15.26	1.0000	15.26	_____
TOTAL FIXED EXPENSES				42.46	_____
TOTAL SPECIFIED EXPENSES				570.55	_____

Note: Cost of production estimates are based on 2021 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, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	170.0000	878.90	_____

TOTAL INCOME				878.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.12	1.0000	8.12	_____
FERTILIZERS	acre	216.32	1.0000	216.32	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	1.10	1.0000	1.10	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.4466	6.82	_____
UNALLOCATED LABOR	hour	15.27	0.4020	6.14	_____
DIESEL FUEL	gal	2.36	5.3810	12.69	_____
REPAIR & MAINTENANCE	acre	15.35	1.0000	15.35	_____
INTEREST ON OP. CAP.	acre	10.73	1.0000	10.73	_____

TOTAL DIRECT EXPENSES				528.09	_____
RETURNS ABOVE DIRECT EXPENSES				350.81	_____
TOTAL FIXED EXPENSES				42.46	_____

TOTAL SPECIFIED EXPENSES				570.55	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				308.35	_____

Note: Cost of production estimates are based on 2021 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, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2022

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

Note: Cost of production estimates are based on 2021 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, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2022

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						0.12	3.45		3.45
Lime (Spread)	ton	39.29						1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60			0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	45.23						1.58	46.81		46.81
Potash (60% K2O)	cwt	32.88						1.15	34.03		34.03
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81			0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
Clarity	pt	5.50						0.13	5.63		5.63
Select Max	pt	12.73						0.30	13.03		13.03
Plant & Pre-Folding	12R-38		1.46	2.30	2.03			0.12	5.91	5.79	11.70
Corn Seed BtRR	thous	105.00						2.14	107.14		107.14
Fert 10-34-0	gal	14.72						0.30	15.02		15.02
Zinc Plus	pt	6.80						0.14	6.94		6.94
Custom Apply Fert	acre	7.50						0.13	7.63		7.63
UAN + Sulfur (28%)	gal	39.58						0.69	40.27		40.27
Spray (Broadcast)	60'		0.77	0.41	0.95			0.04	2.17	1.51	3.68
Atrazine 4L	pt	6.68						0.12	6.80		6.80
Halex GT	pt	20.95						0.37	21.32		21.32
App by Air (3 gal)	appl	1.12						0.02	1.14		1.14
Bifenthrin	oz	1.10						0.02	1.12		1.12
Corn Consultant	acre	6.00						0.09	6.09		6.09
Fert Appl (Liquid)	12R-38		1.41	1.22	1.73			0.06	4.42	3.22	7.64
UAN (32%)	gal	77.11						1.12	78.23		78.23
Header - Corn	8R-38		3.25	5.93	2.93			0.04	12.15	17.81	29.96
Grain Cart Corn	700 bu		0.69	0.51	0.74			0.01	1.95	1.65	3.60
Haul Corn	bu	39.10						0.11	39.21		39.21
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11	12.80
TOTALS		475.14	12.69	15.35	14.18	0.00	10.73	528.09	42.46	570.55	

Note: Cost of production estimates are based on 2021 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, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2022

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	878.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00
FERTILIZERS	78.11	0.00	0.00	0.00	0.00	21.52	39.58	77.11	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	39.29	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	3.41	0.00	0.00	0.00	0.00	2.03	0.95	1.73	0.00	0.00	0.00	6.06
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.86	0.00	0.00	0.00	0.00	1.46	0.77	1.41	0.00	0.00	0.00	6.19
REPAIR & MAINTENANCE	1.95	0.00	0.00	0.00	0.00	2.30	0.41	1.22	0.00	0.00	0.00	9.47
INTEREST ON OP. CAP.	4.52	0.00	0.00	0.00	0.67	2.70	1.35	1.31	0.00	0.00	0.00	0.18
TOTAL DIRECT EXPENSES	133.47	0.00	0.00	0.00	29.42	135.01	78.19	91.00	0.00	0.00	0.00	61.00
NET INCOME	-133.47	0.00	0.00	0.00	-29.42	-135.01	-78.19	-91.00	0.00	0.00	0.00	817.90
NET INCOME TO DATE	-133.47	-133.47	-133.47	-133.47	-162.89	-297.90	-376.09	-467.09	-467.09	-467.09	-467.09	350.81

Note: Cost of production estimates are based on 2021 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, non-irrigated, 12row 38"
 170 bu yield goal, Delta Area, Mississippi, 2022

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Corn	3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46		
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-178 -221	-156 -199	-134 -177	-112 -155	-91 -133	-69 -111	-47 -89	-25 -67	-3 -45	18 -23	40 -1
60	102.00	bu	-116 -159	-90 -132	-64 -106	-37 -80	-11 -53	14 -27	41 -1	67 25	94 51	120 77	146 104
70	119.00	bu	-54 -97	-24 -66	6 -35	37 -5	68 25	98 56	129 87	160 117	191 148	221 179	252 210
80	136.00	bu	7 -35	42 -0	77 34	112 70	147 105	182 140	218 175	253 210	288 245	323 281	358 316
90	153.00	bu	69 26	108 66	148 105	187 145	227 184	266 224	306 263	345 303	385 343	425 382	464 422
100	170.00	bu	131 88	175 132	218 176	262 220	306 264	350 308	394 352	438 396	482 440	526 484	570 528
110	187.00	bu	193 150	241 198	289 247	338 295	386 343	434 392	483 440	531 488	579 537	628 585	676 634
120	204.00	bu	255 212	307 265	360 318	413 370	466 423	518 476	571 529	624 581	676 634	729 687	782 739
130	221.00	bu	317 274	374 331	431 388	488 446	545 503	602 560	659 617	716 674	774 731	831 788	888 845
140	238.00	bu	379 336	440 398	502 459	563 521	625 582	686 644	748 705	809 767	871 828	932 890	994 951
150	255.00	bu	441 398	506 464	572 530	638 596	704 662	770 728	836 794	902 860	968 925	1034 991	1100 1057

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 2021 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, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	0.2000	1.12	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	27.75	1.9570	54.31	_____
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
Fert 10-34-0	gal	3.68	4.0000	14.72	_____
Zinc Plus	pt	3.40	2.0000	6.80	_____
UAN + Sulfur (28%)	gal	2.05	32.1712	65.95	_____
UAN (32%)	gal	2.10	30.0000	63.00	_____
Urea, Solid (46% N)	cwt	28.63	1.0000	28.63	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	34.0000	127.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.3699	5.65	_____
Harvesters	hour	15.27	0.1277	1.95	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1462	1.33	_____
UNALLOCATED LABOR					
	hour	15.29	0.4478	6.85	_____
DIESEL FUEL					
Tractors	gal	2.36	4.2843	10.11	_____
Harvesters	gal	2.36	1.7419	4.11	_____
1/4-mi. Pivot Irr.	gal	2.36	11.2011	26.43	_____
REPAIR & MAINTENANCE					
Implements	acre	10.06	1.0000	10.06	_____
Tractors	acre	2.87	1.0000	2.87	_____
Harvesters	acre	5.20	1.0000	5.20	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	13.14	1.0000	13.14	_____
TOTAL DIRECT EXPENSES				684.67	_____
FIXED EXPENSES					
Implements	acre	13.51	1.0000	13.51	_____
Tractors	acre	16.91	1.0000	16.91	_____
Harvesters	acre	19.30	1.0000	19.30	_____
1/4-mi. Pivot Irr.	acre	68.70	1.0000	68.70	_____
TOTAL FIXED EXPENSES				118.42	_____
TOTAL SPECIFIED EXPENSES				803.09	_____

Note: Cost of production estimates are based on 2021 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, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____

TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.12	1.0000	8.12	_____
FERTILIZERS	acre	272.86	1.0000	272.86	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	1.10	1.0000	1.10	_____
SEED/PLANTS	acre	127.50	1.0000	127.50	_____
CUSTOM FERTILIZE	acre	15.00	1.0000	15.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.4976	7.60	_____
UNALLOCATED LABOR	hour	15.29	0.4478	6.85	_____
DIESEL FUEL	gal	2.36	17.2274	40.65	_____
REPAIR & MAINTENANCE	acre	40.08	1.0000	40.08	_____
INTEREST ON OP. CAP.	acre	13.14	1.0000	13.14	_____

TOTAL DIRECT EXPENSES				684.67	_____
RETURNS ABOVE DIRECT EXPENSES				452.73	_____
TOTAL FIXED EXPENSES				118.42	_____

TOTAL SPECIFIED EXPENSES				803.09	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				334.31	_____

Note: Cost of production estimates are based on 2021 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, 2022

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

Note: Cost of production estimates are based on 2021 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, 2022

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						0.12	3.45		3.45
Lime (Spread)	ton	39.29						1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60			0.12	3.54	2.56	6.10
Phosphorus (46% P2O5)	cwt	54.31						1.90	56.21		56.21
Potash (60% K2O)	cwt	39.45						1.38	40.83		40.83
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81			0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
Clarity	pt	5.50						0.13	5.63		5.63
Select Max	pt	12.73						0.30	13.03		13.03
Plant & Pre-Folding	16R-30		1.39	2.79	1.94			0.12	6.24	6.57	12.81
Corn Seed BtRR	thous	127.50						2.60	130.10		130.10
Fert 10-34-0	gal	14.72						0.30	15.02		15.02
Zinc Plus	pt	6.80						0.14	6.94		6.94
Custom Apply Fert	acre	7.50						0.13	7.63		7.63
UAN + Sulfur (28%)	gal	65.95						1.15	67.10		67.10
Spray (Broadcast)	60'		0.77	0.41	0.95			0.04	2.17	1.51	3.68
Atrazine 4L	pt	6.68						0.12	6.80		6.80
Halex GT	pt	20.95						0.37	21.32		21.32
App by Air (3 gal)	appl	1.12						0.02	1.14		1.14
Bifenthrin	oz	1.10						0.02	1.12		1.12
Corn Consultant	acre	6.00						0.09	6.09		6.09
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64			0.10	6.86	5.02	11.88
UAN (32%)	gal	63.00						0.92	63.92		63.92
App Fert by Air	cwt	7.50						0.09	7.59		7.59
Urea, Solid (46% N)	cwt	28.63						0.33	28.96		28.96
Header - Corn	8R-30		4.11	7.47	3.71			0.04	15.33	22.49	37.82
Grain Cart Corn	700 bu		0.69	0.51	0.74			0.01	1.95	1.65	3.60
Haul Corn	bu	50.60						0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11	12.80
1/4-mi. Pivot Irr.	acre		26.43	21.95	1.84			0.64	50.86	68.70	119.56
TOTALS		573.18	40.65	40.08	17.62	0.00	13.14	684.67	118.42	803.09	

Note: Cost of production estimates are based on 2021 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, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00
FERTILIZERS	93.76	0.00	0.00	0.00	0.00	21.52	65.95	63.00	28.63	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	127.50	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	7.50	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	39.29	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	3.41	0.00	0.00	0.00	0.00	1.94	2.29	2.79	0.20	0.15	0.00	6.84
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	2.86	0.00	0.00	0.00	0.00	1.39	0.77	10.08	10.57	7.93	0.00	7.05
REPAIR & MAINTENANCE	1.95	0.00	0.00	0.00	0.00	2.79	0.41	20.44	1.99	1.49	0.00	11.01
INTEREST ON OP. CAP.	5.07	0.00	0.00	0.00	0.67	3.16	1.83	1.54	0.57	0.08	0.00	0.22
TOTAL DIRECT EXPENSES	149.67	0.00	0.00	0.00	29.42	158.30	106.38	106.07	49.46	9.65	0.00	75.72
NET INCOME	-149.67	0.00	0.00	0.00	-29.42	-158.30	-106.38	-106.07	-49.46	-9.65	0.00	1061.68
NET INCOME TO DATE	-149.67	-149.67	-149.67	-149.67	-179.09	-337.39	-443.77	-549.84	-599.30	-608.95	-608.95	452.73

Note: Cost of production estimates are based on 2021 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, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT YIELD UNIT			-----dollars-----										
50	110.00	bu	-232 -351	-204 -322	-175 -294	-147 -265	-119 -237	-90 -209	-62 -180	-33 -152	-5 -123	23 -95	51 -66
60	132.00	bu	-152 -270	-118 -236	-84 -202	-50 -168	-16 -134	18 -100	52 -66	86 -32	120 2	154 36	188 70
70	154.00	bu	-72 -190	-32 -150	7 -111	47 -71	86 -31	126 8	166 48	206 87	246 127	285 167	325 207
80	176.00	bu	7 -110	53 -65	98 -19	144 25	189 71	235 116	280 162	326 207	371 253	417 298	462 344
90	198.00	bu	88 -30	139 20	190 72	241 123	292 174	344 225	395 276	446 328	497 379	548 430	599 481
100	220.00	bu	168 49	225 106	282 163	338 220	395 277	452 334	509 391	566 448	623 504	680 561	737 618
110	242.00	bu	248 130	311 192	373 255	436 317	498 380	561 442	623 505	686 568	749 630	811 693	874 755
120	264.00	bu	328 210	397 278	465 346	533 415	601 483	670 551	738 619	806 688	874 756	943 824	1011 892
130	286.00	bu	409 290	483 364	556 438	630 512	704 586	778 660	852 734	926 808	1000 882	1074 956	1148 1029
140	308.00	bu	489 370	568 450	648 530	728 609	807 689	887 768	967 848	1046 928	1126 1007	1205 1087	1285 1167
150	330.00	bu	569 451	654 536	740 621	825 707	910 792	996 877	1081 962	1166 1048	1251 1133	1337 1218	1422 1304

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 2021 input prices.

Table 4.A Estimated costs per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	1.2000	6.72	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	27.75	1.9570	54.31	_____
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN + Sulfur (28%)	gal	2.05	32.1712	65.95	_____
UAN (32%)	gal	2.10	30.0000	63.00	_____
Urea, Solid (46% N)	cwt	28.63	1.0000	28.63	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
Intrepid 2F	oz	1.91	4.0000	7.64	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.25	34.0000	110.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.6423	9.81	_____
Harvesters	hour	15.27	0.1009	1.54	_____
Self-Propelled	hour	15.27	0.0176	0.27	_____
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	15.25	0.6141	9.37	_____
DIESEL FUEL					
Tractors	gal	2.36	7.2557	17.12	_____
Harvesters	gal	2.36	1.3770	3.25	_____
Self-Propelled	gal	2.36	0.1586	0.37	_____
Roll-Out Pipe Irr.	gal	2.36	10.5901	25.00	_____
REPAIR & MAINTENANCE					
Implements	acre	10.98	1.0000	10.98	_____
Tractors	acre	4.81	1.0000	4.81	_____
Harvesters	acre	4.11	1.0000	4.11	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	12.88	1.0000	12.88	_____
TOTAL DIRECT EXPENSES				667.36	_____
FIXED EXPENSES					
Implements	acre	17.95	1.0000	17.95	_____
Tractors	acre	28.44	1.0000	28.44	_____
Harvesters	acre	15.26	1.0000	15.26	_____
Self-Propelled	acre	1.26	1.0000	1.26	_____
Roll-Out Pipe Irr.	acre	49.28	1.0000	49.28	_____
TOTAL FIXED EXPENSES				112.19	_____
TOTAL SPECIFIED EXPENSES				779.55	_____

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____

TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.72	1.0000	13.72	_____
FERTILIZERS	acre	251.34	1.0000	251.34	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	8.74	1.0000	8.74	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	110.50	1.0000	110.50	_____
CUSTOM FERTILIZE	acre	15.00	1.0000	15.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.7609	11.62	_____
UNALLOCATED LABOR	hour	15.25	0.6141	9.37	_____
DIESEL FUEL	gal	2.36	19.3816	45.74	_____
REPAIR & MAINTENANCE	acre	27.26	1.0000	27.26	_____
INTEREST ON OP. CAP.	acre	12.88	1.0000	12.88	_____

TOTAL DIRECT EXPENSES				667.36	_____
RETURNS ABOVE DIRECT EXPENSES				470.04	_____
TOTAL FIXED EXPENSES				112.19	_____

TOTAL SPECIFIED EXPENSES				779.55	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				357.85	_____

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	POWER IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Subsoiler	3 shank	MFWD 225	0.204	0.50	Oct		0.10	0.10	0.10	0.09
Disk Harrow	42'	MFWD 225	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Soil Test	acre			0.33	Oct	0.3330				
Lime (Spread)	ton			0.33	Oct	0.6660				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.9570				
Potash (60% K2O)	cwt					1.5000				
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Row Cond./Roll-Fold.	40'	MFWD 225	0.046	1.00	Mar		0.04	0.04	0.04	0.04
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					34.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					32.1712				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			0.20	May	0.2000				
Bifenthrin	oz					1.2800				
Fert Appl (Liquid)	12R-38	MFWD 225	0.051	1.00	May		0.05	0.05	0.07	0.04
UAN (32%)	gal					30.0000				
Cultivate	12R-38	MFWD 225	0.054	1.00	May		0.05	0.05	0.05	0.04
App Fert by Air	cwt			1.00	Jun	1.0000				
Urea, Solid (46% N)	cwt					1.0000				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-38	265 hp	0.100	1.00	Sep		0.10	0.10	0.10	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
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 2021 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 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		2.79	1.01	2.96			0.24	7.00	5.17	12.17
Disk Harrow	42'		1.28	1.79	1.35			0.15	4.57	4.95	9.52
Soil Test	acre	3.33						0.12	3.45		3.45
Lime (Spread)	ton	39.29						1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60			0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	54.31						1.90	56.21		56.21
Potash (60% K2O)	cwt	39.45						1.38	40.83		40.83
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81			0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
Clarity	pt	5.50						0.13	5.63		5.63
Select Max	pt	12.73						0.30	13.03		13.03
Row Cond./Roll-Fold.	40'		1.28	0.76	1.36			0.07	3.47	3.12	6.59
Plant - Folding	12R-38		1.36	1.94	1.89			0.11	5.30	5.04	10.34
Corn Seed RR2	thous	110.50						2.26	112.76		112.76
Custom Apply Fert	acre	7.50						0.13	7.63		7.63
UAN + Sulfur (28%)	gal	65.95						1.15	67.10		67.10
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.59			0.02	1.18	1.26	2.44
Atrazine 4L	pt	6.68						0.12	6.80		6.80
Halex GT	pt	20.95						0.37	21.32		21.32
Corn Consultant	acre	6.00						0.09	6.09		6.09
App by Air (3 gal)	appl	1.12						0.02	1.14		1.14
Bifenthrin	oz	1.10						0.02	1.12		1.12
Fert Appl (Liquid)	12R-38		1.41	1.22	1.73			0.06	4.42	3.22	7.64
UAN (32%)	gal	63.00						0.92	63.92		63.92
Cultivate	12R-38		1.48	1.09	1.58			0.06	4.21	4.13	8.34
App Fert by Air	cwt	7.50						0.09	7.59		7.59
Urea, Solid (46% N)	cwt	28.63						0.33	28.96		28.96
App by Air (3 gal)	appl	5.60						0.07	5.67		5.67
Intrepid 2F	oz	7.64						0.09	7.73		7.73
Header - Corn	8R-38		3.25	5.93	2.93			0.04	12.15	17.81	29.96
Grain Cart Corn	700 bu		0.69	0.51	0.74			0.01	1.95	1.65	3.60
Haul Corn	bu	50.60						0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11	12.80
Roll-Out Pipe Irr.	acre	7.92	26.72	7.83	4.73			0.55	47.75	53.36	101.11
TOTALS		555.82	45.74	27.26	25.66	0.00	12.88	667.36	112.19	779.55	

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	5.60	0.00	0.00	0.00
FERTILIZERS	93.76	0.00	0.00	0.00	0.00	0.00	65.95	63.00	28.63	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	7.64	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	110.50	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	7.50	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	39.29	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	8.30	0.00	0.00	0.00	0.00	3.25	0.59	3.54	3.06	0.23	0.63	6.06
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	7.81	0.00	0.00	0.00	0.00	2.64	0.37	2.89	19.20	6.25	0.39	6.19
REPAIR & MAINTENANCE	5.07	0.00	0.00	0.00	0.00	2.70	0.20	2.31	6.29	1.05	0.17	9.47
INTEREST ON OP. CAP.	5.52	0.00	0.00	0.00	0.67	2.44	1.79	1.17	1.00	0.06	0.01	0.22
TOTAL DIRECT EXPENSES	163.08	0.00	0.00	0.00	29.42	121.53	104.03	81.13	86.84	7.59	1.20	72.54
NET INCOME	-163.08	0.00	0.00	0.00	-29.42	-121.53	-104.03	-81.13	-86.84	-7.59	-1.20	1064.86
NET INCOME TO DATE	-163.08	-163.08	-163.08	-163.08	-192.50	-314.03	-418.06	-499.19	-586.03	-593.62	-594.82	470.04

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2022

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Corn	3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46		
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-215 -327	-187 -299	-158 -270	-130 -242	-101 -213	-73 -185	-44 -157	-16 -128	12 -100	40 -71	68 -43
60	132.00	bu	-135 -247	-101 -213	-66 -179	-32 -145	1 -110	35 -76	69 -42	103 -8	137 25	171 59	205 93
70	154.00	bu	-55 -167	-15 -127	24 -87	64 -47	104 -7	144 31	183 71	223 111	263 151	303 191	343 230
80	176.00	bu	25 -86	70 -41	116 4	161 49	207 95	252 140	298 186	343 231	389 277	434 322	480 368
90	198.00	bu	105 -6	156 44	207 95	259 146	310 198	361 249	412 300	463 351	514 402	566 453	617 505
100	220.00	bu	185 73	242 130	299 187	356 244	413 300	470 357	526 414	583 471	640 528	697 585	754 642
110	242.00	bu	265 153	328 216	391 278	453 341	516 403	578 466	641 529	703 591	766 654	828 716	891 779
120	264.00	bu	346 233	414 302	482 370	550 438	619 506	687 575	755 643	823 711	892 779	960 848	1028 916
130	286.00	bu	426 314	500 388	574 462	648 535	722 609	796 683	869 757	943 831	1017 905	1091 979	1165 1053
140	308.00	bu	506 394	586 474	665 553	745 633	825 712	904 792	984 872	1063 951	1143 1031	1223 1110	1302 1190
150	330.00	bu	586 474	672 559	757 645	842 730	928 815	1013 901	1098 986	1183 1071	1269 1157	1354 1242	1439 1327

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 2021 input prices.

Table 5.A Estimated costs per acre
 Corn, conventional tillage, RR2 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	1.2000	6.72	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	27.75	1.6300	45.23	_____
Potash (60% K2O)	cwt	26.30	1.2500	32.88	_____
UAN + Sulfur (28%)	gal	2.05	19.3063	39.58	_____
UAN (32%)	gal	2.10	36.7200	77.11	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2804	1.10	_____
Intrepid 2F	oz	1.91	4.0000	7.64	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.25	28.0000	91.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.4903	7.48	_____
Harvesters	hour	15.27	0.1009	1.54	_____
Self-Propelled	hour	15.27	0.0176	0.27	_____
HAND LABOR					
Implements	hour	9.06	0.1175	1.06	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	15.25	0.5480	8.36	_____
DIESEL FUEL					
Tractors	gal	2.36	5.6788	13.40	_____
Harvesters	gal	2.36	1.3770	3.25	_____
Self-Propelled	gal	2.36	0.1586	0.37	_____
REPAIR & MAINTENANCE					
Implements	acre	9.84	1.0000	9.84	_____
Tractors	acre	3.80	1.0000	3.80	_____
Harvesters	acre	4.11	1.0000	4.11	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	10.55	1.0000	10.55	_____

TOTAL DIRECT EXPENSES				517.17	_____
FIXED EXPENSES					
Implements	acre	14.79	1.0000	14.79	_____
Tractors	acre	22.41	1.0000	22.41	_____
Harvesters	acre	15.26	1.0000	15.26	_____
Self-Propelled	acre	1.26	1.0000	1.26	_____

TOTAL FIXED EXPENSES				53.72	_____

TOTAL SPECIFIED EXPENSES				570.89	_____

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	170.0000	878.90	_____

TOTAL INCOME				878.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.72	1.0000	13.72	_____
FERTILIZERS	acre	194.80	1.0000	194.80	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	8.74	1.0000	8.74	_____
SEED/PLANTS	acre	91.00	1.0000	91.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.6089	9.29	_____
UNALLOCATED LABOR	hour	15.25	0.5480	8.36	_____
DIESEL FUEL	gal	2.36	7.2145	17.02	_____
REPAIR & MAINTENANCE	acre	17.95	1.0000	17.95	_____
INTEREST ON OP. CAP.	acre	10.55	1.0000	10.55	_____

TOTAL DIRECT EXPENSES				517.17	_____
RETURNS ABOVE DIRECT EXPENSES				361.73	_____
TOTAL FIXED EXPENSES				53.72	_____

TOTAL SPECIFIED EXPENSES				570.89	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				308.01	_____

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

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

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		2.79	1.01	2.96			0.24	7.00	5.17	12.17
Disk Harrow	42'		1.28	1.79	1.35			0.15	4.57	4.95	9.52
Soil Test	acre	3.33						0.12	3.45		3.45
Lime (Spread)	ton	39.29						1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60			0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	45.23						1.58	46.81		46.81
Potash (60% K2O)	cwt	32.88						1.15	34.03		34.03
Bed/Disk (Hipper)	12R-38		1.35	1.01	1.43			0.13	3.92	3.81	7.73
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
Clarity	pt	5.50						0.13	5.63		5.63
Select Max	pt	12.73						0.30	13.03		13.03
Row Cond Folding	38'		1.12	0.64	1.18			0.06	3.00	3.14	6.14
Plant - Folding	12R-38		1.36	1.94	1.89			0.11	5.30	5.04	10.34
Corn Seed RR2	thous	91.00						1.86	92.86		92.86
Custom Apply Fert	acre	7.50						0.13	7.63		7.63
UAN + Sulfur (28%)	gal	39.58						0.69	40.27		40.27
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.59			0.02	1.18	1.26	2.44
Atrazine 4L	pt	6.68						0.12	6.80		6.80
Halex GT	pt	20.95						0.37	21.32		21.32
Corn Consultant	acre	6.00						0.09	6.09		6.09
App by Air (3 gal)	appl	1.12						0.02	1.14		1.14
Bifenthrin	oz	1.10						0.02	1.12		1.12
Fert Appl (Liquid)	12R-38		1.41	1.22	1.73			0.06	4.42	3.22	7.64
UAN (32%)	gal	77.11						1.12	78.23		78.23
App by Air (3 gal)	appl	5.60						0.07	5.67		5.67
Intrepid 2F	oz	7.64						0.09	7.73		7.73
Header - Corn	8R-38		3.25	5.93	2.93			0.04	12.15	17.81	29.96
Grain Cart Corn	700 bu		0.69	0.51	0.74			0.01	1.95	1.65	3.60
Haul Corn	bu	39.10						0.11	39.21		39.21
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11	12.80
TOTALS		452.86	17.02	17.95	18.79	0.00	10.55	517.17	53.72	570.89	

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

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	878.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	5.60	0.00	0.00	0.00
FERTILIZERS	78.11	0.00	0.00	0.00	0.00	0.00	39.58	77.11	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	7.64	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	91.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	39.29	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	7.34	0.00	0.00	0.00	0.00	3.07	0.59	1.73	0.00	0.00	0.00	6.06
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	6.57	0.00	0.00	0.00	0.00	2.48	0.37	1.41	0.00	0.00	0.00	6.19
REPAIR & MAINTENANCE	4.48	0.00	0.00	0.00	0.00	2.58	0.20	1.22	0.00	0.00	0.00	9.47
INTEREST ON OP. CAP.	4.87	0.00	0.00	0.00	0.67	2.03	1.33	1.31	0.16	0.00	0.00	0.18
TOTAL DIRECT EXPENSES	143.99	0.00	0.00	0.00	29.42	101.16	77.20	91.00	13.40	0.00	0.00	61.00
NET INCOME	-143.99	0.00	0.00	0.00	-29.42	-101.16	-77.20	-91.00	-13.40	0.00	0.00	817.90
NET INCOME TO DATE	-143.99	-143.99	-143.99	-143.99	-173.41	-274.57	-351.77	-442.77	-456.17	-456.17	-456.17	361.73

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38"
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2022

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
			-----dollars-----										
PERCENT	YIELD	UNIT											
50	85.00	bu	-167	-146	-124	-102	-80	-58	-36	-14	7	29	51
			-221	-199	-177	-155	-133	-111	-89	-67	-45	-23	-1
60	102.00	bu	-105	-79	-53	-26	-0	25	52	78	104	131	157
			-159	-133	-106	-80	-54	-27	-1	24	51	77	103
70	119.00	bu	-43	-13	17	48	79	109	140	171	202	232	263
			-97	-66	-36	-5	25	56	86	117	148	179	209
80	136.00	bu	18	53	88	123	158	193	228	264	299	334	369
			-35	-0	34	69	104	140	175	210	245	280	315
90	153.00	bu	80	119	159	198	238	277	317	356	396	435	475
			26	65	105	144	184	224	263	303	342	382	421
100	170.00	bu	142	185	229	273	317	361	405	449	493	537	581
			88	132	176	220	264	308	351	395	439	483	527
110	187.00	bu	204	252	300	349	397	445	494	542	590	639	687
			150	198	246	295	343	391	440	488	536	585	633
120	204.00	bu	265	318	371	424	476	529	582	635	687	740	793
			212	265	317	370	423	475	528	581	634	686	739
130	221.00	bu	327	385	442	499	556	613	670	727	785	842	899
			274	331	388	445	502	559	617	674	731	788	845
140	238.00	bu	389	451	513	574	636	697	759	820	882	943	1005
			336	397	459	520	582	643	705	766	828	889	951
150	255.00	bu	451	517	583	649	715	781	847	913	979	1045	1111
			398	464	530	596	661	727	793	859	925	991	1057

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 2021 input prices.

Table 6.A Estimated costs per acre
 Corn, conventional tillage, RR2 seed, 12-row 38",
 220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	1.2000	6.72	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	27.75	1.9570	54.31	_____
Potash (60% K2O)	cwt	26.30	1.5000	39.45	_____
UAN + Sulfur (28%)	gal	2.05	32.1712	65.95	_____
UAN (32%)	gal	2.10	30.0000	63.00	_____
Urea, Solid (46% N)	cwt	28.63	1.0000	28.63	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2800	1.10	_____
Intrepid 2F	oz	1.91	4.0000	7.64	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.25	34.0000	110.50	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
App Fert by Air	cwt	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.5637	8.61	_____
Harvesters	hour	15.27	0.1009	1.54	_____
Self-Propelled	hour	15.27	0.0176	0.27	_____
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	15.25	0.6141	9.37	_____
DIESEL FUEL					
Tractors	gal	2.36	6.5294	15.40	_____
Harvesters	gal	2.36	1.3770	3.25	_____
Self-Propelled	gal	2.36	0.1586	0.37	_____
1/4-mi. Pivot Irr.	gal	2.36	11.2011	26.43	_____
REPAIR & MAINTENANCE					
Implements	acre	10.76	1.0000	10.76	_____
Tractors	acre	4.36	1.0000	4.36	_____
Harvesters	acre	4.11	1.0000	4.11	_____
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	12.97	1.0000	12.97	_____
TOTAL DIRECT EXPENSES				670.47	_____
FIXED EXPENSES					
Implements	acre	16.54	1.0000	16.54	_____
Tractors	acre	25.77	1.0000	25.77	_____
Harvesters	acre	15.26	1.0000	15.26	_____
Self-Propelled	acre	1.26	1.0000	1.26	_____
1/4-mi. Pivot Irr.	acre	68.70	1.0000	68.70	_____
TOTAL FIXED EXPENSES				127.53	_____
TOTAL SPECIFIED EXPENSES				798.00	_____

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____

TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.72	1.0000	13.72	_____
FERTILIZERS	acre	251.34	1.0000	251.34	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	8.74	1.0000	8.74	_____
SEED/PLANTS	acre	110.50	1.0000	110.50	_____
CUSTOM FERTILIZE	acre	15.00	1.0000	15.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.6823	10.42	_____
UNALLOCATED LABOR	hour	15.25	0.6141	9.37	_____
DIESEL FUEL	gal	2.36	19.2663	45.45	_____
REPAIR & MAINTENANCE	acre	41.38	1.0000	41.38	_____
INTEREST ON OP. CAP.	acre	12.97	1.0000	12.97	_____

TOTAL DIRECT EXPENSES				670.47	_____
RETURNS ABOVE DIRECT EXPENSES				466.93	_____
TOTAL FIXED EXPENSES				127.53	_____

TOTAL SPECIFIED EXPENSES				798.00	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				339.40	_____

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

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

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Subsoiler	3 shank		2.79	1.01	2.96			0.24	7.00	5.17	12.17
Disk Harrow	42'		1.28	1.79	1.35			0.15	4.57	4.95	9.52
Soil Test	acre	3.33						0.12	3.45		3.45
Lime (Spread)	ton	39.29						1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60			0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	54.31						1.90	56.21		56.21
Potash (60% K2O)	cwt	39.45						1.38	40.83		40.83
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81			0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
Clarity	pt	5.50						0.13	5.63		5.63
Select Max	pt	12.73						0.30	13.03		13.03
Row Cond./Roll-Fold.	40'		1.28	0.76	1.36			0.07	3.47	3.12	6.59
Plant - Folding	12R-38		1.36	1.94	1.89			0.11	5.30	5.04	10.34
Corn Seed RR2	thous	110.50						2.26	112.76		112.76
Custom Apply Fert	acre	7.50						0.13	7.63		7.63
UAN + Sulfur (28%)	gal	65.95						1.15	67.10		67.10
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.59			0.02	1.18	1.26	2.44
Atrazine 4L	pt	6.68						0.12	6.80		6.80
Halex GT	pt	20.95						0.37	21.32		21.32
Corn Consultant	acre	6.00						0.09	6.09		6.09
App by Air (3 gal)	appl	1.12						0.02	1.14		1.14
Bifenthrin	oz	1.10						0.02	1.12		1.12
Fert Appl (Liquid)	12R-38		1.41	1.22	1.73			0.06	4.42	3.22	7.64
UAN (32%)	gal	63.00						0.92	63.92		63.92
Cultivate	12R-38		1.48	1.09	1.58			0.06	4.21	4.13	8.34
App Fert by Air	cwt	7.50						0.09	7.59		7.59
Urea, Solid (46% N)	cwt	28.63						0.33	28.96		28.96
App by Air (3 gal)	appl	5.60						0.07	5.67		5.67
Intrepid 2F	oz	7.64						0.09	7.73		7.73
Header - Corn	8R-38		3.25	5.93	2.93			0.04	12.15	17.81	29.96
Grain Cart Corn	700 bu		0.69	0.51	0.74			0.01	1.95	1.65	3.60
Haul Corn	bu	50.60						0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11	12.80
1/4-mi. Pivot Irr.	acre		26.43	21.95	1.84			0.64	50.86	68.70	119.56
TOTALS		547.90	45.45	41.38	22.77	0.00	12.97	670.47	127.53	798.00	

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	5.60	0.00	0.00	0.00
FERTILIZERS	93.76	0.00	0.00	0.00	0.00	0.00	65.95	63.00	28.63	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	7.64	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	110.50	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	7.50	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	39.29	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	7.72	0.00	0.00	0.00	0.00	3.25	1.93	3.46	0.20	0.15	0.00	6.06
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	6.93	0.00	0.00	0.00	0.00	2.64	0.37	10.82	10.57	7.93	0.00	6.19
REPAIR & MAINTENANCE	4.75	0.00	0.00	0.00	0.00	2.70	0.20	20.78	1.99	1.49	0.00	9.47
INTEREST ON OP. CAP.	5.46	0.00	0.00	0.00	0.67	2.44	1.81	1.56	0.73	0.08	0.00	0.22
TOTAL DIRECT EXPENSES	161.24	0.00	0.00	0.00	29.42	121.53	105.39	107.84	62.86	9.65	0.00	72.54
NET INCOME	-161.24	0.00	0.00	0.00	-29.42	-121.53	-105.39	-107.84	-62.86	-9.65	0.00	1064.86
NET INCOME TO DATE	-161.24	-161.24	-161.24	-161.24	-190.66	-312.19	-417.58	-525.42	-588.28	-597.93	-597.93	466.93

Note: Cost of production estimates are based on 2021 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 seed, 12-row 38",
 220 bu yld goal, Pivot Irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2022

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT	YIELD	UNIT	-----dollars-----										
50	110.00	bu	-218	-190	-161	-133	-104	-76	-47	-19	8	37	65
			-346	-317	-289	-260	-232	-203	-175	-147	-118	-90	-61
60	132.00	bu	-138	-104	-70	-35	-1	32	66	100	134	168	202
			-265	-231	-197	-163	-129	-95	-61	-27	7	41	75
70	154.00	bu	-58	-18	21	61	101	140	180	220	260	300	339
			-185	-145	-106	-66	-26	13	53	93	132	172	212
80	176.00	bu	22	67	113	158	204	249	295	340	386	431	477
			-105	-59	-14	31	76	122	167	213	258	304	349
90	198.00	bu	102	153	204	255	307	358	409	460	511	562	614
			-25	26	77	128	179	230	281	333	384	435	486
100	220.00	bu	182	239	296	353	410	466	523	580	637	694	751
			55	111	168	225	282	339	396	453	510	566	623
110	242.00	bu	262	325	387	450	513	575	638	700	763	825	888
			135	197	260	322	385	448	510	573	635	698	760
120	264.00	bu	343	411	479	547	616	684	752	820	888	957	1025
			215	283	351	420	488	556	624	693	761	829	897
130	286.00	bu	423	497	571	645	718	792	866	940	1014	1088	1162
			295	369	443	517	591	665	739	813	887	961	1035
140	308.00	bu	503	583	662	742	821	901	981	1060	1140	1220	1299
			375	455	535	614	694	774	853	933	1012	1092	1172
150	330.00	bu	583	669	754	839	924	1010	1095	1180	1266	1351	1436
			456	541	626	712	797	882	968	1053	1138	1223	1309

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 2021 input prices.

Table 7.A Estimated costs per acre
 Corn, stale seedbed, RR2 seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	1.2000	6.72	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	27.75	1.6300	45.23	_____
Potash (60% K2O)	cwt	26.30	1.2500	32.88	_____
UAN + Sulfur (28%)	gal	2.05	56.0263	114.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2804	1.10	_____
Intrepid 2F	oz	1.91	4.0000	7.64	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.25	28.0000	91.00	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.4295	6.56	_____
Harvesters	hour	15.27	0.1277	1.95	_____
Self-Propelled	hour	15.27	0.0176	0.27	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0088	0.08	_____
UNALLOCATED LABOR					
	hour	15.26	0.5173	7.90	_____
DIESEL FUEL					
Tractors	gal	2.36	4.9741	11.74	_____
Harvesters	gal	2.36	1.7419	4.11	_____
Self-Propelled	gal	2.36	0.1586	0.37	_____
REPAIR & MAINTENANCE					
Implements	acre	10.07	1.0000	10.07	_____
Tractors	acre	3.34	1.0000	3.34	_____
Harvesters	acre	5.20	1.0000	5.20	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	10.38	1.0000	10.38	_____
TOTAL DIRECT EXPENSES				514.51	_____
FIXED EXPENSES					
Implements	acre	13.89	1.0000	13.89	_____
Tractors	acre	19.63	1.0000	19.63	_____
Harvesters	acre	19.30	1.0000	19.30	_____
Self-Propelled	acre	1.26	1.0000	1.26	_____
TOTAL FIXED EXPENSES				54.08	_____
TOTAL SPECIFIED EXPENSES				568.59	_____

Note: Cost of production estimates are based on 2021 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 seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	170.0000	878.90	_____

TOTAL INCOME				878.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.72	1.0000	13.72	_____
FERTILIZERS	acre	192.97	1.0000	192.97	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	8.74	1.0000	8.74	_____
SEED/PLANTS	acre	91.00	1.0000	91.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.5748	8.78	_____
UNALLOCATED LABOR	hour	15.26	0.5173	7.90	_____
DIESEL FUEL	gal	2.36	6.8748	16.22	_____
REPAIR & MAINTENANCE	acre	18.81	1.0000	18.81	_____
INTEREST ON OP. CAP.	acre	10.38	1.0000	10.38	_____

TOTAL DIRECT EXPENSES				514.51	_____
RETURNS ABOVE DIRECT EXPENSES				364.39	_____
TOTAL FIXED EXPENSES				54.08	_____

TOTAL SPECIFIED EXPENSES				568.59	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				310.31	_____

Note: Cost of production estimates are based on 2021 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 seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2022

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

Note: Cost of production estimates are based on 2021 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 seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2022

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						0.12	3.45		3.45
Lime (Spread)	ton	39.29						1.38	40.67		40.67
Spin Spreader	5 ton		1.15	0.67	1.60			0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	45.23						1.58	46.81		46.81
Potash (60% K2O)	cwt	32.88						1.15	34.03		34.03
Disk Heavy	28'		2.07	1.79	2.20			0.21	6.27	5.81	12.08
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81			0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
Clarity	pt	5.50						0.13	5.63		5.63
Select Max	pt	12.73						0.30	13.03		13.03
Plant - Rigid	12R-30		1.72	2.00	2.39			0.12	6.23	5.54	11.77
Corn Seed RR2	thous	91.00						1.86	92.86		92.86
Custom Apply Fert	acre	7.50						0.13	7.63		7.63
UAN + Sulfur (28%)	gal	39.58						0.69	40.27		40.27
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.59			0.02	1.18	1.26	2.44
Atrazine 4L	pt	6.68						0.12	6.80		6.80
Halex GT	pt	20.95						0.37	21.32		21.32
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64			0.10	6.86	5.02	11.88
UAN + Sulfur (28%)	gal	75.28						1.10	76.38		76.38
Corn Consultant	acre	6.00						0.09	6.09		6.09
App by Air (3 gal)	appl	1.12						0.02	1.14		1.14
Bifenthrin	oz	1.10						0.02	1.12		1.12
App by Air (3 gal)	appl	5.60						0.07	5.67		5.67
Intrepid 2F	oz	7.64						0.09	7.73		7.73
Header - Corn	8R-30		4.11	7.47	3.71			0.04	15.33	22.49	37.82
Grain Cart Corn	500 bu		0.69	0.40	0.74			0.01	1.84	1.48	3.32
Haul Corn	bu	39.10						0.11	39.21		39.21
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11	12.80
TOTALS		451.03	16.22	18.81	18.07	0.00	10.38	514.51	54.08	568.59	

Note: Cost of production estimates are based on 2021 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 seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2022

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	878.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	5.60	0.00	0.00	0.00
FERTILIZERS	78.11	0.00	0.00	0.00	0.00	0.00	39.58	75.28	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	7.64	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	91.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	39.29	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	5.61	0.00	0.00	0.00	0.00	2.39	0.59	2.64	0.00	0.00	0.00	6.84
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	4.93	0.00	0.00	0.00	0.00	1.72	0.37	2.15	0.00	0.00	0.00	7.05
REPAIR & MAINTENANCE	3.74	0.00	0.00	0.00	0.00	2.00	0.20	1.97	0.00	0.00	0.00	10.90
INTEREST ON OP. CAP.	4.73	0.00	0.00	0.00	0.67	1.98	1.33	1.33	0.16	0.00	0.00	0.18
TOTAL DIRECT EXPENSES	139.74	0.00	0.00	0.00	29.42	99.09	77.20	91.59	13.40	0.00	0.00	64.07
NET INCOME	-139.74	0.00	0.00	0.00	-29.42	-99.09	-77.20	-91.59	-13.40	0.00	0.00	814.83
NET INCOME TO DATE	-139.74	-139.74	-139.74	-139.74	-169.16	-268.25	-345.45	-437.04	-450.44	-450.44	-450.44	364.39

Note: Cost of production estimates are based on 2021 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 seed, 12-row 30",
 170 bu yield goal, Non-Delta, Mississippi, 2022

			-----PERCENT-----										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
			-----PRODUCT PRICE-----										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT	YIELD	UNIT	-----dollars-----										
50	85.00	bu	-165 -219	-143 -197	-121 -175	-99 -153	-77 -131	-55 -109	-33 -87	-11 -65	10 -43	32 -21	54 0
60	102.00	bu	-103 -157	-76 -131	-50 -104	-24 -78	2 -51	28 -25	54 0	81 27	107 53	133 79	160 106
70	119.00	bu	-41 -95	-10 -64	20 -33	50 -3	81 27	112 58	143 89	174 119	204 150	235 181	266 212
80	136.00	bu	20 -33	55 1	90 36	126 72	161 107	196 142	231 177	266 212	301 247	337 282	372 318
90	153.00	bu	82 28	122 68	161 107	201 147	240 186	280 226	319 265	359 305	399 344	438 384	478 424
100	170.00	bu	144 90	188 134	232 178	276 222	320 266	364 310	408 354	452 398	496 442	540 486	584 530
110	187.00	bu	206 152	255 200	303 249	351 297	400 345	448 394	496 442	545 490	593 539	641 587	690 635
120	204.00	bu	268 214	321 267	374 320	426 372	479 425	532 478	585 530	637 583	690 636	743 689	795 741
130	221.00	bu	330 276	387 333	444 390	502 447	559 505	616 562	673 619	730 676	787 733	844 790	901 847
140	238.00	bu	392 338	454 400	515 461	577 523	638 584	700 646	761 707	823 769	884 830	946 892	1007 953
150	255.00	bu	454 400	520 466	586 532	652 598	718 664	784 730	850 796	916 861	981 927	1047 993	1113 1059

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 2021 input prices.

Table 8.A Estimated costs per acre
 Corn, stale seedbed, RR2 seed, 16 row 30", Pivot
 Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	1.2000	6.72	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	27.75	1.6300	45.23	_____
Potash (60% K2O)	cwt	26.30	1.2500	32.88	_____
UAN + Sulfur (28%)	gal	2.05	56.0263	114.85	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	1.2804	1.10	_____
Intrepid 2F	oz	1.91	4.0000	7.64	_____
SEED/PLANTS					
Corn Seed RR2	thous	3.25	28.0000	91.00	_____
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	59.00	0.6600	38.94	_____
CROP CONSULTANT					
Corn Consultant	acre	6.00	1.0000	6.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	15.27	0.4137	6.32	_____
Harvesters	hour	15.27	0.1277	1.95	_____
Self-Propelled	hour	15.27	0.0176	0.27	_____
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	15.28	0.5032	7.69	_____
DIESEL FUEL					
Tractors	gal	2.36	4.7921	11.31	_____
Harvesters	gal	2.36	1.7419	4.11	_____
Self-Propelled	gal	2.36	0.1586	0.37	_____
1/4-mi. Pivot Irr.	gal	2.36	11.2011	26.43	_____
REPAIR & MAINTENANCE					
Implements	acre	10.59	1.0000	10.59	_____
Tractors	acre	3.22	1.0000	3.22	_____
Harvesters	acre	5.20	1.0000	5.20	_____
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	11.03	1.0000	11.03	_____
TOTAL DIRECT EXPENSES				575.88	_____
FIXED EXPENSES					
Implements	acre	14.82	1.0000	14.82	_____
Tractors	acre	18.91	1.0000	18.91	_____
Harvesters	acre	19.30	1.0000	19.30	_____
Self-Propelled	acre	1.26	1.0000	1.26	_____
1/4-mi. Pivot Irr.	acre	68.70	1.0000	68.70	_____
TOTAL FIXED EXPENSES				122.99	_____
TOTAL SPECIFIED EXPENSES				698.87	_____

Note: Cost of production estimates are based on 2021 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 seed, 16 row 30", Pivot
 Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____

TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	13.72	1.0000	13.72	_____
FERTILIZERS	acre	192.97	1.0000	192.97	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	8.74	1.0000	8.74	_____
SEED/PLANTS	acre	91.00	1.0000	91.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.94	1.0000	38.94	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1373	1.25	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	15.27	0.5591	8.54	_____
UNALLOCATED LABOR	hour	15.28	0.5032	7.69	_____
DIESEL FUEL	gal	2.36	17.8938	42.22	_____
REPAIR & MAINTENANCE	acre	41.16	1.0000	41.16	_____
INTEREST ON OP. CAP.	acre	11.03	1.0000	11.03	_____

TOTAL DIRECT EXPENSES				575.88	_____
RETURNS ABOVE DIRECT EXPENSES				561.52	_____
TOTAL FIXED EXPENSES				122.99	_____

TOTAL SPECIFIED EXPENSES				698.87	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				438.53	_____

Note: Cost of production estimates are based on 2021 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 seed, 16 row 30", Pivot
 Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2022

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	0.3300				
Lime (Spread)	ton			0.33	Oct	0.6600				
Spin Spreader	5 ton	MFWD 225	0.042	1.00	Oct		0.04	0.04	0.08	0.03
Phosphorus(46% P2O5)	cwt					1.6300				
Potash (60% K2O)	cwt					1.2500				
Disk Heavy	28'	MFWD 225	0.075	1.00	Oct		0.07	0.07	0.07	0.06
Bed/Disk w/roller	12R-30/40	MFWD 225	0.062	1.00	Oct		0.06	0.06	0.06	0.05
App by Air (5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Clarity	pt					0.5000				
Select Max	pt					1.0000				
Plant - Folding	16R-30	MFWD 225	0.047	1.00	Mar		0.04	0.04	0.09	0.04
Corn Seed RR2	thous					28.0000				
Custom Apply Fert	acre			1.00	Apr	1.0000				
UAN + Sulfur (28%)	gal					19.3063				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Atrazine 4L	pt					4.0000				
Halex GT	pt					3.6000				
Fert Appl (Liquid)	12R-30	MFWD 225	0.078	1.00	May		0.07	0.07	0.11	0.07
UAN + Sulfur (28%)	gal					36.7200				
Corn Consultant	acre			1.00	May	1.0000				
App by Air (3 gal)	appl			1.00	May	0.2000				
Bifenthrin	oz					1.2804				
App by Air (3 gal)	appl			1.00	Jun	1.0000				
Intrepid 2F	oz					4.0000				
Header - Corn	8R-30	265 hp	0.127	1.00	Sep		0.12	0.12	0.12	0.11
Grain Cart Corn	500 bu	MFWD 225	0.025	1.00	Sep		0.02	0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex	20'	MFWD 225	0.082	1.00	Sep		0.08	0.08	0.08	0.07
1/4-mi. Pivot Irr.	acre				Jul	1.0000			0.20	
TOTALS							0.55	0.54	0.90	0.50

Note: Cost of production estimates are based on 2021 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 seed, 16 row 30", Pivot
 Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.12	3.42		3.42
Lime (Spread)	ton	38.94						1.36	40.30		40.30
Spin Spreader	5 ton		1.15	0.67	1.60			0.12	3.54	2.56	6.10
Phosphorus(46% P2O5)	cwt	45.23						1.58	46.81		46.81
Potash (60% K2O)	cwt	32.88						1.15	34.03		34.03
Disk Heavy	28'		2.07	1.79	2.20			0.21	6.27	5.81	12.08
Bed/Disk w/roller	12R-30/40		1.71	1.28	1.81			0.17	4.97	4.81	9.78
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
Clarity	pt	5.50						0.13	5.63		5.63
Select Max	pt	12.73						0.30	13.03		13.03
Plant - Folding	16R-30		1.29	2.40	1.80			0.11	5.60	5.75	11.35
Corn Seed RR2	thous	91.00						1.86	92.86		92.86
Custom Apply Fert	acre	7.50						0.13	7.63		7.63
UAN + Sulfur (28%)	gal	39.58						0.69	40.27		40.27
Sprayer 600-750gal	60' 175hp		0.37	0.20	0.59			0.02	1.18	1.26	2.44
Atrazine 4L	pt	6.68						0.12	6.80		6.80
Halex GT	pt	20.95						0.37	21.32		21.32
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64			0.10	6.86	5.02	11.88
UAN + Sulfur (28%)	gal	75.28						1.10	76.38		76.38
Corn Consultant	acre	6.00						0.09	6.09		6.09
App by Air (3 gal)	appl	1.12						0.02	1.14		1.14
Bifenthrin	oz	1.10						0.02	1.12		1.12
App by Air (3 gal)	appl	5.60						0.07	5.67		5.67
Intrepid 2F	oz	7.64						0.09	7.73		7.73
Header - Corn	8R-30		4.11	7.47	3.71			0.04	15.33	22.49	37.82
Grain Cart Corn	500 bu		0.69	0.40	0.74			0.01	1.84	1.48	3.32
Haul Corn	bu	50.60						0.15	50.75		50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11	12.80
1/4-mi. Pivot Irr.	acre		26.43	21.95	1.84			0.64	50.86	68.70	119.56
TOTALS		462.15	42.22	41.16	19.32	0.00	11.03	575.88	122.99	698.87	

Note: Cost of production estimates are based on 2021 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 seed, 16 row 30", Pivot
 Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	1.12	5.60	0.00	0.00	0.00
FERTILIZERS	78.11	0.00	0.00	0.00	0.00	0.00	39.58	75.28	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	7.64	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	91.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.94	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	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	5.61	0.00	0.00	0.00	0.00	1.80	1.93	2.79	0.20	0.15	0.00	6.84
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	4.93	0.00	0.00	0.00	0.00	1.29	0.37	10.08	10.57	7.93	0.00	7.05
REPAIR & MAINTENANCE	3.74	0.00	0.00	0.00	0.00	2.40	0.20	20.44	1.99	1.49	0.00	10.90
INTEREST ON OP. CAP.	4.71	0.00	0.00	0.00	0.67	1.97	1.35	1.72	0.31	0.08	0.00	0.22
TOTAL DIRECT EXPENSES	139.34	0.00	0.00	0.00	29.42	98.46	78.56	118.53	26.31	9.65	0.00	75.61
NET INCOME	-139.34	0.00	0.00	0.00	-29.42	-98.46	-78.56	-118.53	-26.31	-9.65	0.00	1061.79
NET INCOME TO DATE	-139.34	-139.34	-139.34	-139.34	-168.76	-267.22	-345.78	-464.31	-490.62	-500.27	-500.27	561.52

Note: Cost of production estimates are based on 2021 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 seed, 16 row 30", Pivot
 Irrigated, 220 bu yield goal, Non-Delta, Mississippi, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Corn			3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46
PERCENT YIELD UNIT			-----dollars-----										
50	110.00	bu	-123 -246	-95 -218	-67 -190	-38 -161	-10 -133	18 -104	46 -76	75 -47	103 -19	131 8	160 37
60	132.00	bu	-43 -166	-9 -132	24 -98	58 -64	92 -30	126 3	160 37	195 72	229 106	263 140	297 174
70	154.00	bu	36 -86	76 -46	116 -6	155 32	195 72	235 112	275 152	315 192	354 231	394 271	434 311
80	176.00	bu	116 -6	162 39	207 84	253 130	298 175	344 221	389 266	435 312	480 357	526 403	571 448
90	198.00	bu	196 73	248 125	299 176	350 227	401 278	452 329	504 381	555 432	606 483	657 534	708 585
100	220.00	bu	277 154	334 211	390 267	447 324	504 381	561 438	618 495	675 552	732 609	789 666	845 722
110	242.00	bu	357 234	419 296	482 359	545 422	607 484	670 547	732 609	795 672	857 734	920 797	982 859
120	264.00	bu	437 314	505 382	574 451	642 519	710 587	778 655	847 724	915 792	983 860	1051 928	1120 997
130	286.00	bu	517 394	591 468	665 542	739 616	813 690	887 764	961 838	1035 912	1109 986	1183 1060	1257 1134
140	308.00	bu	598 475	677 554	757 634	836 713	916 793	996 873	1075 952	1155 1032	1235 1112	1314 1191	1394 1271
150	330.00	bu	678 555	763 640	848 725	934 811	1019 896	1104 981	1190 1067	1275 1152	1360 1237	1446 1323	1531 1408

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 2021 input prices.

Table 9.A Estimated costs per acre
 Corn, no-tillage, BtRR, 12-row 30", 170 bu yield goal
 Non-Delta Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	1.0000	5.60	_____
FERTILIZERS					
DAP	cwt	35.88	1.6300	58.48	_____
Potash (60% K2O)	cwt	26.30	1.2500	32.88	_____
Fert 10-34-0	gal	3.68	5.0000	18.40	_____
UAN (32%)	gal	2.10	43.8348	92.05	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	6.4020	5.51	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	28.0000	105.00	_____
HAULING					
Haul Corn	bu	0.23	170.0000	39.10	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.3616	5.53	_____
Harvesters	hour	15.27	0.1277	1.95	_____
HAND LABOR					
Implements	hour	9.06	0.1832	1.66	_____
UNALLOCATED LABOR					
	hour	15.28	0.4404	6.73	_____
DIESEL FUEL					
Tractors	gal	2.36	4.1883	9.88	_____
Harvesters	gal	2.36	1.7419	4.11	_____
REPAIR & MAINTENANCE					
Implements	acre	9.01	1.0000	9.01	_____
Tractors	acre	2.82	1.0000	2.82	_____
Harvesters	acre	5.20	1.0000	5.20	_____
INTEREST ON OP. CAP.	acre	9.50	1.0000	9.50	_____
TOTAL DIRECT EXPENSES				518.41	_____
FIXED EXPENSES					
Implements	acre	11.14	1.0000	11.14	_____
Tractors	acre	16.52	1.0000	16.52	_____
Harvesters	acre	19.30	1.0000	19.30	_____
TOTAL FIXED EXPENSES				46.96	_____
TOTAL SPECIFIED EXPENSES				565.37	_____

Note: Cost of production estimates are based on 2021 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-Delta Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	170.0000	878.90	_____

TOTAL INCOME				878.90	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	12.60	1.0000	12.60	_____
FERTILIZERS	acre	201.81	1.0000	201.81	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	5.51	1.0000	5.51	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.4893	7.48	_____
UNALLOCATED LABOR	hour	15.28	0.4404	6.73	_____
DIESEL FUEL	gal	2.36	5.9303	13.99	_____
REPAIR & MAINTENANCE	acre	17.03	1.0000	17.03	_____
INTEREST ON OP. CAP.	acre	9.50	1.0000	9.50	_____

TOTAL DIRECT EXPENSES				518.41	_____
RETURNS ABOVE DIRECT EXPENSES				360.49	_____
TOTAL FIXED EXPENSES				46.96	_____

TOTAL SPECIFIED EXPENSES				565.37	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				313.53	_____

Note: Cost of production estimates are based on 2021 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-Delta Areas, Mississippi, 2022

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

Note: Cost of production estimates are based on 2021 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-Delta Areas, Mississippi, 2022

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						0.12	3.45	3.45
Lime (Spread)	ton	39.29						1.38	40.67	40.67
App by Air (5 gal)	appl	7.00						0.16	7.16	7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60	3.60
Clarity	pt	5.50						0.13	5.63	5.63
Select Max	pt	12.73						0.30	13.03	13.03
Spin Spreader	5 ton		1.15	0.67	1.60			0.07	3.49	2.56 6.05
DAP	cwt	58.48						1.19	59.67	59.67
Potash (60% K2O)	cwt	32.88						0.67	33.55	33.55
NT Plant&Pre-Rigid	12R-30		1.93	2.84	2.69			0.15	7.61	7.27 14.88
Corn Seed BtRR	thous	105.00						2.14	107.14	107.14
Fert 10-34-0	gal	18.40						0.38	18.78	18.78
Spray (Broadcast)	27'		1.71	0.65	2.10			0.08	4.54	3.03 7.57
Atrazine 4L	pt	6.68						0.12	6.80	6.80
Halex GT	pt	20.95						0.37	21.32	21.32
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64			0.12	6.88	5.02 11.90
UAN (32%)	gal	92.05						1.61	93.66	93.66
Corn Consultant	acre	6.00						0.09	6.09	6.09
App by Air (3 gal)	appl	5.60						0.08	5.68	5.68
Bifenthrin	oz	5.51						0.08	5.59	5.59
Header - Corn	8R-30		4.11	7.47	3.71			0.04	15.33	22.49 37.82
Grain Cart Corn	500 bu		0.69	0.40	0.74			0.01	1.84	1.48 3.32
Haul Corn	bu	39.10						0.11	39.21	39.21
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11 12.80
TOTALS		462.02	13.99	17.03	15.87	0.00	9.50	518.41	46.96	565.37

Note: Cost of production estimates are based on 2021 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-Delta Areas, Mississippi, 2022

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	878.90
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	5.60	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	109.76	92.05	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	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	5.51	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	39.29	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	4.29	4.74	0.00	0.00	0.00	0.00	6.84
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	3.08	3.86	0.00	0.00	0.00	0.00	7.05
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	3.51	2.62	0.00	0.00	0.00	0.00	10.90
INTEREST ON OP. CAP.	1.50	0.00	0.00	0.00	0.67	4.60	2.30	0.25	0.00	0.00	0.00	0.18
TOTAL DIRECT EXPENSES	44.12	0.00	0.00	0.00	29.42	230.24	133.20	17.36	0.00	0.00	0.00	64.07
NET INCOME	-44.12	0.00	0.00	0.00	-29.42	-230.24	-133.20	-17.36	0.00	0.00	0.00	814.83
NET INCOME TO DATE	-44.12	-44.12	-44.12	-44.12	-73.54	-303.78	-436.98	-454.34	-454.34	-454.34	-454.34	360.49

Note: Cost of production estimates are based on 2021 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-Delta Areas, Mississippi, 2022

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Corn	3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46		
PERCENT	YIELD	UNIT	dollars										
50	85.00	bu	-169 -216	-147 -194	-125 -172	-103 -150	-81 -128	-59 -106	-37 -84	-15 -62	6 -40	28 -18	50 3
60	102.00	bu	-107 -154	-80 -127	-54 -101	-28 -75	-1 -48	24 -22	50 4	77 30	103 56	130 83	156 109
70	119.00	bu	-45 -92	-14 -61	16 -30	47 0	77 30	108 61	139 92	170 123	200 153	231 184	262 215
80	136.00	bu	16 -30	51 4	87 40	122 75	157 110	192 145	227 180	262 215	298 251	333 286	368 321
90	153.00	bu	78 31	118 71	157 110	197 150	236 190	276 229	316 269	355 308	395 348	434 387	474 427
100	170.00	bu	140 93	184 137	228 181	272 225	316 269	360 313	404 357	448 401	492 445	536 489	580 533
110	187.00	bu	202 155	251 204	299 252	347 300	396 349	444 397	492 445	541 494	589 542	637 590	686 639
120	204.00	bu	264 217	317 270	370 323	422 376	475 428	528 481	581 534	633 586	686 639	739 692	792 745
130	221.00	bu	326 279	383 336	441 394	498 451	555 508	612 565	669 622	726 679	783 736	840 793	898 851
140	238.00	bu	388 341	450 403	511 464	573 526	634 587	696 649	757 710	819 772	880 833	942 895	1003 957
150	255.00	bu	450 403	516 469	582 535	648 601	714 667	780 733	846 799	912 865	978 931	1044 997	1109 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 2021 input prices.

Table 10.A Estimated costs per acre
 Corn, no-tillage, BtRR seed, 12 row 30", 220 bu yield
 goal, Pivot Irrigated, Non-Delta Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
App by Air (3 gal)	appl	5.60	1.0000	5.60	_____
FERTILIZERS					
DAP	cwt	35.88	1.6300	58.48	_____
Potash (60% K2O)	cwt	26.30	1.2500	32.88	_____
Fert 10-34-0	gal	3.68	5.0000	18.40	_____
UAN (32%)	gal	2.10	43.8348	92.05	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
Clarity	pt	11.00	0.5000	5.50	_____
Select Max	pt	12.73	1.0000	12.73	_____
Atrazine 4L	pt	1.67	4.0000	6.68	_____
Halex GT	pt	5.82	3.6000	20.95	_____
INSECTICIDES					
Bifenthrin	oz	0.86	6.4020	5.51	_____
SEED/PLANTS					
Corn Seed BtRR	thous	3.75	28.0000	105.00	_____
HAULING					
Haul Corn	bu	0.23	220.0000	50.60	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.3616	5.53	_____
Harvesters	hour	15.27	0.1277	1.95	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	_____
HAND LABOR					
Implements	hour	9.06	0.1832	1.66	_____
UNALLOCATED LABOR	hour	15.28	0.4404	6.73	_____
DIESEL FUEL					
Tractors	gal	2.36	4.1883	9.88	_____
Harvesters	gal	2.36	1.7419	4.11	_____
1/4-mi. Pivot Irr.	gal	2.36	11.2011	26.43	_____
REPAIR & MAINTENANCE					
Implements	acre	9.01	1.0000	9.01	_____
Tractors	acre	2.82	1.0000	2.82	_____
Harvesters	acre	5.20	1.0000	5.20	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	9.89	1.0000	9.89	_____
TOTAL DIRECT EXPENSES				580.52	_____
FIXED EXPENSES					
Implements	acre	11.14	1.0000	11.14	_____
Tractors	acre	16.52	1.0000	16.52	_____
Harvesters	acre	19.30	1.0000	19.30	_____
1/4-mi. Pivot Irr.	acre	68.70	1.0000	68.70	_____
TOTAL FIXED EXPENSES				115.66	_____
TOTAL SPECIFIED EXPENSES				696.18	_____

Note: Cost of production estimates are based on 2021 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 seed, 12 row 30", 220 bu yield
 goal, Pivot Irrigated, Non-Delta Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	5.17	220.0000	1137.40	_____

TOTAL INCOME				1137.40	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	12.60	1.0000	12.60	_____
FERTILIZERS	acre	201.81	1.0000	201.81	_____
HERBICIDES	acre	49.38	1.0000	49.38	_____
INSECTICIDES	acre	5.51	1.0000	5.51	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.4893	7.48	_____
UNALLOCATED LABOR	hour	15.28	0.4404	6.73	_____
DIESEL FUEL	gal	2.36	17.1314	40.42	_____
REPAIR & MAINTENANCE	acre	38.98	1.0000	38.98	_____
INTEREST ON OP. CAP.	acre	9.89	1.0000	9.89	_____

TOTAL DIRECT EXPENSES				580.52	_____
RETURNS ABOVE DIRECT EXPENSES				556.88	_____
TOTAL FIXED EXPENSES				115.66	_____

TOTAL SPECIFIED EXPENSES				696.18	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				441.22	_____

Note: Cost of production estimates are based on 2021 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 seed, 12 row 30", 220 bu yield
 goal, Pivot Irrigated, Non-Delta Areas, Mississippi, 2022

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

Note: Cost of production estimates are based on 2021 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 seed, 12 row 30", 220 bu yield
 goal, Pivot Irrigated, Non-Delta Areas, Mississippi, 2022

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						0.12	3.45	3.45
Lime (Spread)	ton	39.29						1.38	40.67	40.67
App by Air (5 gal)	appl	7.00						0.16	7.16	7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60	3.60
Clarity	pt	5.50						0.13	5.63	5.63
Select Max	pt	12.73						0.30	13.03	13.03
Spin Spreader	5 ton		1.15	0.67	1.60			0.07	3.49	2.56 6.05
DAP	cwt	58.48						1.19	59.67	59.67
Potash (60% K2O)	cwt	32.88						0.67	33.55	33.55
NT Plant&Pre-Rigid	12R-30		1.93	2.84	2.69			0.15	7.61	7.27 14.88
Corn Seed BtRR	thous	105.00						2.14	107.14	107.14
Fert 10-34-0	gal	18.40						0.38	18.78	18.78
Spray (Broadcast)	27'		1.71	0.65	2.10			0.08	4.54	3.03 7.57
Atrazine 4L	pt	6.68						0.12	6.80	6.80
Halex GT	pt	20.95						0.37	21.32	21.32
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64			0.10	6.86	5.02 11.88
UAN (32%)	gal	92.05						1.34	93.39	93.39
Corn Consultant	acre	6.00						0.09	6.09	6.09
App by Air (3 gal)	appl	5.60						0.08	5.68	5.68
Bifenthrin	oz	5.51						0.08	5.59	5.59
Header - Corn	8R-30		4.11	7.47	3.71			0.04	15.33	22.49 37.82
Grain Cart Corn	500 bu		0.69	0.40	0.74			0.01	1.84	1.48 3.32
Haul Corn	bu	50.60						0.15	50.75	50.75
Stalk Shredder Flex	20'		2.25	3.03	2.39			0.02	7.69	5.11 12.80
1/4-mi. Pivot Irr.	acre		26.43	21.95	1.84			0.64	50.86	68.70 119.56
TOTALS		473.52	40.42	38.98	17.71	0.00	9.89	580.52	115.66	696.18

Note: Cost of production estimates are based on 2021 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 seed, 12 row 30", 220 bu yield
 goal, Pivot Irrigated, Non-Delta Areas, Mississippi, 2022

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	1137.40
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	5.60	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	109.76	0.00	92.05	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.75	0.00	27.63	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	5.51	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	39.29	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	4.29	3.44	2.79	0.20	0.15	0.00	6.84
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	3.08	1.71	10.08	10.57	7.93	0.00	7.05
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	3.51	0.65	20.44	1.99	1.49	0.00	10.90
INTEREST ON OP. CAP.	1.50	0.00	0.00	0.00	0.67	4.60	0.59	2.08	0.15	0.08	0.00	0.22
TOTAL DIRECT EXPENSES	44.12	0.00	0.00	0.00	29.42	230.24	34.02	144.55	12.91	9.65	0.00	75.61
NET INCOME	-44.12	0.00	0.00	0.00	-29.42	-230.24	-34.02	-144.55	-12.91	-9.65	0.00	1061.79
NET INCOME TO DATE	-44.12	-44.12	-44.12	-44.12	-73.54	-303.78	-337.80	-482.35	-495.26	-504.91	-504.91	556.88

Note: Cost of production estimates are based on 2021 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 seed, 12 row 30", 220 bu yield
 goal, Pivot Irrigated, Non-Delta Areas, Mississippi, 2022

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
	PRODUCT PRICE												
Corn	3.87	4.13	4.39	4.65	4.91	5.17	5.42	5.68	5.94	6.20	6.46		
PERCENT	YIELD	UNIT	dollars										
50	110.00	bu	-128 -244	-100 -215	-71 -187	-43 -158	-14 -130	13 -102	41 -73	70 -45	98 -16	127 11	155 40
60	132.00	bu	-48 -164	-14 -129	19 -95	53 -61	88 -27	122 6	156 40	190 74	224 108	258 143	292 177
70	154.00	bu	31 -83	71 -44	111 -4	151 35	191 75	230 115	270 155	310 194	350 234	390 274	429 314
80	176.00	bu	112 -3	157 41	203 87	248 132	294 178	339 223	385 269	430 314	476 360	521 405	567 451
90	198.00	bu	192 76	243 127	294 179	345 230	397 281	448 332	499 383	550 434	601 486	652 537	704 588
100	220.00	bu	272 156	329 213	386 270	443 327	500 384	556 441	613 498	670 554	727 611	784 668	841 725
110	242.00	bu	352 237	415 299	477 362	540 424	602 487	665 549	728 612	790 674	853 737	915 800	978 862
120	264.00	bu	432 317	501 385	569 453	637 522	705 590	774 658	842 726	910 795	978 863	1047 931	1115 999
130	286.00	bu	513 397	587 471	661 545	735 619	808 693	882 767	956 841	1030 915	1104 989	1178 1062	1252 1136
140	308.00	bu	593 477	673 557	752 637	832 716	911 796	991 875	1071 955	1150 1035	1230 1114	1310 1194	1389 1273
150	330.00	bu	673 558	758 643	844 728	929 813	1014 899	1100 984	1185 1069	1270 1155	1356 1240	1441 1325	1526 1411

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 2021 input prices.

Table 11.A Estimated costs per acre
 Grain sorghum, 12-row 30", 100 bu yield goal
 All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	1.0000	7.00	_____
FERTILIZERS					
DAP	cwt	35.88	1.3000	46.64	_____
Potash (60% K2O)	cwt	26.30	1.0000	26.30	_____
UAN + Sulfur (28%)	gal	2.05	38.2883	78.49	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.11	32.0000	3.52	_____
2,4-D Amine 4	pt	2.64	2.0000	5.28	_____
Select Max	pt	12.73	1.0000	12.73	_____
Lexar	pt	6.79	6.0000	40.74	_____
INSECTICIDES					
Sivanto Prime	oz	3.24	8.0000	25.92	_____
Warrior II	oz	2.74	1.5000	4.11	_____
Prevathon	oz	1.12	14.0000	15.68	_____
SEED/PLANTS					
Sorghum Concept+ Po	lb	3.72	4.5000	16.74	_____
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	_____
HAULING					
Haul Sorghum	bu	0.25	100.0000	25.00	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.2915	4.45	_____
Harvesters	hour	15.27	0.1021	1.56	_____
Self-Propelled	hour	15.27	0.0661	1.00	_____
HAND LABOR					
Implements	hour	9.06	0.1442	1.31	_____
Self-Propelled	hour	9.06	0.0330	0.30	_____
UNALLOCATED LABOR					
	hour	15.22	0.4138	6.30	_____
DIESEL FUEL					
Tractors	gal	2.36	3.3766	7.98	_____
Harvesters	gal	2.36	1.3935	3.29	_____
Self-Propelled	gal	2.36	0.8505	2.00	_____
REPAIR & MAINTENANCE					
Implements	acre	5.64	1.0000	5.64	_____
Tractors	acre	2.27	1.0000	2.27	_____
Harvesters	acre	4.16	1.0000	4.16	_____
Self-Propelled	acre	1.05	1.0000	1.05	_____
INTEREST ON OP. CAP.	acre	6.78	1.0000	6.78	_____
TOTAL DIRECT EXPENSES				405.85	_____
FIXED EXPENSES					
Implements	acre	10.13	1.0000	10.13	_____
Tractors	acre	13.31	1.0000	13.31	_____
Harvesters	acre	15.44	1.0000	15.44	_____
Self-Propelled	acre	6.55	1.0000	6.55	_____
TOTAL FIXED EXPENSES				45.43	_____
TOTAL SPECIFIED EXPENSES				451.28	_____

Note: Cost of production estimates are based on 2021 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, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Grain Sorghum	bu	4.91	100.0000	491.00	_____

TOTAL INCOME				491.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.00	1.0000	7.00	_____
FERTILIZERS	acre	151.43	1.0000	151.43	_____
HERBICIDES	acre	62.27	1.0000	62.27	_____
INSECTICIDES	acre	45.71	1.0000	45.71	_____
SEED/PLANTS	acre	16.74	1.0000	16.74	_____
ADJUVANTS	acre	0.99	1.0000	0.99	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.4598	7.01	_____
UNALLOCATED LABOR	hour	15.22	0.4138	6.30	_____
DIESEL FUEL	gal	2.36	5.6208	13.27	_____
REPAIR & MAINTENANCE	acre	13.12	1.0000	13.12	_____
INTEREST ON OP. CAP.	acre	6.78	1.0000	6.78	_____

TOTAL DIRECT EXPENSES				405.85	_____
RETURNS ABOVE DIRECT EXPENSES				85.15	_____
TOTAL FIXED EXPENSES				45.43	_____

TOTAL SPECIFIED EXPENSES				451.28	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				39.72	_____

Note: Cost of production estimates are based on 2021 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, 2022

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

Note: Cost of production estimates are based on 2021 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, 2022

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						0.12	3.45		3.45
Lime (Spread)	ton	39.29						1.38	40.67		40.67
Disk Harrow	32'		1.68	1.55	1.78			0.16	5.17	4.90	10.07
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Glyphosate 3lbs a.e	oz	3.52						0.08	3.60		3.60
2,4-D Amine 4	pt	5.28						0.12	5.40		5.40
Select Max	pt	12.73						0.30	13.03		13.03
Surfactant	pt	0.99						0.02	1.01		1.01
Spin Spreader	5 ton		1.15	0.67	1.60			0.06	3.48	2.56	6.04
DAP	cwt	46.64						0.82	47.46		47.46
Potash (60% K2O)	cwt	26.30						0.46	26.76		26.76
Field Cultivate Fld	32'		1.28	0.88	1.35			0.06	3.57	4.17	7.74
Plant - Folding	12R-30		1.72	2.19	2.39			0.11	6.41	5.88	12.29
Sorghum Concept+ Po	lb	16.74						0.29	17.03		17.03
Sprayer 800gal	80' 250hp		0.40	0.21	0.44			0.02	1.07	1.31	2.38
Lexar	pt	40.74						0.71	41.45		41.45
Sorghum Consultant	acre	6.00						0.09	6.09		6.09
Fert Appl (Liquid)	12R-30		2.15	1.97	2.64			0.10	6.86	5.02	11.88
UAN + Sulfur (28%)	gal	78.49						1.14	79.63		79.63
Sprayer 800gal	80' 250hp		0.40	0.21	0.44			0.01	1.06	1.31	2.37
Sivanto Prime	oz	12.96						0.15	13.11		13.11
Sprayer 800gal	80' 250hp		0.40	0.21	0.44			0.01	1.06	1.31	2.37
Warrior II	oz	4.11						0.04	4.15		4.15
Sprayer 800gal	80' 250hp		0.40	0.21	0.44			0.01	1.06	1.31	2.37
Prevathon	oz	15.68						0.14	15.82		15.82
Sprayer 800gal	80' 250hp		0.40	0.21	0.44			0.01	1.06	1.31	2.37
Sivanto Prime	oz	12.96						0.11	13.07		13.07
Header Wheat/Sorghum	25' Rigid		3.29	4.81	2.96			0.03	11.09	16.35	27.44
Haul Sorghum	bu	25.00						0.07	25.07		25.07
TOTALS		357.76	13.27	13.12	14.92	0.00	6.78	405.85	45.43	451.28	

Note: Cost of production estimates are based on 2021 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, 2022

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	491.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	72.94	78.49	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	21.53	0.00	40.74	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	12.96	32.75	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	16.74	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	39.29	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	1.78	0.00	0.00	0.00	0.00	5.78	2.64	0.44	1.32	0.00	2.96
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	1.68	0.00	0.00	0.00	0.00	4.55	2.15	0.40	1.20	0.00	3.29
REPAIR & MAINTENANCE	0.00	1.55	0.00	0.00	0.00	0.00	3.95	1.97	0.21	0.63	0.00	4.81
INTEREST ON OP. CAP.	1.50	0.16	0.00	0.00	0.68	0.00	2.53	1.33	0.16	0.32	0.00	0.10
TOTAL DIRECT EXPENSES	44.12	5.17	0.00	0.00	30.20	0.00	147.23	92.58	14.17	36.22	0.00	36.16
NET INCOME	-44.12	-5.17	0.00	0.00	-30.20	0.00	-147.23	-92.58	-14.17	-36.22	0.00	454.84
NET INCOME TO DATE	-44.12	-49.29	-49.29	-49.29	-79.49	-79.49	-226.72	-319.30	-333.47	-369.69	-369.69	85.15

Note: Cost of production estimates are based on 2021 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, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Grain Sorghum			3.68	3.92	4.17	4.41	4.66	4.91	5.15	5.40	5.64	5.89	6.13
PERCENT	YIELD	UNIT	-----dollars-----										
50	50.00	bu	-209	-196	-184	-172	-160	-147	-135	-123	-110	-98	-86
			-254	-242	-230	-217	-205	-193	-180	-168	-156	-144	-131
60	60.00	bu	-174	-160	-145	-130	-115	-101	-86	-71	-57	-42	-27
			-220	-205	-190	-176	-161	-146	-131	-117	-102	-87	-73
70	70.00	bu	-140	-123	-106	-88	-71	-54	-37	-20	-3	14	31
			-185	-168	-151	-134	-117	-100	-82	-65	-48	-31	-14
80	80.00	bu	-106	-86	-66	-47	-27	-8	11	31	50	70	90
			-151	-132	-112	-92	-73	-53	-33	-14	5	25	44
90	90.00	bu	-71	-49	-27	-5	16	38	60	82	104	126	149
			-117	-95	-73	-51	-28	-6	15	37	59	81	103
100	100.00	bu	-37	-13	11	36	60	85	109	134	158	183	207
			-83	-58	-33	-9	15	39	64	88	113	137	162
110	110.00	bu	-3	23	50	77	104	131	158	185	212	239	266
			-48	-21	5	32	59	86	113	140	167	194	221
120	120.00	bu	31	60	89	119	148	178	207	237	266	296	325
			-14	15	44	73	103	132	162	191	221	250	280
130	130.00	bu	65	97	129	161	193	224	256	288	320	352	384
			19	51	83	115	147	179	211	243	275	307	339
140	140.00	bu	99	134	168	202	237	271	305	340	374	409	443
			54	88	122	157	191	226	260	294	329	363	397
150	150.00	bu	133	170	207	244	281	318	354	391	428	465	502
			88	125	162	199	235	272	309	346	383	419	456

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 2021 input prices.

Table 12.A Estimated costs per acre
 Wheat followed by soybeans, 70 bu yield goal
 All Areas, Mississippi, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air (5 gal)	appl	7.00	2.0000	14.00	_____
App by Air (3 gal)	appl	5.60	1.0000	5.60	_____
FERTILIZERS					
DAP	cwt	35.88	1.0000	35.88	_____
Potash (60% K2O)	cwt	26.30	0.7500	19.73	_____
Fert 41-0-0-4	cwt	18.22	3.0480	55.53	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	4.60	4.5000	20.70	_____
Prosaro	oz	2.36	8.0000	18.88	_____
HERBICIDES					
Axiom	oz	2.06	10.0000	20.60	_____
Harmony Extra SG	oz	10.86	0.7500	8.15	_____
Axial XL	oz	1.10	16.4000	18.04	_____
INSECTICIDES					
Warrior II	oz	2.74	1.5000	4.11	_____
SEED/PLANTS					
Wheat Seed Private	lb	0.28	90.0000	25.20	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	7.50	3.0480	22.86	_____
HAULING					
Haul Wheat	bu	0.26	70.0000	18.20	_____
CUSTOM LIME					
Lime (Spread)	ton	59.00	0.6660	39.29	_____
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	15.27	0.2129	3.25	_____
Harvesters	hour	15.27	0.1021	1.56	_____
HAND LABOR					
Implements	hour	9.06	0.1049	0.95	_____
UNALLOCATED LABOR	hour	15.27	0.2521	3.85	_____
DIESEL FUEL					
Tractors	gal	2.36	2.4667	5.83	_____
Harvesters	gal	2.36	1.3935	3.29	_____
REPAIR & MAINTENANCE					
Implements	acre	4.20	1.0000	4.20	_____
Tractors	acre	1.66	1.0000	1.66	_____
Harvesters	acre	4.16	1.0000	4.16	_____
INTEREST ON OP. CAP.	acre	7.21	1.0000	7.21	_____
TOTAL DIRECT EXPENSES				371.57	_____
FIXED EXPENSES					
Implements	acre	8.57	1.0000	8.57	_____
Tractors	acre	9.72	1.0000	9.72	_____
Harvesters	acre	15.44	1.0000	15.44	_____
TOTAL FIXED EXPENSES				33.73	_____
TOTAL SPECIFIED EXPENSES				405.30	_____

Note: Cost of production estimates are based on 2021 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, 2022

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	7.28	70.0000	509.60	_____

TOTAL INCOME				509.60	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	19.60	1.0000	19.60	_____
FERTILIZERS	acre	111.15	1.0000	111.15	_____
FUNGICIDES	acre	39.58	1.0000	39.58	_____
HERBICIDES	acre	46.79	1.0000	46.79	_____
INSECTICIDES	acre	4.11	1.0000	4.11	_____
SEED/PLANTS	acre	25.20	1.0000	25.20	_____
CUSTOM FERTILIZE	acre	22.86	1.0000	22.86	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	39.29	1.0000	39.29	_____
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	15.27	0.3151	4.81	_____
UNALLOCATED LABOR	hour	15.27	0.2521	3.85	_____
DIESEL FUEL	gal	2.36	3.8602	9.12	_____
REPAIR & MAINTENANCE	acre	10.02	1.0000	10.02	_____
INTEREST ON OP. CAP.	acre	7.21	1.0000	7.21	_____

TOTAL DIRECT EXPENSES				371.57	_____
RETURNS ABOVE DIRECT EXPENSES				138.03	_____
TOTAL FIXED EXPENSES				33.73	_____

TOTAL SPECIFIED EXPENSES				405.30	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				104.30	_____

Note: Cost of production estimates are based on 2021 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, 2022

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

Note: Cost of production estimates are based on 2021 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, 2022

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						0.10	3.43		3.43
Lime (Spread)	ton	39.29						1.15	40.44		40.44
Disk Harrow	32'		1.68	1.55	1.69			0.14	5.06	4.90	9.96
Spin Spreader	5 ton		1.15	0.67	1.53			0.10	3.45	2.56	6.01
DAP	cwt	35.88						1.05	36.93		36.93
Potash (60% K2O)	cwt	19.73						0.58	20.31		20.31
Field Cultivate Fld	32'		1.28	0.88	1.28			0.10	3.54	4.17	7.71
Grain Drill	30'		1.72	2.11	2.30			0.16	6.29	5.75	12.04
Wheat Seed Private	lb	25.20						0.66	25.86		25.86
CruiserMaxx Vibrance	oz	20.70						0.54	21.24		21.24
Wheat Consultant	acre	5.50						0.14	5.64		5.64
App by Air (5 gal)	appl	7.00						0.16	7.16		7.16
Axiom	oz	20.60						0.48	21.08		21.08
App by Air (3 gal)	appl	5.60						0.08	5.68		5.68
Warrior II	oz	4.11						0.06	4.17		4.17
Harmony Extra SG	oz	8.15						0.12	8.27		8.27
Axial XL	oz	18.04						0.26	18.30		18.30
App Fert by Air	cwt	11.43						0.17	11.60		11.60
Fert 41-0-0-4	cwt	27.77						0.40	28.17		28.17
App Fert by Air	cwt	11.43						0.13	11.56		11.56
Fert 41-0-0-4	cwt	27.77						0.32	28.09		28.09
App by Air (5 gal)	appl	7.00						0.06	7.06		7.06
Prosaro	oz	18.88						0.17	19.05		19.05
Header Wheat/Sorghum	25' Rigid		3.29	4.81	2.81			0.03	10.94	16.35	27.29
Haul Wheat	bu	18.20						0.05	18.25		18.25
TOTALS		335.61	9.12	10.02	9.61	0.00		7.21	371.57	33.73	405.30

Note: Cost of production estimates are based on 2021 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, 2022

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	509.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.00	0.00	0.00	5.60	0.00	7.00	0.00	0.00
FERTILIZERS	0.00	0.00	55.61	0.00	0.00	0.00	0.00	27.77	27.77	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	20.70	0.00	0.00	0.00	0.00	0.00	18.88	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	20.60	0.00	0.00	26.19	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.11	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.43	11.43	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	39.29	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	4.50	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.81
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	4.11	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29
REPAIR & MAINTENANCE	0.00	0.00	3.10	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.81
INTEREST ON OP. CAP.	0.00	0.00	3.22	1.50	0.64	0.00	0.00	1.09	0.45	0.23	0.00	0.08
TOTAL DIRECT EXPENSES	0.00	0.00	113.16	59.03	28.24	0.00	0.00	76.19	39.65	26.11	0.00	29.19
NET INCOME	0.00	0.00	-113.16	-59.03	-28.24	0.00	0.00	-76.19	-39.65	-26.11	0.00	480.41
NET INCOME TO DATE	0.00	0.00	-113.16	-172.19	-200.43	-200.43	-200.43	-276.62	-316.27	-342.38	-342.38	138.03

Note: Cost of production estimates are based on 2021 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, 2022

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
-----			-----PRODUCT PRICE-----										
Wheat			5.46	5.82	6.18	6.55	6.91	7.28	7.64	8.00	8.37	8.73	9.10
PERCENT YIELD UNIT			-----dollars-----										
50	35.00	bu	-171 -205	-158 -192	-145 -179	-133 -166	-120 -154	-107 -141	-94 -128	-82 -115	-69 -103	-56 -90	-43 -77
60	42.00	bu	-134 -168	-119 -153	-104 -138	-89 -122	-73 -107	-58 -92	-43 -76	-27 -61	-12 -46	2 -31	17 -15
70	49.00	bu	-98 -132	-80 -114	-62 -96	-45 -78	-27 -60	-9 -43	8 -25	26 -7	44 10	61 28	79 46
80	56.00	bu	-62 -95	-41 -75	-21 -55	-1 -34	19 -14	39 6	60 26	80 46	100 67	121 87	141 107
90	63.00	bu	-25 -59	-2 -36	20 -13	43 9	65 32	88 55	111 78	134 101	157 123	180 146	203 169
100	70.00	bu	10 -23	36 2	61 27	87 53	112 78	138 104	163 129	188 155	214 180	239 206	265 231
110	77.00	bu	47 13	75 41	103 69	131 97	159 125	187 153	215 181	243 209	271 237	299 265	327 293
120	84.00	bu	83 49	113 80	144 110	175 141	205 171	236 202	266 233	297 263	328 294	358 324	389 355
130	91.00	bu	119 86	152 119	186 152	219 185	252 218	285 251	318 284	351 317	384 351	417 384	451 417
140	98.00	bu	156 122	191 158	227 193	263 229	298 265	334 300	370 336	405 372	441 407	477 443	512 479
150	105.00	bu	192 158	230 197	269 235	307 273	345 311	383 349	421 388	460 426	498 464	536 502	574 541

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 2021 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, 2022

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Combine (250-299 hp)	265 hp	391,000	300	8	13.64	15.27	32.19	40.72	88.18	151.14	239.33
Combine (300-349 hp)	325 hp	413,700	300	8	16.73	15.27	39.48	43.09	97.84	159.92	257.76
Combine (350-399 hp)	355 hp	437,900	300	8	18.27	15.27	43.11	45.61	104.00	169.27	273.27
Combine (400-449 hp)	425 hp	474,800	300	8	21.87	15.27	51.62	49.45	116.35	183.54	299.89
Combine (450-499hp)	475 hp	489,900	300	8	24.44	15.27	57.69	51.03	124.00	189.37	313.37
Tractor(20-39hp)CB	MFWD 30	28,600	600	8	1.54	15.27	3.64	0.89	19.80	5.01	24.81
Tractor(20-39hp)RB	MFWD 30	21,400	600	8	1.54	15.27	3.64	0.66	19.58	3.74	23.33
Tractor(40-59hp)CB	2WD 50	32,100	600	8	2.57	15.27	6.07	1.00	22.34	5.62	27.97
Tractor(40-59hp)CB	MFWD 50	42,600	600	8	2.57	15.27	6.07	1.33	22.67	7.46	30.13
Tractor(40-59hp)RB	2WD 50	23,300	600	8	2.57	15.27	6.07	0.72	22.07	4.08	26.15
Tractor(40-59hp)RB	MFWD 50	30,500	600	8	2.57	15.27	6.07	0.95	22.29	5.34	27.64
Tractor(60-89hp)CB	2WD 75	56,700	600	8	3.86	15.27	9.11	1.77	26.15	9.93	36.08
Tractor(60-89hp)CB	MFWD 75	60,500	600	8	3.86	15.27	9.11	1.89	26.27	10.59	36.87
Tractor(60-89hp)RB	2WD 75	43,100	600	8	3.86	15.27	9.11	1.34	25.72	7.55	33.27
Tractor(60-89hp)RB	MFWD 75	43,800	600	8	3.86	15.27	9.11	1.36	25.74	7.67	33.42
Tractor(90-119hp)CB	2WD 105	74,700	600	8	5.40	15.27	12.75	2.33	30.35	13.08	43.44
Tractor(90-119hp)CB	MFWD 105	94,500	600	8	5.40	15.27	12.75	2.95	30.97	16.55	47.53
Tractor(90-119hp)RB	2WD 105	67,100	600	8	5.40	15.27	12.75	2.09	30.12	11.75	41.87
Tractor(90-119hp)RB	MFWD 105	75,300	600	8	5.40	15.27	12.75	2.35	30.37	13.19	43.57
Tractor(120-139hp)CB	2WD 130	117,400	600	8	6.69	15.27	15.79	3.66	34.73	20.56	55.29
Tractor(120-139hp)CB	MFWD 130	131,100	600	8	6.69	15.27	15.79	4.09	35.15	22.96	58.12
Tractor(140-159hp)	2WD 150	116,100	600	8	7.72	15.27	18.22	3.62	37.11	20.34	57.45
Tractor(140-159hp)CB	MFWD 150	143,000	600	8	7.72	15.27	18.22	4.46	37.96	25.05	63.01
Tractor(160-179hp)CB	MFWD 170	164,000	600	8	8.75	15.27	20.65	5.12	41.04	30.21	71.26
Tractor(180-199hp)CB	MFWD 190	206,000	600	8	9.77	15.27	23.08	6.43	44.78	37.95	82.74
Tractor(200-249hp)CB	MFWD 225	248,000	600	8	11.58	15.27	27.33	7.75	50.35	45.69	96.04
Tractor(250-349hp)CB	4WD 300	343,000	600	8	15.44	15.27	36.44	10.71	62.43	63.19	125.62
Tractor(250-349hp)CB	MFWD 300	324,000	600	8	15.44	15.27	36.44	10.12	61.83	59.69	121.53
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	15.27	36.44	10.28	61.99	60.61	122.60
Tractor(350-449hp)	Track 400	492,000	600	8	20.58	15.27	48.59	15.37	79.23	90.64	169.88
Tractor(350-449hp)CB	4WD 400	406,000	600	8	20.58	15.27	48.59	12.68	76.54	74.80	151.34
Tractor(450-550hp)CB	4WD 500	430,000	600	8	25.73	15.27	60.73	13.43	89.44	79.22	168.66
Tractor(450-550hp)CB	Track 500	496,000	600	8	25.73	15.27	60.73	15.50	91.50	91.38	182.88
Utility Vehicle	800 CC	12,200	200	8	0.70	15.27	1.96	1.90	19.14	7.07	26.21
Utility Vehicle	900 CC	15,800	200	8	1.00	15.27	2.81	2.46	20.54	9.16	29.71

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, 2022

Item Name	Size	Purchase	Annual	Useful	Fuel	Perf	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use	Rate				Direct	Cost	Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	6.27	7.82	10.79	24.89	40.05	64.95
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.27	10.95	14.13	31.36	52.46	83.83
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	4.19	7.32	9.61	21.12	35.66	56.79
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	5.31	9.41	15.85	30.57	58.84	89.42
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.19	7.43	12.51	24.14	46.45	70.60
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.27	12.52	21.58	40.38	80.11	120.50
Cotton Picker/Module	6R-30 (500)	854,000	200	8	25.73	0.218	5.31	13.25	29.12	47.68	108.07	155.76
Cotton Picker/Module	6R-38 (500)	854,000	200	8	25.73	0.172	4.19	10.46	22.99	37.65	85.32	122.97
Dry Applicator SP	70'300cuft	365,000	350	8	16.98	0.015	0.29	0.60	0.29	1.20	1.82	3.02
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.34	0.37	0.20	0.92	1.26	2.18
Sprayer 600-825gal	80' 175hp	234,000	350	8	11.81	0.013	0.26	0.36	0.16	0.79	1.02	1.82
Sprayer 600-825gal	90' 250hp	328,000	350	8	12.73	0.011	0.23	0.35	0.20	0.79	1.27	2.06
Sprayer 800gal	100' 250hp	333,000	350	8	14.15	0.010	0.20	0.35	0.18	0.75	1.16	1.91
Sprayer 800gal	80' 250hp	300,000	350	8	12.86	0.013	0.26	0.40	0.21	0.87	1.31	2.18
Sprayer 1000-1400gal	90' 275hp	332,000	350	8	14.15	0.010	0.20	0.35	0.18	0.75	1.16	1.91
Sprayer 1000gal	100' 300hp	379,000	350	8	15.44	0.010	0.20	0.38	0.21	0.80	1.32	2.13
Sprayer 1200+gal	120' 300hp	401,000	350	8	15.44	0.008	0.17	0.32	0.18	0.68	1.17	1.85

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2022

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Artisan	oz	0.23
Agri-Dex	pt	1.75	Avaris	oz	1.68
AMS SuperMax	pt	3.81	Avicta Complete Bean	oz	0.26
Class Act NG	pt	4.75	Bravo Weather Stick	pt	4.12
Crop Oil Conc. (Pet.)	pt	2.86	Captan 50 WP	lb	6.59
Crop Oil Conc. (Veg.)	pt	2.90	Convoy	oz	1.17
Dyne-A-Pak	pt	4.13	Cotton Seed Trt.	acre	20.00
Fire-Zone	pt	2.87	CruiserMaxx Vibrance	oz	4.60
Herbimax	pt	4.00	Elatus	oz	3.31
Induce	pt	3.00	Flint Extra	oz	8.75
MSO	pt	4.38	Headline EC	oz	4.44
Penetrator Plus	pt	2.58	Miravis Top	oz	1.34
Surfactant	pt	3.30	Prior Xemium	oz	3.91
CLEANING			Propimax EC	pt	12.50
Cleaning Peanuts	ton	18.00	Prosaro	oz	2.36
CROP CONSULTANT			Provost Optimum	oz	219.44
Corn Consultant	acre	6.00	Quadris	oz	1.56
Cotton Consultant	acre	8.00	Quadris Top	oz	2.59
Peanut Consultant	acre	9.25	Quadris Top SBX	oz	2.77
Rice Consultant	acre	8.00	Quilt	pt	20.23
Sorghum Consultant	acre	6.00	Quilt XCEL	pt	24.10
Soybeans Consultant	acre	6.50	Stratego	pt	23.93
Wheat Consultant	acre	5.50	Stratego YLD	oz	3.46
CUSTOM FERTILIZE			Tilt 3.6 EC	oz	0.90
App Fert by Air	cwt	7.50	Tilt/ Bravo SE	oz	0.72
App Fert by Air (Mi)	appl	7.50	Trivapro	oz	1.50
Custom Apply Fert	acre	7.50	GINNING		
CUSTOM LIME			Gin & Haul	lb	0.11
Lime (Spread)	ton	59.00	GROWTH REGULATORS		
CUSTOM PLANT			Mepex	oz	0.09
Custom Plant	acre	7.50	Mepichlor 4.2%	oz	0.09
Custom Plant Air	cwt	7.50	Mepiquat	oz	0.21
CUSTOM SPRAY			Mepstar 6	oz	0.08
App by Air (3 gal)	appl	5.60	Palisade	oz	1.20
App by Air (5 gal)	appl	7.00	Pentia	oz	0.41
App by Air (10 gal)	appl	9.30	Pix WSB	oz	1.32
Custom Spray Ground	acre	7.00	Stance	oz	1.27
DRYING			Veto	oz	0.06
Dry Corn	bu	0.19	HARVEST AIDS		
Dry Grain Sorghum	cwt	0.25	Adios	oz	1.00
Dry Peanuts	ton	24.00	Boll Buster	oz	0.34
Dry Rice	bu	0.40	Def/Folex	pt	11.73
ERADICATION FEE			Defol 5	gal	8.54
Eradication	acre	1.00	Display	oz	10.23
FERTILIZERS			Ethephon 6E	pt	3.89
Agrotain Ultra	pt	11.30	Finish 6	pt	11.74
Amm Sulfate (21% N)	cwt	19.88	Folex 6EC	pt	11.74
Boron Plus	pt	4.64	Freefall SC	oz	1.63
DAP	cwt	35.88	Ginstar EC	pt	27.59
Fert 10-34-0	cwt	31.55	Gramoxone SL	oz	0.19
Fert 10-34-0	gal	3.68	Sharpen	oz	5.99
Fert 11-37-0	cwt	26.26	Sodium Chlorate 5L	gal	8.54
Fert 41-0-0-4	cwt	18.22	SuperBoll	oz	0.24
Lime	ton	49.00	Thidiazuron 4lb	oz	2.07
NBPT	pt	12.93	Tribufos 6lb	pt	11.74
Phosphorus (46% P2O5)	cwt	27.75	Vacate	oz	1.39
Potash (60% K2O)	cwt	26.30	HAULING		
Sulfur Plus	pt	2.62	Haul Corn	bu	0.23
UAN (32% N)	cwt	19.00	Haul Peanuts	ton	14.50
UAN (32%)	gal	2.10	Haul Rice	bu	0.35
UAN + Sulfur (28%)	cwt	18.45	Haul Sorghum	bu	0.25
UAN + Sulfur (28%)	gal	2.05	Haul Soybeans	bu	0.27
Urea, Solid (46% N)	cwt	28.63	Haul Wheat	bu	0.26
Zinc Plus	pt	3.40	HERBICIDES		
FUNGICIDES			2,4-D Amine 4	pt	2.64
Abound	oz	1.96	2,4-D Ester	pt	2.41
Alfa Guard	lb	1.26	AATrex 4L	pt	1.90
Allegiance Flowabl	oz	3.35	Accent Q	oz	18.15
Ameristar Top	oz	2.51	Acuron	oz	0.51
Approach Prima	pt	28.00			
Apron Maxx RTA	oz	0.84			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2022 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Aim	oz	5.79	Harmony Extra SG	oz	10.86
Anthem Flex	oz	3.57	Helmet	oz	0.41
Anthem Maxx	oz	5.38	Huskie	oz	0.82
Armezon Pro	oz	0.92	Impact	oz	15.32
Atrazine 4L	pt	1.67	Intimidator	oz	0.64
Atrazine 90DF	lb	3.36	Leadoff	oz	6.00
Authority First	lb	68.23	League	oz	4.39
Authority Elite	pt	13.75	Lexar	pt	6.79
Authority Maxx	lb	68.82	Liberty 280	oz	0.59
Authority MTZ	lb	20.63	Loyant	oz	2.29
Avatar	pt	9.62	Makaze	oz	0.21
Avenger	pt	11.75	Metolachlor	pt	5.02
Axial XL	oz	1.10	Metribuzin 4L	pt	8.25
Axiom	oz	2.06	Metribuzin 75	lb	14.73
Banvel	pt	4.81	MSMA	pt	3.42
Barrage	pt	5.36	Newpath	oz	3.84
Basagran	pt	5.43	Obey	oz	1.01
Boundary	pt	10.45	Osprey	oz	4.00
Brake	oz	1.48	Outlook	pt	13.88
Broadaxe	pt	13.95	Panther Pro	oz	6.61
Broadhead	lb	58.21	Parallel	pt	4.01
Buccaneer Plus	pt	2.97	Paraquat	oz	0.16
Buctril	pt	4.28	Parazone 3SL	oz	0.18
Butyrac 200 (2,4-DB)	pt	2.90	Permit	oz	21.96
Cadre	oz	3.33	Permit Plus	oz	21.96
Canopy	oz	2.91	PowerFlex	oz	7.00
Caparol	pt	4.87	Preface	oz	4.99
Capreno	oz	3.96	Prefix	pt	6.17
Cinch	pt	14.18	Provisia	oz	0.76
Cinch ATZ	pt	5.96	Prowl 3.3 EC	pt	5.69
Clarity	pt	11.00	Quelex	oz	7.42
Classic	oz	12.00	RealmQ	oz	5.34
Clearpath	oz	4.06	RebelEx	oz	2.00
Clethodim 2E	oz	0.50	Reflex	pt	6.71
Clincher SF	oz	2.56	Regiment	oz	45.50
Cobra	oz	1.23	Resicore	oz	0.60
Command 3ME	pt	18.00	Resource	oz	2.11
Corvus	oz	4.69	RiceBeaux	pt	5.38
Cotoran	pt	5.79	Riceshot	pt	4.92
Cotton Pro	pt	3.45	Ricestar HT	pt	26.88
Dicamba	pt	6.35	Ringside	pt	5.63
Direx	pt	2.44	Roundup Power Max	oz	0.20
Diuron	pt	3.50	Roundup PowerMax	pt	3.24
Dual II Magnum	pt	11.15	Roundup PowerMax ii	oz	0.19
Dual Magnum	pt	10.02	Roundup Pro	pt	0.20
Duet	pt	6.22	Scepter 70 DG	oz	4.64
Engenia	oz	0.83	Select Max	pt	12.73
Envive	oz	4.06	Sencor/Tricor.Metrib	lb	23.95
Envoke	oz	0.80	Sequence	pt	5.72
Facet L	pt	14.83	Sharpen	oz	5.99
Fierce	oz	6.50	Sinister	pt	13.77
Fierce XLT	oz	3.91	Sonic	oz	4.04
Finesse	oz	12.45	Stalwart	pt	3.82
Firestorm	pt	3.44	Stam 80 EDF	lb	9.45
First Rate	oz	37.79	Stam M4	qt	10.83
Flexstar	pt	7.34	Staple LX	oz	7.89
Flexstar GT	pt	4.73	Storm	pt	11.16
Fusilade DX	oz	0.88	Strada	oz	5.88
Gambit	oz	16.50	Strada Pro	oz	6.56
Glyphosate 3lbs a.e	pt	1.81	Strada XT2	pt	3.26
Glyphosate 3lbs a.e	oz	0.11	Superwham	qt	10.07
Goal 2XL	pt	8.69	Suprend	lb	13.52
Gramoxone SL 2.0	oz	0.19	SureStart II	oz	0.39
Grandstand R	pt	17.79	Surveil	oz	6.70
Grasp	oz	12.07	Synchrony XP	oz	11.26
Grasp Xtra	oz	1.61	Tempest	pt	19.50
Halex GT	pt	5.82	Touchdown Total	qt	10.21
Halomax	oz	21.11	Treflan	pt	2.50

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2022 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Trifluralin	pt	3.73	Mustang Max	oz	0.97
Triflurex	pt	3.47	Nuprid 4F	oz	0.94
Ultra Blazer	pt	5.25	Oberon	oz	2.78
Valor EZ	oz	4.71	Orthene 90	lb	11.15
Valor SX	oz	3.60	Permethrin	oz	0.40
Valor XLT	oz	3.45	Portal XLO	oz	0.74
Vamos	pt	6.49	Pounce 25WP	lb	19.52
Verdict	oz	1.54	Prevathon	oz	1.05
Veritas	pt	7.49	Python WDG	oz	19.80
Villain	pt	5.24	Radiant	oz	8.28
Volunteer	pt	10.63	Sevin 4F	pt	56.11
Warrant	pt	3.97	Sevin XLR Plus	qt	16.01
XtendiMax	oz	0.42	Sivanto Prime	oz	3.24
Zidua DF	oz	8.76	Tempest	oz	1.70
Zidua SC	oz	4.93	Transform WG	oz	7.63
INOCULANT			Up-Cyde	oz	0.36
Inoculant-Soybean	acre	1.55	Warrior ZT	oz	2.74
Optimize LIFT	oz	0.50	Zeal	oz	8.42
INSECTICIDES			IRRIGATION SUPPLIES		
Abamectin .15EC	oz	1.75	Roll-Out Pipe	ft	0.24
Acephate 90%	lb	9.87	SEED/PLANTS		
Acephate 90SP	lb	8.58	Corn Seed BtRR	thous	3.75
Admire Pro	oz	1.57	Corn Seed Conv.	thous	1.93
Agri-Mek	oz	2.66	Corn Seed Op Leptra	thous	3.66
Asana .66 XL	oz	0.63	Corn Seed RR2	thous	3.25
Avenger	oz	0.28	Corn Seed VT2P	thous	3.63
Baythroid XL	oz	1.04	Cot. Seed B3XF/W3FE	thous	2.59
Belt	oz	6.80	Cotton Seed B3XF	thous	2.59
Besiege	oz	2.38	Cotton Seed GLB2	thous	2.05
Bidrin 8EC	oz	1.34	Cotton Seed W3FE	thous	2.59
Bifenthrin	oz	0.86	Cotton Seed W3RF	thous	1.98
Bifenture 2EC	oz	0.51	Peanut Seed	lb	0.84
Brigade EC	pt	18.77	Rice Conv Hyb Trt	lb	6.60
Capture LFR	oz	1.37	Rice Fullpage Hyb Tr	lb	7.37
Centric 40WG	oz	4.97	Rice Seed CF(Levees)	lb	1.03
Cypermethrin	oz	1.31	Rice Seed Clearfield	lb	1.03
Declare	oz	1.95	Rice Seed Conv.	lb	0.32
Diamond .83EC	oz	1.28	Rice Seed Cv(Levees)	lb	0.32
Dimethoate 4E	pt	5.65	Rice Seed CvH(Levee)	lb	1.93
Dimilin 2L	oz	1.70	Rice Seed FPH(Levee)	lb	2.67
Endigo	oz	1.53	Rice Seed Provisia	lb	1.25
Force 3G	lb	7.28	Rice Seed Trt/Insect	lbseed	0.29
Hero	oz	1.09	Sorghum Concept	lb	3.10
Imidacloprid 4F	oz	0.78	Sorghum Concept+ Po	lb	3.72
Imidan 70 WSB	oz	0.79	Soybean Enlist E3	lb	1.20
IncidentalPestTrt \$8	acre	8.00	Soybean Seed LL	lb	1.16
IncidentalPestTrt\$15	acre	15.00	Soybean Seed RR2	lb	1.16
IncidentalPestTrt\$22	acre	22.00	Soybean Seed RR2X	lb	1.34
IncidentalPestTrt\$30	acre	30.00	Wheat Seed Private	lb	0.28
Intrepid 2F	oz	1.91	SOIL TEST		
Intruder 70WSP	oz	1.13	Soil Test	acre	10.00
Lambda	oz	1.88	SURVEY & MARK LEVEES		
Lannate LV	pt	9.30	Survey & Mark Levees	acre	4.50
Macho	oz	0.47	Survey & Mark Levees	acre	4.50
Malathion 8E	pt	9.84			

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2022

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	2.36
Gasoline	gal	2.81
INTEREST RATES		
Short-term	%	3.50
Intermediate-term	%	4.00

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2022

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	15.27
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, 2022

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '22	5.31	-0.14	5.17	2.35	5.17
Cotton Lint	lb	Dec '22	0.87	-0.016	0.8544	0.52	0.8544
Cottonseed	lb						0.11 ^f
Grain Sorghum	bu				4.91	4.09	4.91
Peanuts	ton				430.00	354.89	430.00
Soybeans	bu	Nov '22	12.45	0.01	12.46	6.41	12.46
Rice	bu	Nov '22	6.16	-0.36	5.80	3.21	5.80
Wheat	bu	Jul '22	7.44	0.16	7.28	3.60	7.28

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2021 for the stated contract months.

^b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2020 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 2021 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2020 Farm-stored Loan Rate for long grain rough rice. National 2020 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

^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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.27				0.27	0.27
Maintenance										
IRRIGATE LABOR	hour				1.07		0.02		1.09	1.09
Apply Water										
IRRIGATE LABOR	hour				0.15				0.15	0.15
Apply Water										
IRRIGATE LABOR	hour				0.20				0.20	0.20
Apply Water										
IRRIGATE LABOR	hour				0.15				0.15	0.15
Pivot, 1/4 CP	each			13.48			0.20		13.68	49.60 63.28
Well & Pump, 1/4 CP	each			3.50			0.05		3.55	9.34 12.89
Engine, 1/4 CP, 65	each									9.76 9.76
June Irr. 3app@.75"	ac-in		7.93	1.49			0.14		9.56	9.56
July Irr. 4app@.75"	ac-in		10.57	1.99			0.15		12.71	12.71
Aug Irr. 3app@.75"	ac-in		7.93	1.49			0.08		9.50	9.50
TOTALS		0.00	26.43	21.95	1.84	0.00	0.64		50.86	68.70 119.56

Note: Cost of production estimates are based on 2021 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, 2022

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Land Plane	50'x16'		0.88	0.32	0.58			0.06	1.84	1.65	3.49
Set Up Engine											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Ditcher (1m/160a)			0.19	0.07	0.14				0.40	0.31	0.71
Roll-Out Pipe	ft	7.92						0.09	8.01		8.01
Lay Roll-out Pipe											
Pipe Spool 160ac	1/4m roll		0.26	0.11	0.42			0.01	0.80	0.85	1.65
IRRIGATE LABOR	hour				1.81			0.02	1.83		1.83
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Apply Water											
IRRIGATE LABOR	hour				0.23				0.23		0.23
Pick Up Pipe											
Pipe Spool 160ac	1/4m roll		0.39	0.17	0.63			0.01	1.20	1.27	2.47
Land Forming (\$450)	each									28.81	28.81
Well & Pump, Furrow	each			2.96				0.03	2.99	7.88	10.87
Main Line Pipe	each									4.36	4.36
Engine, RPF, Corn	each									8.23	8.23
1st June Irrigation	ac-in		6.25	1.05				0.09	7.39		7.39
2nd June Irrigation	ac-in		6.25	1.05				0.09	7.39		7.39
3rd June Irrigation	ac-in		6.25	1.05				0.09	7.39		7.39
July Irrigation	ac-in		6.25	1.05				0.06	7.36		7.36
TOTALS		7.92	26.72	7.83	4.73	0.00		0.55	47.75	53.36	101.11

Note: Cost of production estimates are based on 2021 input prices.

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