

# **DELTA 2023 PLANNING BUDGETS**

**Mississippi State University  
Department of Agricultural Economics  
Budget Report 2022-05**

**November 2022**



## **Foreword**

This report is designed to provide necessary planning data to farmers, research and extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled "**Returns Above Specified Expenses.**" Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. "**Returns Above Direct Expenses**" should be used in making 2023 planning decisions. This would be a one-year short-run decision. Decisions beyond one year, or long-run decisions, should be based on "**Returns Above Specified Expenses.**"

## **Acknowledgments**

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

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

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

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# Table of Contents

	Page
Foreword .....	i
Acknowledgments.....	i
2023 Budget Committees .....	ii
2023 Planning Budgets .....	1
Budgets for Agricultural Enterprises.....	1
Methods and Procedures .....	1
Production Practices .....	1
Machinery .....	1
Estimates of Direct Costs.....	2
Estimates of Fixed Costs.....	2
Estimates of Returns .....	3
Irrigation Costs .....	3
Net Retruns .....	3
Enterprise Budgets	
Table	
1      Cotton, 12R-38", solid, conservation tillage B3XF variety, Delta Area .....	6
2      Cotton, 12R-38", solid, conversation tillage, furrow irr., B3XF variety, 10.5 ac-in., Delta Area.....	12
3      Cotton, 12R-38", solid, cons. tillage, pivot irr., B3XF variety, 7.5 ac.-in., Delta Area.....	18
4      Cotton, 12R-38", solid, no-till B3XF variety, Delta Area .....	24
5      Cotton, 12R-38", 2x1 full-skip, (8 rows planted) Cons. till., B3XF variety, Delta Area.....	30
6      Cotton, 12R-38", solid, conservation tillage W3FE variety, Delta Area.....	36
7      Cotton, 12R-38", solid, conversation tillage, furrow irr., W3FE variety, 10.5 ac-in., Delta Area.....	42
8      Cotton, 12R-38", solid, cons. tillage, pivot irr., W3FE variety, 7.5 ac.-in., Delta Area .....	48
9      Cotton, 12R-38", solid, no-till W3FE variety, Delta Area .....	54
10     Cotton, 12R-38", 2x1 full-skip, (8 rows planted) Cons. till., W3FE variety, Delta Area .....	60
11     Soybeans, full-season, Enlist E3, stale seedbed, 12R 30" Non-irrigated, Delta Area .....	66
12     Soybeans, full-season, Enlist E3, stale seedbed, 12R 30" Furrow irrigated, 9 ac-in., Delta Area.....	72
13     Soybeans, full-season, Enlist E3, stale seedbed, 12R 30" Flood irrigated, 13.5 ac-in., Delta Area .....	78
14     Soybeans, double crop after wheat, Enlist E3, 12R 30" 1/2 mile pivot irrigated, 7.5 ac-in., All Areas .....	84
15     Soybeans, double crop after wheat, Enlist E3, 12R 30" Non-irrigated, All Areas.....	90
16     Soybeans full season, RR2X, stale seedbed, 12R 30" Non-irrigated, Delta Area .....	96
17     Soybeans, full-season, RR2X, stale seedbed, 12R 30" Furrow irrigated, 9 ac-in., Delta Area.....	102
18     Soybeans, full-season, RR2X, stale seedbed, 12R 30"	

19	Flood irrigated, 13.5 ac-in., Delta Area.....	108
	Soybeans, double crop after wheat, RR2X, 12R 30"	
	1/2 mile pivot irrigated, 7.5 ac-in., All Areas.....	114
20	Soybeans, double crop after wheat, RR2X, 12R 30"	
	Non-irrigated, All Areas .....	120
21	Corn, stale seedbed, BtRR, 12-row 38", 220 bu yield goal	
	Furrow irrigated, 13 ac-in., Delta Area .....	126
22	Corn, stale seedbed, BtRR, 12-row 38", 170 bu yield goal	
	Non-irrigated, Delta Area.....	132
23	Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal	
	Pivot irrigated, 7.5 ac-in., Delta Area .....	138
24	Corn, conventional tillage, RR2, 12-row 38"	
	220 bu yield goal, furrow irrigated, 13 ac-in., Delta Area .....	144
25	Corn, conventional tillage, RR2, 12-row 38"	
	170 bu yield goal, non-irrigated, Delta Area.....	150
26	Corn, conventional tillage, RR2, 12-row 38"	
	220 bu yield goal, pivot irrigated, 7.5 ac-in ,Delta Area .....	156
27	Grain sorghum, 12-row 30", 100 bu yield goal	
	All Areas .....	162
28	Wheat followed by soybeans, 70 bu yield goal	
	All Areas .....	168
29	Contour levee rice	
	Flood irrigated, 33 ac-in,.....	174
30	Straight levee rice	
	Flood irrigated, 27 ac-in,.....	180
31	Straight levee rice	
	Multi inlet flood irrigated, 23 ac-in,.....	186
32	Straight levee rice – zero grade	
	Flood irrigated, 19 ac-in,.....	192
33	Conventional hybrid contour levee rice	
	Flood irrigated, 33 ac-in,.....	198
34	Conventional hybrid straight levee rice	
	Flood irrigated, 27 ac-in,.....	204
35	Conventional hybrid straight levee multi inlet rice	
	Flood irrigated, 23 ac-in,.....	210
36	Conventional hybrid straight levee-zero grade rice	
	Flood irrigated, 19 ac-in,.....	216
37	Clearfield contour levee rice	
	Flood irrigated, 33 ac-in,.....	222
38	Clearfield straight levee rice	
	Flood irrigated, 27 ac-in,.....	228
39	Clearfield straight levee multi inlet rice	
	Flood irrigated, 23 ac-in,.....	234
40	Clearfield straight levee-zero grade rice	
	Flood irrigated, 19 ac-in,.....	240
41	Fullpage hybrid contour levee rice	
	Flood irrigated, 33 ac-in,.....	246
42	Fullpage hybrid straight levee rice	
	Flood irrigated, 27 ac-in,.....	252
43	Fullpage hybrid straight levee multi inlet rice	
	Flood irrigated, 23 ac-in,.....	258
44	Fullpage hybrid straight levee-zero grade rice	
	Flood irrigated, 19 ac-in,.....	264
45	Provisia contour levee rice	
	Flood irrigated, 33 ac-in,.....	270
46	Provisia straight levee rice	
	Flood irrigated, 27 ac-in,.....	276
47	Provisia straight levee multi inlet rice	
	Flood irrigated, 23 ac-in,.....	282
48	Provisia straight levee-zero grade rice	
	Flood irrigated, 19 ac-in,.....	288

49	Peanut- runner, 1.9 ton (3800 lb) yield, 8 row-38 inch All Areas.....	294
50	Peanuts-runner, 1.9 ton (3800 lb) yield, 8 row-38" twin All Areas.....	300
51	Peanut- runner, 1.9 ton (3800 lb) yield, 12 row-38 inch All Areas.....	306
52	Peanut- runner, 2.2 ton (4400 lb) yield, 12 row-38 inch Furrow irrigated, All Areas.....	312

**Appendix**  
**Table**

1	Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed costs per hour.....	320
2	Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed costs per acre .....	321
3	Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed costs per acre .....	322
4	Operating inputs: estimated prices .....	327
5	Estimated fuel prices and interest rates.....	330
6	Labor types, wage rates and unallocated labor multipliers for crop enterprises .....	330
7	Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets .....	331
8	Cotton irrigated with roll-out pipe	
9	160-acre roll-out pipe system, 10.5 ac-in., Delta Area .....	332
10	Cotton irrigated with center pivot	
11	135-acre ¼-mile pivot system, 7.5 ac-in., Delta Area.....	333
12	Full-season soybeans irrigated with roll-out pipe,	
13	160-acre system, 9 ac-in., Delta Area .....	334
14	Irrigation with a contour flood system	
15	80-acre system, 13.5 ac-in., Delta Area .....	335
16	Irrigation with a ½-mile center pivot system	
17	530-acre system, 7.5 ac-in., Delta Area .....	336
18	Corn irrigated with roll-out pipe	
19	160-acre system, 13 ac-in., Delta Area .....	337
20	Contour levee rice flood irrigation system,	
21	80-acre system, 33 ac-in., Delta Area .....	338
22	Straight levee rice flood irrigation system,	
23	80-acre system, 27 ac-in., Delta Area .....	339
24	Straight levee rice multi inlet flood irrigation system,	
25	80-acre system, 23 ac-in., Delta Area .....	340
26	Straight levee rice – zero grade flood irrigation system	
27	80-acre system, 19 ac-in., Delta Area .....	341
28	Peanuts irrigated with a roll-out pipe	
29	160-acre system, 12 ac-in., Delta Area .....	342
	Literature Cited .....	343



# 2023 Planning Budgets

## Budgets for Agricultural Enterprises

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

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

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

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

## Methods and Procedures

### Production Practices

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

Committees made up of appropriate disciplines from the Mississippi Agricultural and Forestry Experiment Station, the Mississippi State University Extension Service, and the U.S. Department of Agriculture review and update the practices in the budgets every year. The updates are based on the collective judgment of the committee members. Quantities of materials and individual production practices budgeted are based on generally accepted recommendations by committee members.

### Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2022. (Appendix Tables 1, 2, and 3).

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

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

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

### Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

RPH = R&M cost per hour of use

RLC = Replacement cost of machine

RP = R&M percentage (percent of RLC)

THL = Total hours of machine life

RPA = R&M cost per acre

PR = Performance rate

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

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

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

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

### Estimates of Fixed Costs

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

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

where:

CRF = Capital recovery factor

IIR = Intermediate-term interest rate

TYL = Total years of life

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

where:

CRCPY = Capital recovery charge per year

RLC = Replacement cost

SV = Salvage value (at end of useful life)

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

### Estimates of Returns

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

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. Commodity prices used in this report represent the higher of a calculated forward contract price or the loan rate that was applicable for the 2022 crop year. Government payments for commodities are not included in the budgets except to the extent that they are included in loan rates.

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

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

### Irrigation Costs

Estimated costs of various irrigation systems are presented in Appendix Tables 8 through 18. A dryland crop budget may be converted to an irrigated crop budget by adding the appropriate direct and fixed costs to the costs of the dryland crop. Also, adjustments in crop yields and other costs may be required with the addition of supplemental irrigation.

### Net Returns

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



## Enterprise Budgets

Table 1.A Estimated costs per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF variety, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	
App by Air ( 3 gal)	appl	6.40	5.2500	33.60	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.52	2.3000	3.50	
Ethephon 6E	pt	3.56	2.3125	8.23	
Tribufos 6lb	pt	12.50	0.5000	6.25	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	46.60	1.5000	69.90	
UAN (32%)	gal	4.30	34.3582	147.74	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	14.30	0.5000	7.15	
Glyphosate 3lbs a.e	oz	0.34	96.0000	32.64	
Select Max	pt	13.86	1.0000	13.86	
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	
Cotoran	pt	6.37	2.0000	12.74	
Engenia	oz	0.83	25.6000	21.25	
Dual Magnum	pt	11.45	2.0000	22.90	
INSECTICIDES					
Acephate 90%	lb	9.30	2.0000	18.60	
Bidrin 8EC	oz	1.43	5.2000	7.44	
Centric 40WG	oz	5.95	2.0000	11.90	
Diamond .83EC	oz	2.23	6.0000	13.38	
Imidacloprid 4F	oz	1.06	2.0000	2.12	
Bifenthrin	oz	1.13	12.8000	14.46	
Lambda	oz	2.08	1.0000	2.08	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
Transform WG	oz	8.82	1.5000	13.23	
SEED/PLANTS					
Cotton Seed B3XF	thous	2.35	45.0000	105.75	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.22	48.0000	10.56	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.3993	6.60	
Self-Propelled	hour	16.54	0.2075	3.42	
HAND LABOR					
implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR					
hour	16.55	0.4855	8.04		
DIESEL FUEL					
Tractors	gal	4.48	6.1665	27.64	
Self-Propelled	gal	4.48	4.8836	21.88	
REPAIR & MAINTENANCE					
implements	acre	10.13	1.0000	10.13	
Tractors	acre	3.78	1.0000	3.78	
Self-Propelled	acre	25.83	1.0000	25.83	
INTEREST ON OP. CAP.					
TOTAL DIRECT EXPENSES				980.43	
FIXED EXPENSES					
implements	acre	16.44	1.0000	16.44	
Tractors	acre	26.82	1.0000	26.82	
Self-Propelled	acre	115.36	1.0000	115.36	
TOTAL FIXED EXPENSES				158.62	
TOTAL SPECIFIED EXPENSES				1139.05	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.  
 Lime cost prorated for application every 3<sup>rd</sup> year.

Table 1.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF variety, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	1200.0000	886.68	_____
Cotton Seed	lb	0.11	1620.0000	178.20	_____
				-----	
<b>TOTAL INCOME</b>				<b>1064.88</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	52.60	1.0000	52.60	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	217.64	1.0000	217.64	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	128.29	1.0000	128.29	_____
INSECTICIDES	acre	98.22	1.0000	98.22	_____
SEED/PLANTS	acre	105.75	1.0000	105.75	_____
GROWTH REGULATORS	acre	10.56	1.0000	10.56	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
OPERATOR LABOR	hour	16.54	0.6069	10.02	_____
UNALLOCATED LABOR	hour	16.55	0.4855	8.04	_____
DIESEL FUEL	gal	4.48	11.0501	49.52	_____
REPAIR & MAINTENANCE	acre	39.74	1.0000	39.74	_____
INTEREST ON OP. CAP.	acre	27.47	1.0000	27.47	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>980.43</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>84.45</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>158.62</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1139.05</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-74.17</b>	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 1.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF variety, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Nov		0.3330				
Lime (Spread)	ton			0.33	Nov		0.6660				
Custom Apply Fert	acre			1.00	Nov		1.0000				
Potash (60% K2O)	cwt						1.5000				
Bed-Subsoil Fold	12R-38	MFWD 300	0.053	1.00	Nov			0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	0.049	0.50	Nov			0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar		1.0000				
Clarity	pt						0.5000				
Glyphosate 3lbs a.e	oz						32.0000				
Select Max	pt						1.0000				
Surfactant	pt						0.2000				
Fert Appl (Liquid) UAN (32%)	12R-38 gal	MFWD 300	0.051	1.00	Apr		17.1791	0.05	0.05	0.07	0.04
Row Cond Folding	38'	MFWD 300	0.040	1.00	May			0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May			0.04	0.04	0.09	0.03
Cotton Seed B3XF	thous						45.0000				
Cotton Seed Trt.	acre						1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May				0.01	0.01	0.00
Gramoxone SL 2.0	oz						48.0000				
Cotoran	pt						2.0000				
Surfactant	pt						0.2000				
Cotton Consultant	acre			1.00	May		1.0000				
Eradication	acre						1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May				0.01	0.01	0.00
Engenia	oz						12.8000				
Glyphosate 3lbs a.e	oz						32.0000				
Dual Magnum	pt						1.0000				
Acephate 90%	lb						0.5000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun				0.01	0.01	0.00
Bidrin 8EC	oz						3.2000				
Fert Appl (Liquid) UAN (32%)	12R-38 gal	MFWD 300	0.051	1.00	Jun		17.1791	0.05	0.05	0.07	0.04
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun			0.04	0.04	0.06	0.03
Engenia	oz						12.8000				
Glyphosate 3lbs a.e	oz						32.0000				
Dual Magnum	pt						1.0000				
Centric 40WG	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
App by Air ( 3 gal)	appl			1.00	Jul		1.0000				
Diamond .83EC	oz						6.0000				
Imidacloprid 4F	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
App by Air ( 3 gal)	appl			1.00	Jul		1.0000				
Acephate 90%	lb						0.7500				
Mepiquat Chloride	oz						16.0000				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl			0.25	Jul		0.2500				
Lambda	oz						1.0000				
Bidrin 8EC	oz						2.0000				
Incidental Pest				1.00	Jul						
App by Air ( 3 gal)	appl						1.0000				
Incidental Pest Trt \$15	acre						1.0000				
App by Air ( 3 gal)	appl			1.00	Aug		1.0000				
Acephate 90%	lb						0.7500				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl			1.00	Aug		1.0000				
Transform WG	oz						1.5000				
App by Air ( 5 gal)	appl			1.00	Sep		1.0000				
Thidiazuron 4lb	oz						2.3000				
Ethepron 6E	pt						2.0000				
App by Air ( 5 gal)	appl			0.50	Sep		0.5000				
Tribufos 6lb	pt						0.5000				
Ethepron 6E	pt						0.3125				
Cotton Picker/Module	6R-38 (500)		0.172	1.00	Oct				0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1200.0000					
Stalk Shredder-Flail	20'	MFWD 300	0.082	1.00	Oct			0.08	0.08	0.08	0.06
TOTALS							0.60	0.39	0.92	0.48	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 1.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF variety, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL	FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE			
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Lime (Spread)	ton	38.63					2.47	41.10	41.10
Custom Apply Fert	acre	7.50					0.48	7.98	7.98
Potash (60% K2O)	cwt	69.90					4.47	74.37	74.37
Bed-Subsoil Fold	12R-38		3.72	2.43	1.60		0.50	8.25	7.44
Bed/Disk (Hipper)	12R-38		1.71	0.70	0.74		0.20	3.35	3.08
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Clarity	pt	7.15					0.31	7.46	7.46
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34	11.34
Select Max	pt	13.86					0.59	14.45	14.45
Surfactant	pt	0.66					0.03	0.69	0.69
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.26	7.16	4.84
UAN (32%)	gal	73.87					2.76	76.63	76.63
Row Cond Folding	38'		2.83	0.80	1.22		0.16	5.01	4.72
Plant - Folding	12R-38		3.43	2.14	1.93		0.24	7.74	6.98
Cotton Seed B3XF	thous	105.75					3.38	109.13	109.13
Cotton Seed Trt.	acre	20.00					0.64	20.64	20.64
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Gramoxone SL 2.0	oz	17.76					0.57	18.33	18.33
Cotoran	pt	12.74					0.41	13.15	13.15
Surfactant	pt	0.66					0.02	0.68	0.68
Cotton Consultant	acre	8.00					0.26	8.26	8.26
Eradication	acre	1.00					0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Engenia	oz	10.62					0.34	10.96	10.96
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23	11.23
Dual Magnum	pt	11.45					0.37	11.82	11.82
Acephate 90%	lb	4.65					0.15	4.80	4.80
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Bidrin 8EC	oz	4.58					0.12	4.70	4.70
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.18	7.08	4.84
UAN (32%)	gal	73.87					1.97	75.84	75.84
Spray (Direct/Layby)	12R-38		3.08	1.04	1.53		0.15	5.80	3.83
Engenia	oz	10.62					0.28	10.90	10.90
Glyphosate 3lbs a.e	oz	10.88					0.29	11.17	11.17
Dual Magnum	pt	11.45					0.31	11.76	11.76
Centric 40WG	oz	11.90					0.32	12.22	12.22
Mepiquat Chloride	oz	3.52					0.09	3.61	3.61
App by Air ( 3 gal)	appl	6.40					0.14	6.54	6.54
Diamond .83EC	oz	13.38					0.29	13.67	13.67
Imidacloprid 4F	oz	2.12					0.05	2.17	2.17
Mepiquat Chloride	oz	3.52					0.08	3.60	3.60
App by Air ( 3 gal)	appl	6.40					0.14	6.54	6.54
Acephate 90%	lb	6.98					0.15	7.13	7.13
Mepiquat Chloride	oz	3.52					0.08	3.60	3.60
Bifenthrin	oz	7.23					0.15	7.38	7.38
App by Air ( 3 gal)	appl	1.60					0.03	1.63	1.63
Lambda	oz	2.08					0.04	2.12	2.12
Bidrin 8EC	oz	2.86					0.06	2.92	2.92
Incidental Pest									
App by Air ( 3 gal)	appl	6.40					0.14	6.54	6.54
Incidental Pest Trt \$15	acre	15.00					0.32	15.32	15.32
App by Air ( 3 gal)	appl	6.40					0.10	6.50	6.50
Acephate 90%	lb	6.98					0.11	7.09	7.09
Bifenthrin	oz	7.23					0.12	7.35	7.35
App by Air ( 3 gal)	appl	6.40					0.10	6.50	6.50
Transform WG	oz	13.23					0.21	13.44	13.44
App by Air ( 5 gal)	appl	7.60					0.08	7.68	7.68
Thidiazuron 4lb	oz	3.50					0.04	3.54	3.54
Ethepron 6E	pt	7.12					0.08	7.20	7.20
App by Air ( 5 gal)	appl	3.80					0.04	3.84	3.84
Tribufos 6lb	pt	6.25					0.07	6.32	6.32
Ethepron 6E	pt	1.11					0.01	1.12	1.12
Cotton Picker/Module	6R-38(500)		19.87	25.23	6.69		0.28	52.07	110.98
Gin & Haul	lb	132.00					0.70	132.70	132.70
Stalk Shredder-Flail	20'		5.71	3.68	2.45		0.06	11.90	7.53
TOTALS		842.82	49.52	39.74	20.88	0.00	27.47	980.43	158.62
									1139.05

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

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

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

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

Table 1.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF variety, Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1064.88
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	20.80	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	73.87	0.00	73.87	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	63.45	32.95	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	16.48	49.65	27.44	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.75	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	7.04	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.34	0.00	0.00	0.00	0.00	1.76	3.95	3.69	0.00	0.00	0.00	9.14
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.43	0.00	0.00	0.00	0.00	3.58	7.60	7.33	0.00	0.00	0.00	25.58
REPAIR & MAINTENANCE	3.13	0.00	0.00	0.00	0.00	1.56	3.34	2.80	0.00	0.00	0.00	28.91
INTEREST ON OP. CAP.	8.33	0.00	0.00	0.00	1.71	3.02	7.00	3.74	1.67	0.64	0.32	1.04
TOTAL DIRECT EXPENSES	138.59	0.00	0.00	0.00	41.86	83.79	225.40	144.38	79.16	40.88	29.70	196.67
NET INCOME	-138.59	0.00	0.00	0.00	-41.86	-83.79	-225.40	-144.38	-79.16	-40.88	-29.70	868.21
NET INCOME TO DATE	-138.59	-138.59	-138.59	-138.59	-180.45	-264.24	-489.64	-634.02	-713.18	-754.06	-783.76	84.45

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 B3XF variety, Delta Area, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-403 -561	-381 -539	-359 -517	-336 -495	-314 -473	-292 -451	-270 -428	-248 -406	-226 -384	-203 -362	-181 -340
60	720.00	lb	-350 -508	-323 -482	-296 -455	-270 -428	-243 -402	-217 -375	-190 -349	-163 -322	-137 -295	-110 -269	-84 -242
70	840.00	lb	-296 -455	-265 -424	-234 -393	-203 -362	-172 -331	-141 -300	-110 -269	-79 -238	-48 -207	-17 -176	13 -145
80	960.00	lb	-243 -402	-208 -366	-172 -331	-137 -295	-101 -260	-66 -224	-30 -189	4 -154	40 -118	75 -83	110 -47
90	1080.00	lb	-190 -349	-150 -309	-110 -269	-70 -229	-30 -189	9 -149	48 -109	88 -69	128 -29	168 10	208 49
100	1200.00	lb	-137 -295	-92 -251	-48 -207	-4 -162	40 -118	84 -74	128 -29	173 14	217 58	261 103	306 147
110	1320.00	lb	-83 -242	-35 -193	13 -145	62 -96	111 -47	159 1	208 49	257 98	306 147	354 196	403 245
120	1440.00	lb	-30 -189	22 -136	75 -82	128 -29	182 23	235 76	288 129	341 183	394 236	448 289	501 342
130	1560.00	lb	22 -136	80 -78	137 -20	195 36	253 94	310 152	368 209	425 267	483 324	541 382	598 440
140	1680.00	lb	75 -82	137 -20	199 41	261 103	323 165	386 227	448 289	510 351	572 413	634 475	696 537
150	1800.00	lb	128 -29	195 36	261 103	328 169	394 236	461 302	527 369	594 435	660 502	727 568	793 635

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 2.A Estimated costs per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 B3XF variety, 10.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	
App by Air ( 3 gal)	appl	6.40	5.7500	36.80	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.52	2.3000	3.50	
Ethephon 6E	pt	3.56	2.3125	8.23	
Tribufos 6lb	pt	12.50	0.5000	6.25	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	46.60	1.5000	69.90	
UAN (32%)	gal	4.30	34.3582	147.74	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	14.30	0.5000	7.15	
Glyphosate 3lbs a.e	oz	0.34	96.0000	32.64	
Select Max	pt	13.86	1.0000	13.86	
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	
Cotoran	pt	6.37	2.0000	12.74	
Engenia	oz	0.83	25.6000	21.25	
Dual Magnum	pt	11.45	2.0000	22.90	
INSECTICIDES					
Acephate 90SP	lb	6.62	0.5000	3.31	
Bidrin 8EC	oz	1.43	5.2000	7.44	
Diamond .83EC	oz	2.23	6.0000	13.38	
Imidacloprid 4F	oz	1.06	2.0000	2.12	
Centric 40WG	oz	5.95	2.0000	11.90	
Acephate 90%	lb	9.30	1.5000	13.95	
Bifenthrin	oz	1.13	12.8000	14.46	
Lambda	oz	2.08	1.0000	2.08	
Incidental Pest Trt \$15	acre	15.00	1.5000	22.50	
Transform WG	oz	8.82	1.5000	13.23	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Cotton Seed B3XF	thous	2.35	45.0000	105.75	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.22	51.0000	11.22	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.5025	8.32	
Self-Propelled	hour	16.54	0.2075	3.42	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	
Implements	hour	9.06	0.0625	0.57	
HAND LABOR					
Implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR					
hour	16.54	0.5052	8.36		
DIESEL FUEL					
Tractors	gal	4.48	7.2737	32.60	
Self-Propelled	gal	4.48	4.8836	21.88	
Roll-Out Pipe Irr.	gal	4.48	8.5535	38.31	
REPAIR & MAINTENANCE					
Implements	acre	10.86	1.0000	10.86	
Tractors	acre	4.51	1.0000	4.51	
Self-Propelled	acre	25.83	1.0000	25.83	
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	29.10	1.0000	29.10	
TOTAL DIRECT EXPENSES				-----	1090.23
FIXED EXPENSES					
Implements	acre	19.68	1.0000	19.68	
Tractors	acre	31.95	1.0000	31.95	
Self-Propelled	acre	115.36	1.0000	115.36	
Roll-Out Pipe Irr.	acre	65.01	1.0000	65.01	
TOTAL FIXED EXPENSES				-----	232.00
TOTAL SPECIFIED EXPENSES				-----	1322.23

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 2.B Summary of estimated costs and returns per acre  
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
B3XF variety, 10.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	1500.0000	1108.35	_____
Cotton Seed	lb	0.11	2025.0000	222.75	_____
<b>-----</b>					
<b>TOTAL INCOME</b>				<b>1331.10</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	55.80	1.0000	55.80	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	217.64	1.0000	217.64	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	128.29	1.0000	128.29	_____
INSECTICIDES	acre	104.38	1.0000	104.38	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	105.75	1.0000	105.75	_____
GROWTH REGULATORS	acre	11.22	1.0000	11.22	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	16.54	0.7101	11.74	_____
UNALLOCATED LABOR	hour	16.54	0.5052	8.36	_____
DIESEL FUEL	gal	4.48	20.7109	92.79	_____
REPAIR & MAINTENANCE	acre	48.36	1.0000	48.36	_____
INTEREST ON OP. CAP.	acre	29.10	1.0000	29.10	_____
<b>-----</b>					
<b>TOTAL DIRECT EXPENSES</b>				<b>1090.23</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>240.87</b>	_____
<b>-----</b>					
<b>TOTAL FIXED EXPENSES</b>				<b>232.00</b>	_____
<b>-----</b>					
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1322.23</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>8.87</b>	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 2.C Estimated resource use for field operations, per acre  
Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
B3XF variety, 10.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Nov		0.3330				
Lime (Spread)	ton			0.33	Nov		0.6660				
Custom Apply Fert	acre			1.00	Nov		1.0000				
Potash (60% K2O)	cwt						1.5000				
Bed-Subsoil Fold	12R-38	MFWD	300	0.053	1.00	Nov			0.05	0.05	0.05
Bed/Disk (Hipper)	12R-38	MFWD	300	0.049	1.00	Nov			0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Mar	1.0000				
Clarity	pt						0.5000				
Glyphosate 3lbs a.e	oz						32.0000				
Select Max	pt						1.0000				
Surfactant	pt						0.2000				
Fert Appl (Liquid) UAN (32%)	12R-38 gal	MFWD	300	0.051	1.00	Apr	17.1791		0.05	0.05	0.07
Row Cond Folding	38'	MFWD	300	0.040	1.00	May			0.04	0.04	0.04
Plant - Folding	12R-38	MFWD	300	0.049	1.00	May			0.04	0.04	0.09
Cotton Seed B3XF	thous						45.0000				
Cotton Seed Trt.	acre						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz						48.0000				
Cotoran	pt						2.0000				
Surfactant	pt						0.2000				
Cotton Consultant	acre				1.00	May	1.0000				
Eradication	acre						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Engenia	oz						12.8000				
Glyphosate 3lbs a.e	oz						32.0000				
Dual Magnum	pt						1.0000				
Acephate 90SP	lb						0.5000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz						3.2000				
Fert Appl (Liquid) UAN (32%)	12R-38 gal	MFWD	300	0.051	1.00	Jun	17.1791		0.05	0.05	0.07
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Diamond .83EC	oz						6.0000				
Imidacloprid 4F	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
Spray (Direct/Layby)	12R-38	MFWD	300	0.044	1.00	Jul			0.04	0.04	0.06
Engenia	oz						12.8000				
Glyphosate 3lbs a.e	oz						32.0000				
Dual Magnum	pt						1.0000				
Mepiquat Chloride	oz						19.0000				
Centric 40WG	oz						2.0000				
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Acephate 90%	lb						0.7500				
Mepiquat Chloride	oz						16.0000				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl				0.25	Jul	0.2500				
Lambda	oz						1.0000				
Bidrin 8EC	oz						2.0000				
Incidental Pest					1.50	Jul					
App by Air ( 3 gal)	appl						1.5000				
Incidental Pest Trt\$15	acre						1.5000				
App by Air ( 3 gal)	appl				1.00	Aug	1.0000				
Acephate 90%	lb						0.7500				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl				1.00	Aug	1.0000				
Transform WG	oz						1.5000				
App by Air ( 5 gal)	appl				1.00	Sep	1.0000				
Thidiazuron 4lb	oz						2.3000				
Ethepron 6E	pt						2.0000				
App by Air ( 5 gal)	appl				0.50	Sep	0.5000				
Tribufos 6lb	pt						0.5000				
Ethepron 6E	pt						0.3125				
Cotton Picker/Module	6R-38(500)			0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb				1.00	Oct	1500.0000				
Stalk Shredder-Flail	20'	MFWD	300	0.082	1.00	Oct			0.08	0.08	0.08
Roll-Out Pipe Irr.	acre					Jan	1.0000		0.07	0.07	0.44
TOTALS							0.71		0.50	1.38	0.50

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 2.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 B3XF variety, 10.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL	FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE			
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Lime (Spread)	ton	38.63					2.47	41.10	41.10
Custom Apply Fert	acre	7.50					0.48	7.98	7.98
Potash (60% K2O)	cwt	69.90					4.47	74.37	74.37
Bed-Subsoil Fold	12R-38		3.72	2.43	1.60		0.50	8.25	7.44
Bed/Disk (Hipper)	12R-38		3.41	1.42	1.47		0.40	6.70	6.15
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Clarity	pt	7.15					0.31	7.46	7.46
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34	11.34
Select Max	pt	13.86					0.59	14.45	14.45
Surfactant	pt	0.66					0.03	0.69	0.69
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.26	7.16	4.84
UAN (32%)	gal	73.87					2.76	76.63	76.63
Row Cond Folding	38'		2.83	0.80	1.22		0.16	5.01	4.72
Plant - Folding	12R-38		3.43	2.14	1.93		0.24	7.74	6.98
Cotton Seed B3XF	thous	105.75					3.38	109.13	109.13
Cotton Seed Trt.	acre	20.00					0.64	20.64	20.64
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Gramoxone SL 2.0	oz	17.76					0.57	18.33	18.33
Cotoran	pt	12.74					0.41	13.15	13.15
Surfactant	pt	0.66					0.02	0.68	0.68
Cotton Consultant	acre	8.00					0.26	8.26	8.26
Eradication	acre	1.00					0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Engenia	oz	10.62					0.34	10.96	10.96
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23	11.23
Dual Magnum	pt	11.45					0.37	11.82	11.82
Acephate 90SP	lb	3.31					0.11	3.42	3.42
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Bidrin 8EC	oz	4.58					0.12	4.70	4.70
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.18	7.08	4.84
UAN (32%)	gal	73.87					1.97	75.84	75.84
App by Air ( 3 gal)	appl	6.40					0.14	6.54	6.54
Diamond .83EC	oz	13.38					0.29	13.67	13.67
Imidacloprid 4F	oz	2.12					0.05	2.17	2.17
Mepiquat Chloride	oz	3.52					0.08	3.60	3.60
Spray (Direct/Layby)	12R-38		3.08	1.04	1.53		0.12	5.77	3.83
Engenia	oz	10.62					0.23	10.85	10.85
Glyphosate 3lbs a.e	oz	10.88					0.23	11.11	11.11
Dual Magnum	pt	11.45					0.24	11.69	11.69
Mepiquat Chloride	oz	4.18					0.09	4.27	4.27
Centric 40WG	oz	11.90					0.25	12.15	12.15
App by Air ( 3 gal)	appl	6.40					0.14	6.54	6.54
Acephate 90%	lb	6.98					0.15	7.13	7.13
Mepiquat Chloride	oz	3.52					0.08	3.60	3.60
Bifenthrin	oz	7.23					0.15	7.38	7.38
App by Air ( 3 gal)	appl	1.60					0.03	1.63	1.63
Lambda	oz	2.08					0.04	2.12	2.12
Bidrin 8EC	oz	2.86					0.06	2.92	2.92
Incidental Pest									
App by Air ( 3 gal)	appl	9.60					0.20	9.80	9.80
Incidental Pest Trt \$15	acre	22.50					0.48	22.98	22.98
App by Air ( 3 gal)	appl	6.40					0.10	6.50	6.50
Acephate 90%	lb	6.98					0.11	7.09	7.09
Bifenthrin	oz	7.23					0.12	7.35	7.35
App by Air ( 3 gal)	appl	6.40					0.10	6.50	6.50
Transform WG	oz	13.23					0.21	13.44	13.44
App by Air ( 5 gal)	appl	7.60					0.08	7.68	7.68
Thidiazuron 4lb	oz	3.50					0.04	3.54	3.54
Ethephon 6E	pt	7.12					0.08	7.20	7.20
App by Air ( 5 gal)	appl	3.80					0.04	3.84	3.84
Tribufos 6lb	pt	6.25					0.07	6.32	6.32
Ethephon 6E	pt	1.11					0.01	1.12	1.12
Cotton Picker/Module	6R-38(500)		19.87	25.23	6.69		0.28	52.07	110.98
Gin & Haul	lb	165.00					0.88	165.88	165.88
Stalk Shredder-Flail	20'		5.71	3.68	2.45		0.06	11.90	7.53
Roll-Out Pipe Irr.	acre	7.92	41.57	7.90	4.61		1.35	63.35	70.31
TOTALS		893.76	92.79	48.36	26.22	0.00	29.10	1090.23	232.00
									1322.23

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

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

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

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

Table 2.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 B3XF variety, 10.5 ac-in., Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1331.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	24.00	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	73.87	0.00	73.87	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	63.45	0.00	32.95	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	3.31	4.58	69.05	27.44	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.75	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.22	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.07	0.00	0.00	0.00	0.00	1.76	4.18	4.80	1.76	0.23	0.65	9.77
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	7.13	0.00	0.00	0.00	0.00	3.58	7.60	17.88	15.85	12.77	0.74	27.24
REPAIR & MAINTENANCE	3.85	0.00	0.00	0.00	0.00	1.56	3.34	6.32	2.44	1.40	0.18	29.27
INTEREST ON OP. CAP.	8.53	0.00	0.00	0.00	1.71	3.02	6.97	3.08	3.35	0.87	0.34	1.23
TOTAL DIRECT EXPENSES	141.94	0.00	0.00	0.00	41.86	83.79	224.26	118.45	160.62	55.51	31.29	232.51
NET INCOME	-141.94	0.00	0.00	0.00	-41.86	-83.79	-224.26	-118.45	-160.62	-55.51	-31.29	1098.59
NET INCOME TO DATE	-141.94	-141.94	-141.94	-141.94	-183.80	-267.59	-491.85	-610.30	-770.92	-826.43	-857.72	240.87

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 B3XF variety, 10.5 ac-in., Delta Area, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-368 -600	-341 -573	-313 -545	-285 -517	-258 -490	-230 -462	-202 -434	-174 -406	-147 -379	-119 -351	-91 -323
60	900.00	lb	-302 -534	-269 -501	-235 -467	-202 -434	-169 -401	-136 -368	-102 -334	-69 -301	-36 -268	-3 -235	30 -201
70	1050.00	lb	-235 -467	-197 -429	-158 -390	-119 -351	-80 -312	-41 -273	-3 -235	35 -196	74 -157	113 -118	152 -79
80	1200.00	lb	-169 -401	-124 -356	-80 -312	-36 -268	8 -223	52 -179	96 -135	141 -135	185 -90	229 -46	274 -2
90	1350.00	lb	-102 -334	-52 -284	-3 -235	46 -185	96 -135	146 -85	196 -35	246 14	296 64	346 114	396 164
100	1500.00	lb	-36 -268	19 -212	74 -157	130 -101	185 -46	240 8	296 64	351 119	407 175	462 230	517 285
110	1650.00	lb	30 -201	91 -140	152 -79	213 -18	274 42	335 103	396 164	457 225	517 285	578 346	639 407
120	1800.00	lb	96 -135	163 -68	229 -2	296 64	362 130	429 197	495 263	562 330	628 396	695 463	761 529
130	1950.00	lb	163 -68	235 3	307 75	379 147	451 219	523 291	595 363	667 435	739 507	811 579	883 651
140	2100.00	lb	229 -2	307 75	385 153	462 230	540 308	617 385	695 463	773 541	850 618	928 696	1005 773
150	2250.00	lb	296 64	379 147	462 230	545 313	628 396	712 480	795 563	878 646	961 729	1044 812	1127 895

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 3.A Estimated costs per acre  
Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
B3XF variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	_____
App by Air ( 3 gal)	appl	6.40	5.7500	36.80	_____
<b>HARVEST AIDS</b>					
Thidiazuron 4lb	oz	1.52	2.3000	3.50	_____
Ethephon 6E	pt	3.56	2.3125	8.23	_____
Tribufos 6lb	pt	12.50	0.5000	6.25	_____
<b>GINNING</b>					
Gin & Haul	lb	0.11	1500.0000	165.00	_____
<b>FERTILIZERS</b>					
Potash (60% K2O)	cwt	46.60	1.5000	69.90	_____
UAN (32%)	gal	4.30	34.3582	147.74	_____
<b>FUNGICIDES</b>					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	_____
<b>HERBICIDES</b>					
Clarity	pt	14.30	0.5000	7.15	_____
Glyphosate 3lbs a.e.	oz	0.34	96.0000	32.64	_____
Select Max	pt	13.86	1.0000	13.86	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Cotoran	pt	6.37	2.0000	12.74	_____
Engenia	oz	0.83	25.6000	21.25	_____
Dual Magnum	pt	11.45	2.0000	22.90	_____
<b>INSECTICIDES</b>					
Acephate 90%	lb	9.30	2.0000	18.60	_____
Bidrin 8EC	oz	1.43	5.2000	7.44	_____
Centric 40WG	oz	5.95	2.0000	11.90	_____
Diamond .83EC	oz	2.23	6.0000	13.38	_____
Imidacloprid 4F	oz	1.06	2.0000	2.12	_____
Bifenthrin	oz	1.13	12.8000	14.46	_____
Lambda	oz	2.08	1.0000	2.08	_____
Incidental Pest Trt \$15	acre	15.00	1.5000	22.50	_____
Transform WG	oz	8.82	1.5000	13.23	_____
<b>SEED/PLANTS</b>					
Cotton Seed B3XF	thous	2.35	45.0000	105.75	_____
<b>GROWTH REGULATORS</b>					
Mepiquat Chloride	oz	0.22	48.0000	10.56	_____
<b>ADJUVANTS</b>					
Surfactant	pt	3.30	0.4000	1.32	_____
<b>CUSTOM FERTILIZE</b>					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
<b>ERADICATION FEE</b>					
Eradication	acre	1.00	1.0000	1.00	_____
<b>CUSTOM LIME</b>					
Lime (Spread)	ton	58.00	0.6660	38.63	_____
<b>CROP CONSULTANT</b>					
Cotton Consultant	acre	8.00	1.0000	8.00	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.3993	6.60	_____
Self-Propelled	hour	16.54	0.2075	3.42	_____
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	0.2036	1.84	_____
<b>HAND LABOR</b>					
Implements	hour	9.06	0.1235	1.11	_____
Self-Propelled	hour	9.06	0.1899	1.71	_____
<b>UNALLOCATED LABOR</b>					
hour	16.55	0.4855	8.04	_____	
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	6.1665	27.64	_____
Self-Propelled	gal	4.48	4.8836	21.88	_____
1/4-mi. Pivot Irr.	gal	4.48	11.2011	50.17	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	10.13	1.0000	10.13	_____
Tractors	acre	3.78	1.0000	3.78	_____
Self-Propelled	acre	25.83	1.0000	25.83	_____
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	_____
INTEREST ON OP. CAP.	acre	29.53	1.0000	29.53	_____
<b>TOTAL DIRECT EXPENSES</b>					
				1100.15	_____
<b>FIXED EXPENSES</b>					
Implements	acre	16.44	1.0000	16.44	_____
Tractors	acre	26.82	1.0000	26.82	_____
Self-Propelled	acre	115.36	1.0000	115.36	_____
1/4-mi. Pivot Irr.	acre	87.96	1.0000	87.96	_____
<b>TOTAL FIXED EXPENSES</b>					
				246.58	_____
<b>TOTAL SPECIFIED EXPENSES</b>					
				1346.73	_____

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

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

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

Table 3.B Summary of estimated costs and returns per acre  
Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
B3XF variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	1500.0000	1108.35	_____
Cotton Seed	lb	0.11	2025.0000	222.75	_____
				-----	
<b>TOTAL INCOME</b>				<b>1331.10</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	55.80	1.0000	55.80	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	217.64	1.0000	217.64	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	128.29	1.0000	128.29	_____
INSECTICIDES	acre	105.72	1.0000	105.72	_____
SEED/PLANTS	acre	105.75	1.0000	105.75	_____
GROWTH REGULATORS	acre	10.56	1.0000	10.56	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	16.54	0.6069	10.02	_____
UNALLOCATED LABOR	hour	16.55	0.4855	8.04	_____
DIESEL FUEL	gal	4.48	22.2512	99.69	_____
REPAIR & MAINTENANCE	acre	61.69	1.0000	61.69	_____
INTEREST ON OP. CAP.	acre	29.53	1.0000	29.53	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>1100.15</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>230.95</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>246.58</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1346.73</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-15.63</b>	_____

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

Table 3.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
 B3XF variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre		0.33	Nov		0.3330				
Lime (Spread)	ton		0.33	Nov		0.6660				
Custom Apply Fert	acre		1.00	Nov		1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B3XF	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air ( 3 gal)	appl					1.5000				
IncidentalPestTrt\$15	acre					1.5000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb		1.00	Oct		1500.0000				
Stalk Shredder-Flail	20'	MFWD 300	0.082	1.00	Oct		0.08	0.08	0.08	0.06
1/4-mi. Pivot Irr.	acre				Jan	1.0000		0.20		
TOTALS							0.60	0.39	1.12	0.48

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 3.D Estimated costs for field operations, per acre  
Cotton, 12R-38" solid, cons. tillage, pivot irrig.,  
B3XF variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Lime (Spread)	ton	38.63					2.47	41.10
Custom Apply Fert	acre	7.50					0.48	7.98
Potash (60% K2O)	cwt	69.90					4.47	74.37
Bed-Subsoil Fold	12R-38		3.72	2.43	1.60		0.50	8.25
Bed/Disk (Hipper)	12R-38			1.71	0.70	0.74	0.20	3.35
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Clarity	pt	7.15					0.31	7.46
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34
Select Max	pt	13.86					0.59	14.45
Surfactant	pt	0.66					0.03	0.69
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.26	7.16
UAN (32%)	gal	73.87					2.76	76.63
Row Cond Folding	38'		2.83	0.80	1.22		0.16	5.01
Plant - Folding	12R-38		3.43	2.14	1.93		0.24	7.74
Cotton Seed B3XF	thous	105.75					3.38	109.13
Cotton Seed Trt.	acre	20.00					0.64	20.64
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Cotoran	pt	12.74					0.41	13.15
Surfactant	pt	0.66					0.02	0.68
Cotton Consultant	acre	8.00					0.26	8.26
Eradication	acre	1.00					0.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31
Engenia	oz	10.62					0.34	10.96
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23
Dual Magnum	pt	11.45					0.37	11.82
Acephate 90%	lb	4.65					0.15	4.80
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30
Bidrin 8EC	oz	4.58					0.12	4.70
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.18	7.08
UAN (32%)	gal	73.87					1.97	75.84
Spray (Direct/Layby)	12R-38		3.08	1.04	1.53		0.15	5.80
Engenia	oz	10.62					0.28	10.90
Glyphosate 3lbs a.e	oz	10.88					0.29	11.17
Dual Magnum	pt	11.45					0.31	11.76
Centric 40WG	oz	11.90					0.32	12.22
Mepiquat Chloride	oz	3.52					0.09	3.61
App by Air ( 3 gal)	appl	6.40					0.14	6.54
Diamond .83EC	oz	13.38					0.29	13.67
Imidacloprid 4F	oz	2.12					0.05	2.17
Mepiquat Chloride	oz	3.52					0.08	3.60
App by Air ( 3 gal)	appl	6.40					0.14	6.54
Acephate 90%	lb	6.98					0.15	7.13
Mepiquat Chloride	oz	3.52					0.08	3.60
Bifenthrin	oz	7.23					0.15	7.38
App by Air ( 3 gal)	appl	1.60					0.03	1.63
Lambda	oz	2.08					0.04	2.12
Bidrin 8EC	oz	2.86					0.06	2.92
Incidental Pest								
App by Air ( 3 gal)	appl	9.60					0.20	9.80
IncidentalPestTrt\$15	acre	22.50					0.48	22.98
App by Air ( 3 gal)	appl	6.40					0.10	6.50
Acephate 90%	lb	6.98					0.11	7.09
Bifenthrin	oz	7.23					0.12	7.35
App by Air ( 3 gal)	appl	6.40					0.10	6.50
Transform WG	oz	13.23					0.21	13.44
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Thidiazuron 4lb	oz	3.50					0.04	3.54
Ethephon 6E	pt	7.12					0.08	7.20
App by Air ( 5 gal)	appl	3.80					0.04	3.84
Tribufos 6lb	pt	6.25					0.07	6.32
Ethephon 6E	pt	1.11					0.01	1.12
Cotton Picker/Module	6R-38(500)		19.87	25.23	6.69		0.28	52.07
Gin & Haul	lb	165.00					0.88	165.88
Stalk Shredder-Flail	20'		5.71	3.68	2.45		0.06	11.90
1/4-mi. Pivot Irr.	acre		50.17	21.95	1.84		1.66	75.62
TOTALS		886.52	99.69	61.69	22.72	0.00	29.53	1100.15
								246.58
								1346.73

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 3.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
 B3XF variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1331.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	24.00	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	73.87	0.00	73.87	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	63.45	32.95	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	16.48	57.15	27.44	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.75	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	7.04	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.34	0.00	0.00	0.00	0.00	1.76	5.29	3.84	0.20	0.15	0.00	9.14
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.43	0.00	0.00	0.00	0.00	3.58	7.60	22.38	20.07	15.05	0.00	25.58
REPAIR & MAINTENANCE	3.13	0.00	0.00	0.00	0.00	1.56	3.34	21.27	1.99	1.49	0.00	28.91
INTEREST ON OP. CAP.	8.33	0.00	0.00	0.00	1.71	3.02	7.04	4.63	2.36	0.90	0.32	1.22
TOTAL DIRECT EXPENSES	138.59	0.00	0.00	0.00	41.86	83.79	226.78	178.94	112.81	57.83	29.70	229.85
NET INCOME	-138.59	0.00	0.00	0.00	-41.86	-83.79	-226.78	-178.94	-112.81	-57.83	-29.70	1101.25
NET INCOME TO DATE	-138.59	-138.59	-138.59	-138.59	-180.45	-264.24	-491.02	-669.96	-782.77	-840.60	-870.30	230.95

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irrig.,  
 B3XF variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-378 -625	-351 -597	-323 -569	-295 -542	-267 -514	-240 -486	-212 -459	-184 -431	-157 -403	-129 -376	-101 -348
60	900.00	lb	-312 -558	-279 -525	-245 -492	-212 -459	-179 -425	-146 -392	-112 -359	-79 -326	-46 -292	-13 -259	20 -226
70	1050.00	lb	-245 -492	-206 -453	-168 -414	-129 -375	-90 -337	-51 -298	-12 -259	25 -220	64 -181	103 -143	142 -104
80	1200.00	lb	-179 -425	-134 -381	-90 -337	-46 -292	-1 -248	42 -204	86 -159	131 -115	175 -71	219 -26	264 17
90	1350.00	lb	-112 -359	-62 -309	-12 -259	36 -209	86 -159	136 -109	186 -60	236 -10	286 39	336 89	386 139
100	1500.00	lb	-46 -292	9 -237	64 -181	120 -126	175 -71	230 -15	286 39	341 95	397 150	452 206	508 261
110	1650.00	lb	20 -226	81 -165	142 -104	203 -43	264 17	325 78	386 139	447 200	508 261	569 322	629 383
120	1800.00	lb	86 -159	153 -93	219 -26	286 39	352 106	419 172	485 239	552 305	618 372	685 438	751 505
130	1950.00	lb	153 -93	225 -21	297 50	369 123	441 195	513 267	585 339	657 411	729 483	801 555	873 627
140	2100.00	lb	220 -26	297 51	375 128	452 206	530 283	607 361	685 438	763 516	840 594	918 671	995 749
150	2250.00	lb	286 39	369 123	452 206	535 289	619 372	702 455	785 538	868 621	951 704	1034 788	1117 871

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 4.A Estimated costs per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF variety, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	dollars
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	
App by Air ( 3 gal)	appl	6.40	5.2500	33.60	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.52	2.3000	3.50	
Ethephon 6E	pt	3.56	2.3125	8.23	
Tribufos 6lb	pt	12.50	0.5000	6.25	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	46.60	1.5000	69.90	
UAN (32%)	gal	4.30	25.4000	109.22	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	14.30	0.5000	7.15	
Glyphosate 3lbs a.e	oz	0.34	96.0000	32.64	
Select Max	pt	13.86	1.0000	13.86	
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	
Cotoran	pt	6.37	2.0000	12.74	
Engenia	oz	0.83	25.6000	21.25	
Dual Magnum	pt	11.45	2.0000	22.90	
INSECTICIDES					
Acephate 90%	lb	9.30	2.0000	18.60	
Bidrin 8EC	oz	1.43	5.2000	7.44	
Centric 40WG	oz	5.95	2.0000	11.90	
Diamond .83EC	oz	2.23	6.0000	13.38	
Imidacloprid 4F	oz	1.06	2.0000	2.12	
Bifenthrin	oz	1.13	12.8000	14.46	
Lambda	oz	2.08	1.0000	2.08	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
Transform WG	oz	8.82	1.5000	13.23	
SEED/PLANTS					
Cotton Seed B3XF	thous	2.35	45.0000	105.75	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.22	48.0000	10.56	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.2712	4.48	
Self-Propelled	hour	16.54	0.2075	3.42	
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR					
hour	16.55	0.3830	6.34		
DIESEL FUEL					
Tractors	gal	4.48	4.1890	18.78	
Self-Propelled	gal	4.48	4.8836	21.88	
REPAIR & MAINTENANCE					
Implements	acre	6.98	1.0000	6.98	
Tractors	acre	2.57	1.0000	2.57	
Self-Propelled	acre	25.83	1.0000	25.83	
INTEREST ON OP. CAP.	acre	24.71	1.0000	24.71	
TOTAL DIRECT EXPENSES				921.90	
FIXED EXPENSES					
Implements	acre	10.49	1.0000	10.49	
Tractors	acre	18.22	1.0000	18.22	
Self-Propelled	acre	115.36	1.0000	115.36	
TOTAL FIXED EXPENSES				144.07	
TOTAL SPECIFIED EXPENSES				1065.97	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF variety, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	1200.0000	886.68	_____
Cotton Seed	lb	0.11	1620.0000	178.20	_____
				-----	
<b>TOTAL INCOME</b>				<b>1064.88</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	52.60	1.0000	52.60	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	179.12	1.0000	179.12	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	128.29	1.0000	128.29	_____
INSECTICIDES	acre	98.22	1.0000	98.22	_____
SEED/PLANTS	acre	105.75	1.0000	105.75	_____
GROWTH REGULATORS	acre	10.56	1.0000	10.56	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2897	2.61	_____
OPERATOR LABOR	hour	16.54	0.4788	7.90	_____
UNALLOCATED LABOR	hour	16.55	0.3830	6.34	_____
DIESEL FUEL	gal	4.48	9.0726	40.66	_____
REPAIR & MAINTENANCE	acre	35.38	1.0000	35.38	_____
INTEREST ON OP. CAP.	acre	24.71	1.0000	24.71	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>921.90</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>142.98</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>144.07</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1065.97</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-1.09</b>	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 4.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF variety, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Nov	0.3330					
Lime (Spread)	ton			0.33	Nov	0.6660					
Custom Apply Fert	acre			1.00	Nov	1.0000					
Potash (60% K2O)	cwt					1.5000					
App by Air ( 5 gal)	appl			1.00	Mar	1.0000					
Clarity	pt					0.5000					
Glyphosate 3lbs a.e	oz					32.0000					
Select Max	pt					1.0000					
Surfactant	pt					0.2000					
Row Cond Folding	38'	MFWD	300	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD	300	0.051	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed B3XF	thous					45.0000					
Cotton Seed Trt.	acre					1.0000					
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000					
Cotoran	pt					2.0000					
Surfactant	pt					0.2000					
Cotton Consultant	acre				1.00	May	1.0000				
Eradication	acre					1.0000					
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Engenia	oz					12.8000					
Glyphosate 3lbs a.e	oz					32.0000					
Dual Magnum	pt					1.0000					
Acephate 90%	lb					0.5000					
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000					
Fert Appl (Liquid)	12R-38	MFWD	300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					25.4000					
Spray (Direct/Layby)	12R-38	MFWD	300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Engenia	oz					12.8000					
Glyphosate 3lbs a.e	oz					32.0000					
Dual Magnum	pt					1.0000					
Centric 40WG	oz					2.0000					
Mepiquat Chloride	oz					16.0000					
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000					
Imidacloprid 4F	oz					2.0000					
Mepiquat Chloride	oz					16.0000					
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Acephate 90%	lb					0.7500					
Mepiquat Chloride	oz					16.0000					
Bifenthrin	oz					6.4000					
App by Air ( 3 gal)	appl				0.25	Jul	0.2500				
Lambda	oz					1.0000					
Bidrin 8EC	oz					2.0000					
Incidental Pest					1.00	Jul					
App by Air ( 3 gal)	appl					1.0000					
Incidental Pest Trt\$15	acre					1.0000					
App by Air ( 3 gal)	appl				1.00	Aug	1.0000				
Acephate 90%	lb					0.7500					
Bifenthrin	oz					6.4000					
App by Air ( 3 gal)	appl				1.00	Aug	1.0000				
Transform WG	oz					1.5000					
App by Air ( 5 gal)	appl				1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000					
Ethephon 6E	pt					2.0000					
App by Air ( 5 gal)	appl				0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000					
Ethephon 6E	pt					0.3125					
Cotton Picker/Module	6R-38(500)			0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb				1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD	300	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.47	0.27	0.76	0.38	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF variety, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST				TOTAL	FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Soil Test	acre	3.33				0.21	3.54	3.54
Lime (Spread)	ton	38.63				2.47	41.10	41.10
Custom Apply Fert	acre	7.50				0.48	7.98	7.98
Potash (60% K2O)	cwt	69.90				4.47	74.37	74.37
App by Air ( 5 gal)	appl	7.60				0.32	7.92	7.92
Clarity	pt	7.15				0.31	7.46	7.46
Glyphosate 3lbs a.e	oz	10.88				0.46	11.34	11.34
Select Max	pt	13.86				0.59	14.45	14.45
Surfactant	pt	0.66				0.03	0.69	0.69
Row Cond Folding	38'		2.83	0.80	1.22	0.16	5.01	4.72
NT Plant-Folding	12R-38		3.58	2.47	2.00	0.26	8.31	7.79
Cotton Seed B3XF	thous	105.75				3.38	109.13	109.13
Cotton Seed Trt.	acre	20.00				0.64	20.64	20.64
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.04	1.31	1.46
Gramoxone SL 2.0	oz	17.76				0.57	18.33	18.33
Cotoran	pt	12.74				0.41	13.15	13.15
Surfactant	pt	0.66				0.02	0.68	0.68
Cotton Consultant	acre	8.00				0.26	8.26	8.26
Eradication	acre	1.00				0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.04	1.31	1.46
Engenia	oz	10.62				0.34	10.96	10.96
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23	11.23
Dual Magnum	pt	11.45				0.37	11.82	11.82
Acephate 90%	lb	4.65				0.15	4.80	4.80
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.03	1.30	1.46
Bidrin 8EC	oz	4.58				0.12	4.70	4.70
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76	0.18	7.08	4.84
UAN (32%)	gal	109.22				2.91	112.13	112.13
Spray (Direct/Layby)	12R-38		3.08	1.04	1.53	0.15	5.80	3.83
Engenia	oz	10.62				0.28	10.90	10.90
Glyphosate 3lbs a.e	oz	10.88				0.29	11.17	11.17
Dual Magnum	pt	11.45				0.31	11.76	11.76
Centric 40WG	oz	11.90				0.32	12.22	12.22
Mepiquat Chloride	oz	3.52				0.09	3.61	3.61
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
Diamond .83EC	oz	13.38				0.29	13.67	13.67
Imidacloprid 4F	oz	2.12				0.05	2.17	2.17
Mepiquat Chloride	oz	3.52				0.08	3.60	3.60
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
Acephate 90%	lb	6.98				0.15	7.13	7.13
Mepiquat Chloride	oz	3.52				0.08	3.60	3.60
Bifenthrin	oz	7.23				0.15	7.38	7.38
App by Air ( 3 gal)	appl	1.60				0.03	1.63	1.63
Lambda	oz	2.08				0.04	2.12	2.12
Bidrin 8EC	oz	2.86				0.06	2.92	2.92
Incidental Pest								
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
IncidentalPestTrt\$15	acre	15.00				0.32	15.32	15.32
App by Air ( 3 gal)	appl	6.40				0.10	6.50	6.50
Acephate 90%	lb	6.98				0.11	7.09	7.09
Bifenthrin	oz	7.23				0.12	7.35	7.35
App by Air ( 3 gal)	appl	6.40				0.10	6.50	6.50
Transform WG	oz	13.23				0.21	13.44	13.44
App by Air ( 5 gal)	appl	7.60				0.08	7.68	7.68
Thidiazuron 4lb	oz	3.50				0.04	3.54	3.54
Ethephon 6E	pt	7.12				0.08	7.20	7.20
App by Air ( 5 gal)	appl	3.80				0.04	3.84	3.84
Tribufos 6lb	pt	6.25				0.07	6.32	6.32
Ethephon 6E	pt	1.11				0.01	1.12	1.12
Cotton Picker/Module	6R-38(500)		19.87	25.23	6.69	0.28	52.07	110.98
Gin & Haul	lb	132.00				0.70	132.70	132.70
Stalk Shredder-Flail	20'		5.71	3.68	2.45	0.06	11.90	7.53
TOTALS		804.30	40.66	35.38	16.85	0.00	24.71	921.90
								144.07
								1065.97

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 4.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF variety, Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1064.88
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	20.80	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	0.00	0.00	109.22	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	63.45	32.95	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	16.48	49.65	27.44	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	105.75	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	7.04	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	4.02	3.69	0.00	0.00	0.00	9.14
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	7.75	7.33	0.00	0.00	0.00	25.58
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.67	2.80	0.00	0.00	0.00	28.91
INTEREST ON OP. CAP.	7.63	0.00	0.00	0.00	1.71	0.00	7.02	4.68	1.67	0.64	0.32	1.04
TOTAL DIRECT EXPENSES	126.99	0.00	0.00	0.00	41.86	0.00	225.97	180.67	79.16	40.88	29.70	196.67
NET INCOME	-126.99	0.00	0.00	0.00	-41.86	0.00	-225.97	-180.67	-79.16	-40.88	-29.70	868.21
NET INCOME TO DATE	-126.99	-126.99	-126.99	-126.99	-168.85	-168.85	-394.82	-575.49	-654.65	-695.53	-725.23	142.98

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, no-till  
 B3XF variety, Delta Area, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-344 -488	-322 -466	-300 -444	-278 -422	-256 -400	-234 -378	-211 -355	-189 -333	-167 -311	-145 -289	-123 -267
60	720.00	lb	-291 -435	-265 -409	-238 -382	-211 -355	-185 -329	-158 -302	-132 -276	-105 -249	-78 -222	-52 -196	-25 -169
70	840.00	lb	-238 -382	-207 -351	-176 -320	-145 -289	-114 -258	-83 -227	-52 -196	-21 -165	9 -134	40 -103	71 -72
80	960.00	lb	-185 -329	-149 -293	-114 -258	-78 -222	-43 -187	-7 -151	27 -116	63 -80	98 -45	134 -10	169 25
90	1080.00	lb	-131 -275	-92 -236	-52 -196	-12 -156	27 -116	67 -76	107 -36	147 3	187 43	227 83	267 123
100	1200.00	lb	-78 -222	-34 -178	9 -134	54 -89	98 -45	142 -1	187 43	231 87	275 131	320 176	364 220
110	1320.00	lb	-25 -169	23 -120	72 -71	120 -23	169 25	218 74	267 123	315 171	364 220	413 269	462 318
120	1440.00	lb	27 -116	80 -63	134 -9	187 43	240 96	293 149	346 202	400 256	453 309	506 362	559 415
130	1560.00	lb	81 -63	138 -5	196 52	253 109	311 167	369 225	426 282	484 340	542 398	599 455	657 513
140	1680.00	lb	134 -9	196 52	258 114	320 176	382 238	444 300	506 362	568 424	630 486	692 548	754 610
150	1800.00	lb	187 43	253 109	320 176	386 242	453 309	519 375	586 442	652 508	719 575	785 641	852 708

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 5.A Estimated costs per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., B3XF variety, Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM				
		dollars		dollars					
<b>DIRECT EXPENSES</b>									
<b>CUSTOM SPRAY</b>									
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	_____				
App by Air ( 3 gal)	appl	6.40	5.2500	33.60	_____				
<b>HARVEST AIDS</b>									
Thidiazuron 4lb	oz	1.52	2.3000	3.50	_____				
Ethephon 6E	pt	3.56	2.3125	8.23	_____				
Tribufos 6lb	pt	12.50	0.5000	6.25	_____				
<b>GINNING</b>									
Gin & Haul	lb	0.11	811.0000	89.21	_____				
<b>FERTILIZERS</b>									
Potash (60% K2O)	cwt	46.60	1.5000	69.90	_____				
UAN (32%)	gal	4.30	32.5498	139.96	_____				
<b>FUNGICIDES</b>									
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____				
<b>HERBICIDES</b>									
Clarity	pt	14.30	0.5000	7.15	_____				
Glyphosate 3lbs a.e	oz	0.34	96.0000	32.64	_____				
Select Max	pt	13.86	1.0000	13.86	_____				
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____				
Cotoran	pt	6.37	2.0000	12.74	_____				
Engenia	oz	0.83	25.6000	21.25	_____				
Dual Magnum	pt	11.45	2.0000	22.90	_____				
<b>INSECTICIDES</b>									
Acephate 90%	lb	9.30	2.0000	18.60	_____				
Bidrin 8EC	oz	1.43	5.2000	7.44	_____				
Centric 40WG	oz	5.95	1.3400	7.97	_____				
Diamond .83EC	oz	2.23	6.0000	13.38	_____				
Imidacloprid 4F	oz	1.06	2.0000	2.12	_____				
Bifenthrin	oz	1.13	12.8000	14.46	_____				
Lambda	oz	2.08	1.0000	2.08	_____				
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	_____				
Transform WG	oz	8.82	1.5000	13.23	_____				
<b>SEED/PLANTS</b>									
Cotton Seed B3XF	thous	2.35	30.0000	70.50	_____				
<b>GROWTH REGULATORS</b>									
Mepiquat Chloride	oz	0.22	42.7200	9.40	_____				
<b>ADJUVANTS</b>									
Surfactant	pt	3.30	0.4000	1.32	_____				
<b>CUSTOM FERTILIZE</b>									
Custom Apply Fert	acre	7.50	1.0000	7.50	_____				
<b>ERADICATION FEE</b>									
Eradication	acre	1.00	1.0000	1.00	_____				
<b>CUSTOM LIME</b>									
Lime (Spread)	ton	58.00	0.6660	38.63	_____				
<b>CROP CONSULTANT</b>									
Cotton Consultant	acre	8.00	1.0000	8.00	_____				
<b>SOIL TEST</b>									
Soil Test	acre	10.00	0.3330	3.33	_____				
<b>OPERATOR LABOR</b>									
Tractors	hour	16.54	0.8159	13.50	_____				
Self-Propelled	hour	16.54	0.1958	3.23	_____				
<b>HAND LABOR</b>									
Implements	hour	9.06	0.3181	2.87	_____				
Self-Propelled	hour	9.06	0.1840	1.66	_____				
<b>UNALLOCATED LABOR</b>									
hour	16.55	0.8094	13.40	_____					
<b>DIESEL FUEL</b>									
Tractors	gal	4.48	12.6003	56.46	_____				
Self-Propelled	gal	4.48	3.4035	15.25	_____				
<b>REPAIR &amp; MAINTENANCE</b>									
Implements	acre	13.75	1.0000	13.75	_____				
Tractors	acre	7.75	1.0000	7.75	_____				
Self-Propelled	acre	10.01	1.0000	10.01	_____				
INTEREST ON OP. CAP.	acre	25.79	1.0000	25.79	_____				
<b>TOTAL DIRECT EXPENSES</b>					908.98				
<b>FIXED EXPENSES</b>									
Implements	acre	24.03	1.0000	24.03	_____				
Tractors	acre	54.80	1.0000	54.80	_____				
Self-Propelled	acre	45.20	1.0000	45.20	_____				
<b>TOTAL FIXED EXPENSES</b>					124.03				
<b>TOTAL SPECIFIED EXPENSES</b>					1033.01				

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 5.B Summary of estimated costs and returns per acre  
Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
Cons. till., B3XF variety, Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	811.0000	599.25	_____
Cotton Seed	lb	0.11	1095.0000	120.45	_____
				-----	
<b>TOTAL INCOME</b>				<b>719.70</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	52.60	1.0000	52.60	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	209.86	1.0000	209.86	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	128.29	1.0000	128.29	_____
INSECTICIDES	acre	94.29	1.0000	94.29	_____
SEED/PLANTS	acre	70.50	1.0000	70.50	_____
GROWTH REGULATORS	acre	9.40	1.0000	9.40	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5022	4.53	_____
OPERATOR LABOR	hour	16.54	1.0118	16.73	_____
UNALLOCATED LABOR	hour	16.55	0.8094	13.40	_____
DIESEL FUEL	gal	4.48	16.0039	71.71	_____
REPAIR & MAINTENANCE	acre	31.51	1.0000	31.51	_____
INTEREST ON OP. CAP.	acre	25.79	1.0000	25.79	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>908.98</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>-189.28</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>124.03</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1033.01</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-313.31</b>	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 5.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., B3XF variety, Delta, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre		0.33	Nov		0.3330				
Lime (Spread)	ton		0.33	Nov		0.6660				
Custom Apply Fert	acre		1.00	Nov		1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	8R-38 2x1	MFWD 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	8R-38 2x1	MFWD 300	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	8R-38 2x1	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed B3XF	thous					30.0000				
Cotton Seed Trt.	acre					0.6700				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Spray (Direct/Layby)	8R-38 2x1	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Engenia	oz					12.8000				
Glyphosate 3lbs a.e	oz					32.0000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					1.3400				
Mepiquat Chloride	oz					10.7200				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest					1.00	Jul				
App by Air ( 3 gal)	appl					1.0000				
IncidentalPestTrt\$15	acre					1.0000				
App by Air ( 3 gal)	appl				1.00	Aug	1.0000			
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl				1.00	Aug	1.0000			
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl				1.00	Sep	1.0000			
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R2x1(350)		0.172	1.00	Oct			0.17	0.34	0.13
Boll Buggy	4R2x1(350)	MFWD 300	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1(350)	MFWD 300	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	811.0000				
Stalk Shredder-Flail	15'	MFWD 300	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.01	0.81	1.51	0.80

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

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

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 5.D Estimated costs for field operations, per acre  
Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
Cons. till., B3XF variety, Delta, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Lime (Spread)	ton	38.63					2.47	41.10
Custom Apply Fert	acre	7.50					0.48	7.98
Potash (60% K2O)	cwt	69.90					4.47	74.37
Bed-Subsoil Fold	8R-38 2x1		3.72	2.43	1.60		0.50	8.25
Bed/Disk (Hipper)	8R-38 2x1			1.71	0.70	0.74	0.20	3.35
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Clarity	pt	7.15					0.31	7.46
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34
Select Max	pt	13.86					0.59	14.45
Surfactant	pt	0.66					0.03	0.69
Fert Appl (Liquid)	8R-38 2x1		3.58	1.62	1.76		0.26	7.22
UAN (32%)	gal	69.98					2.61	72.59
Row Cond Folding	38'		2.83	0.80	1.22		0.16	5.01
Plant - Folding	8R-38 2x1			3.43	2.14	1.93	0.24	7.74
Cotton Seed B3XF	thous	70.50					2.26	72.76
Cotton Seed Trt.	acre	13.40					0.43	13.83
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Cotoran	pt	12.74					0.41	13.15
Surfactant	pt	0.66					0.02	0.68
Cotton Consultant	acre	8.00					0.26	8.26
Eradication	acre	1.00					0.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31
Engenia	oz	10.62					0.34	10.96
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23
Dual Magnum	pt	11.45					0.37	11.82
Acephate 90%	lb	4.65					0.15	4.80
Spray (Direct/Layby)	8R-38 2x1		3.08	1.04	1.53		0.15	5.80
Bidrin 8EC	oz	4.58					0.12	4.70
Fert Appl (Liquid)	8R-38 2x1		3.58	1.62	1.76		0.19	7.15
UAN (32%)	gal	69.98					1.87	71.85
Spray (Direct/Layby)	8R-38 2x1		3.08	1.04	1.53		0.15	5.80
Engenia	oz	10.62					0.28	10.90
Glyphosate 3lbs a.e	oz	10.88					0.29	11.17
Dual Magnum	pt	11.45					0.31	11.76
Centric 40WG	oz	7.97					0.21	8.18
Mepiquat Chloride	oz	2.36					0.06	2.42
App by Air ( 3 gal)	appl	6.40					0.14	6.54
Diamond .83EC	oz	13.38					0.29	13.67
Imidacloprid 4F	oz	2.12					0.05	2.17
Mepiquat Chloride	oz	3.52					0.08	3.60
App by Air ( 3 gal)	appl	6.40					0.14	6.54
Acephate 90%	lb	6.98					0.15	7.13
Mepiquat Chloride	oz	3.52					0.08	3.60
Bifenthrin	oz	7.23					0.15	7.38
App by Air ( 3 gal)	appl	1.60					0.03	1.63
Lambda	oz	2.08					0.04	2.12
Bidrin 8EC	oz	2.86					0.06	2.92
Incidental Pest								
App by Air ( 3 gal)	appl	6.40					0.14	6.54
IncidentalPestTrt\$15	acre	15.00					0.32	15.32
App by Air ( 3 gal)	appl	6.40					0.10	6.50
Acephate 90%	lb	6.98					0.11	7.09
Bifenthrin	oz	7.23					0.12	7.35
App by Air ( 3 gal)	appl	6.40					0.10	6.50
Transform WG	oz	13.23					0.21	13.44
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Thidiazuron 4lb	oz	3.50					0.04	3.54
Ethephon 6E	pt	7.12					0.08	7.20
App by Air ( 5 gal)	appl	3.80					0.04	3.84
Ethephon 6E	pt	1.11					0.01	1.12
Tribufos 6lb	pt	6.25					0.07	6.32
Cotton Picker	4R2x1(350)		13.91	9.61	6.69		0.16	30.37
Boll Buggy	4R2x1(350)		11.92	2.95	5.13		0.11	20.11
Module Builder	4R2x1(350)		11.92	3.13	6.69		0.12	21.86
Gin & Haul	lb	89.21					0.48	89.69
Stalk Shredder-Flail	15'		7.61	4.03	3.28		0.08	15.00
TOTALS		745.31	71.71	31.51	34.66	0.00	25.79	908.98
								124.03
								1033.01

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 5.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., B3XF variety, Delta, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	719.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	20.80	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.21
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	69.98	0.00	69.98	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	13.40	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	63.45	32.95	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	12.55	49.65	27.44	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	70.50	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.36	7.04	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.34	0.00	0.00	0.00	0.00	1.76	3.95	4.82	0.00	0.00	0.00	21.79
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.43	0.00	0.00	0.00	0.00	3.58	7.60	9.74	0.00	0.00	0.00	45.36
REPAIR & MAINTENANCE	3.13	0.00	0.00	0.00	0.00	1.62	3.34	3.70	0.00	0.00	0.00	19.72
INTEREST ON OP. CAP.	8.33	0.00	0.00	0.00	1.71	2.87	5.67	3.63	1.67	0.64	0.32	0.95
TOTAL DIRECT EXPENSES	138.59	0.00	0.00	0.00	41.86	79.81	182.22	139.73	79.16	40.88	29.70	177.03
NET INCOME	-138.59	0.00	0.00	0.00	-41.86	-79.81	-182.22	-139.73	-79.16	-40.88	-29.70	542.67
NET INCOME TO DATE	-138.59	-138.59	-138.59	-138.59	-180.45	-260.26	-442.48	-582.21	-661.37	-702.25	-731.95	-189.28

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 5.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., B3XF variety, Delta, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-518 -642	-503 -628	-489 -613	-474 -598	-459 -583	-444 -568	-429 -553	-414 -538	-399 -523	-384 -508	-369 -493
60	486.60	lb	-482 -607	-465 -589	-447 -571	-429 -553	-411 -535	-393 -517	-375 -499	-357 -481	-339 -463	-321 -445	-303 -427
70	567.70	lb	-447 -571	-426 -550	-405 -529	-384 -508	-363 -487	-342 -466	-321 -445	-300 -424	-279 -403	-258 -382	-237 -361
80	648.80	lb	-411 -535	-387 -511	-363 -487	-339 -463	-315 -439	-291 -415	-267 -391	-243 -367	-219 -343	-195 -319	-171 -295
90	729.90	lb	-375 -499	-348 -472	-321 -445	-294 -418	-267 -391	-240 -364	-213 -337	-186 -310	-159 -283	-132 -256	-105 -229
100	811.00	lb	-339 -463	-309 -433	-279 -403	-249 -373	-219 -343	-189 -313	-159 -283	-129 -253	-99 -223	-69 -193	-39 -163
110	892.10	lb	-303 -427	-270 -394	-237 -361	-204 -328	-171 -295	-138 -262	-105 -229	-72 -196	-39 -163	-6 -130	26 -97
120	973.20	lb	-267 -391	-231 -355	-195 -319	-159 -283	-123 -247	-87 -211	-51 -175	-15 -139	20 -103	56 -67	92 -31
130	1054.30	lb	-231 -355	-192 -316	-153 -277	-114 -238	-75 -199	-36 -160	2 -121	41 -82	80 -43	119 -4	158 34
140	1135.40	lb	-195 -319	-153 -277	-111 -235	-69 -193	-27 -151	14 -109	56 -67	98 -25	140 16	182 58	224 100
150	1216.50	lb	-159 -283	-114 -238	-69 -193	-24 -148	20 -103	65 -58	110 -13	155 31	200 76	245 121	290 166

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 6.A Estimated costs per acre  
 Cotton, 12R-38" solid, conservation tillage  
 W3FE variety, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	
App by Air ( 3 gal)	appl	6.40	5.2500	33.60	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.52	2.3000	3.50	
Ethephon 6E	pt	3.56	2.3125	8.23	
Tribufos 6lb	pt	12.50	0.5000	6.25	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	46.60	1.5000	69.90	
UAN (32%)	gal	4.30	34.3582	147.74	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	14.30	0.5000	7.15	
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	
Select Max	pt	13.86	1.0000	13.86	
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	
Cotoran	pt	6.37	2.0000	12.74	
Enlist Duo	pt	8.60	7.0000	60.20	
Dual Magnum	pt	11.45	2.0000	22.90	
INSECTICIDES					
Acephate 90%	lb	9.30	2.0000	18.60	
Bidrin 8EC	oz	1.43	5.2000	7.44	
Centric 40WG	oz	5.95	2.0000	11.90	
Diamond .83EC	oz	2.23	6.0000	13.38	
Imidacloprid 4F	oz	1.06	2.0000	2.12	
Bifenthrin	oz	1.13	12.8000	14.46	
Lambda	oz	2.08	1.0000	2.08	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
Transform WG	oz	8.82	1.5000	13.23	
SEED/PLANTS					
Cotton Seed W3FE	thous	2.32	45.0000	104.40	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.22	48.0000	10.56	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.3993	6.60	
Self-Propelled	hour	16.54	0.2075	3.42	
HAND LABOR					
implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR					
hour	16.55	0.4855	8.04		
DIESEL FUEL					
Tractors	gal	4.48	6.1665	27.64	
Self-Propelled	gal	4.48	4.8836	21.88	
REPAIR & MAINTENANCE					
implements	acre	10.13	1.0000	10.13	
Tractors	acre	3.78	1.0000	3.78	
Self-Propelled	acre	25.83	1.0000	25.83	
INTEREST ON OP. CAP.					
TOTAL DIRECT EXPENSES				996.74	
FIXED EXPENSES					
implements	acre	16.44	1.0000	16.44	
Tractors	acre	26.82	1.0000	26.82	
Self-Propelled	acre	115.36	1.0000	115.36	
TOTAL FIXED EXPENSES				158.62	
TOTAL SPECIFIED EXPENSES				1155.36	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.  
 Lime cost prorated for application every 3<sup>rd</sup> year.

Table 6.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conservation tillage  
 W3FE variety, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	1200.0000	886.68	_____
Cotton Seed	lb	0.11	1620.0000	178.20	_____
				-----	
<b>TOTAL INCOME</b>				<b>1064.88</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	52.60	1.0000	52.60	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	217.64	1.0000	217.64	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	145.49	1.0000	145.49	_____
INSECTICIDES	acre	98.22	1.0000	98.22	_____
SEED/PLANTS	acre	104.40	1.0000	104.40	_____
GROWTH REGULATORS	acre	10.56	1.0000	10.56	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
OPERATOR LABOR	hour	16.54	0.6069	10.02	_____
UNALLOCATED LABOR	hour	16.55	0.4855	8.04	_____
DIESEL FUEL	gal	4.48	11.0501	49.52	_____
REPAIR & MAINTENANCE	acre	39.74	1.0000	39.74	_____
INTEREST ON OP. CAP.	acre	27.93	1.0000	27.93	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>996.74</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>68.14</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>158.62</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1155.36</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-90.48</b>	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 6.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 W3FE variety, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALLOC LABOR
-----hours-----											
Soil Test	acre			0.33	Nov		0.3330				
Lime (Spread)	ton			0.33	Nov		0.6660				
Custom Apply Fert	acre			1.00	Nov		1.0000				
Potash (60% K2O)	cwt						1.5000				
Bed-Subsoil Fold	12R-38	MFWD	300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD	300	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl				1.00	Mar	1.0000				
Clarity	pt						0.5000				
Glyphosate 3lbs a.e	oz						32.0000				
Select Max	pt						1.0000				
Surfactant	pt						0.2000				
Fert Appl (Liquid) UAN (32%)	12R-38	MFWD	300	0.051	1.00	Apr	17.1791	0.05	0.05	0.07	0.04
Row Cond Folding	38'	MFWD	300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD	300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed W3FE	thous						45.0000				
Cotton Seed Trt.	acre						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz						48.0000				
Cotoran	pt						2.0000				
Surfactant	pt						0.2000				
Cotton Consultant	acre				1.00	May	1.0000				
Eradication	acre						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Enlist Duo	pt						3.5000				
Dual Magnum	pt						1.0000				
Acephate 90%	lb						0.5000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz						3.2000				
Fert Appl (Liquid) UAN (32%)	12R-38	MFWD	300	0.051	1.00	Jun	17.1791	0.05	0.05	0.07	0.04
Spray (Direct/Layby)	12R-38	MFWD	300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Enlist Duo	pt						3.5000				
Dual Magnum	pt						1.0000				
Centric 40WG	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Diamond .83EC	oz						6.0000				
Imidacloprid 4F	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
App by Air ( 3 gal)	appl				1.00	Jul	1.0000				
Acephate 90%	lb						0.7500				
Mepiquat Chloride	oz						16.0000				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl				0.25	Jul	0.2500				
Lambda	oz						1.0000				
Bidrin 8EC	oz						2.0000				
Incidental Pest					1.00	Jul					
App by Air ( 3 gal)	appl						1.0000				
IncidentalPestTrt\$15	acre						1.0000				
App by Air ( 3 gal)	appl				1.00	Aug	1.0000				
Acephate 90%	lb						0.7500				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl				1.00	Aug	1.0000				
Transform WG	oz						1.5000				
App by Air ( 5 gal)	appl				1.00	Sep	1.0000				
Thidiazuron 4lb	oz						2.3000				
Ethephon 6E	pt						2.0000				
App by Air ( 5 gal)	appl				0.50	Sep	0.5000				
Tribufos 6lb	pt						0.5000				
Ethephon 6E	pt						0.3125				
Cotton Picker/Module	6R-38(500)			0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb				1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD	300	0.082	1.00	Oct		0.08	0.08	0.08	0.06
TOTALS							0.60	0.39	0.92	0.48	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 W3FE variety, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST				TOTAL	FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Soil Test	acre	3.33				0.21	3.54	3.54
Lime (Spread)	ton	38.63				2.47	41.10	41.10
Custom Apply Fert	acre	7.50				0.48	7.98	7.98
Potash (60% K2O)	cwt	69.90				4.47	74.37	74.37
Bed-Subsoil Fold	12R-38		3.72	2.43	1.60	0.50	8.25	7.44
Bed/Disk (Hipper)	12R-38		1.71	0.70	0.74	0.20	3.35	3.08
App by Air ( 5 gal)	appl	7.60				0.32	7.92	7.92
Clarity	pt	7.15				0.31	7.46	7.46
Glyphosate 3lbs a.e	oz	10.88				0.46	11.34	11.34
Select Max	pt	13.86				0.59	14.45	14.45
Surfactant	pt	0.66				0.03	0.69	0.69
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76	0.26	7.16	4.84
UAN (32%)	gal	73.87				2.76	76.63	76.63
Row Cond Folding	38'		2.83	0.80	1.22	0.16	5.01	4.72
Plant - Folding	12R-38		3.43	2.14	1.93	0.24	7.74	6.98
Cotton Seed W3FE	thous	104.40				3.34	107.74	107.74
Cotton Seed Trt.	acre	20.00				0.64	20.64	20.64
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.04	1.31	1.46
Gramoxone SL 2.0	oz	17.76				0.57	18.33	18.33
Cotoran	pt	12.74				0.41	13.15	13.15
Surfactant	pt	0.66				0.02	0.68	0.68
Cotton Consultant	acre	8.00				0.26	8.26	8.26
Eradication	acre	1.00				0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.04	1.31	1.46
Enlist Duo	pt	30.10				0.96	31.06	31.06
Dual Magnum	pt	11.45				0.37	11.82	11.82
Acephate 90%	lb	4.65				0.15	4.80	4.80
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.03	1.30	1.46
Bidrin 8EC	oz	4.58				0.12	4.70	4.70
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76	0.18	7.08	4.84
UAN (32%)	gal	73.87				1.97	75.84	75.84
Spray (Direct/Layby)	12R-38		3.08	1.04	1.53	0.15	5.80	3.83
Enlist Duo	pt	30.10				0.80	30.90	30.90
Dual Magnum	pt	11.45				0.31	11.76	11.76
Centric 40WG	oz	11.90				0.32	12.22	12.22
Mepiquat Chloride	oz	3.52				0.09	3.61	3.61
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
Diamond .83EC	oz	13.38				0.29	13.67	13.67
Imidacloprid 4F	oz	2.12				0.05	2.17	2.17
Mepiquat Chloride	oz	3.52				0.08	3.60	3.60
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
Acephate 90%	lb	6.98				0.15	7.13	7.13
Mepiquat Chloride	oz	3.52				0.08	3.60	3.60
Bifenthrin	oz	7.23				0.15	7.38	7.38
App by Air ( 3 gal)	appl	1.60				0.03	1.63	1.63
Lambda	oz	2.08				0.04	2.12	2.12
Bidrin 8EC	oz	2.86				0.06	2.92	2.92
Incidental Pest								
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
Incidental Pest Trt \$15	acre	15.00				0.32	15.32	15.32
App by Air ( 3 gal)	appl	6.40				0.10	6.50	6.50
Acephate 90%	lb	6.98				0.11	7.09	7.09
Bifenthrin	oz	7.23				0.12	7.35	7.35
App by Air ( 3 gal)	appl	6.40				0.10	6.50	6.50
Transform WG	oz	13.23				0.21	13.44	13.44
App by Air ( 5 gal)	appl	7.60				0.08	7.68	7.68
Thidiazuron 4lb	oz	3.50				0.04	3.54	3.54
Ethephon 6E	pt	7.12				0.08	7.20	7.20
App by Air ( 5 gal)	appl	3.80				0.04	3.84	3.84
Tribufos 6lb	pt	6.25				0.07	6.32	6.32
Ethephon 6E	pt	1.11				0.01	1.12	1.12
Cotton Picker/Module	6R-38(500)		19.87	25.23	6.69	0.28	52.07	110.98
Gin & Haul	lb	132.00				0.70	132.70	132.70
Stalk Shredder-Flail	20'		5.71	3.68	2.45	0.06	11.90	7.53
<b>TOTALS</b>		858.67	49.52	39.74	20.88	0.00	27.93	996.74
								158.62
								1155.36

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 6.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conservation tillage  
 W3FE variety, Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1064.88
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	20.80	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	73.87	0.00	73.87	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	72.05	41.55	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	16.48	49.65	27.44	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	104.40	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	7.04	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.34	0.00	0.00	0.00	0.00	1.76	3.95	3.69	0.00	0.00	0.00	9.14
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.43	0.00	0.00	0.00	0.00	3.58	7.60	7.33	0.00	0.00	0.00	25.58
REPAIR & MAINTENANCE	3.13	0.00	0.00	0.00	0.00	1.56	3.34	2.80	0.00	0.00	0.00	28.91
INTEREST ON OP. CAP.	8.33	0.00	0.00	0.00	1.71	3.02	7.23	3.97	1.67	0.64	0.32	1.04
TOTAL DIRECT EXPENSES	138.59	0.00	0.00	0.00	41.86	83.79	232.88	153.21	79.16	40.88	29.70	196.67
NET INCOME	-138.59	0.00	0.00	0.00	-41.86	-83.79	-232.88	-153.21	-79.16	-40.88	-29.70	868.21
NET INCOME TO DATE	-138.59	-138.59	-138.59	-138.59	-180.45	-264.24	-497.12	-650.33	-729.49	-770.37	-800.07	68.14

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 6.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conservation tillage  
 W3FE variety, Delta Area, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-419 -578	-397 -556	-375 -533	-353 -511	-331 -489	-308 -467	-286 -445	-264 -423	-242 -400	-220 -378	-198 -356
60	720.00	lb	-366 -525	-339 -498	-313 -471	-286 -445	-260 -418	-233 -392	-206 -365	-180 -338	-153 -312	-127 -285	-100 -259
70	840.00	lb	-313 -471	-282 -440	-251 -409	-220 -378	-189 -347	-158 -316	-127 -285	-95 -254	-64 -223	-33 -192	-2 -161
80	960.00	lb	-259 -418	-224 -383	-189 -347	-153 -312	-118 -276	-82 -241	-47 -205	-11 -170	23 -134	59 -99	94 -63
90	1080.00	lb	-206 -365	-166 -325	-126 -285	-87 -245	-47 -205	-7 -165	32 -125	72 -86	112 -46	152 -6	192 33
100	1200.00	lb	-153 -312	-109 -267	-64 -223	-20 -179	23 -134	68 -90	112 -46	156 -1	201 42	245 86	289 131
110	1320.00	lb	-100 -258	-51 -210	-2 -161	46 -112	94 -63	143 -15	192 33	241 82	289 131	338 179	387 228
120	1440.00	lb	-47 -205	6 -152	59 -99	112 -46	165 7	218 60	272 113	325 166	378 219	431 273	484 326
130	1560.00	lb	6 -152	63 -94	121 -37	179 20	236 78	294 135	351 193	409 250	467 308	524 366	582 423
140	1680.00	lb	59 -99	121 -37	183 24	245 86	307 149	369 211	431 273	493 335	555 397	618 459	680 521
150	1800.00	lb	112 -45	179 20	245 87	312 153	378 220	445 286	511 353	578 419	644 486	711 552	777 619

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 7.A Estimated costs per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	
App by Air ( 3 gal)	appl	6.40	5.7500	36.80	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.52	2.3000	3.50	
Ethepron 6E	pt	3.56	2.3125	8.23	
Tribufos 6lb	pt	12.50	0.5000	6.25	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	46.60	1.5000	69.90	
UAN (32%)	gal	4.30	34.3582	147.74	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	14.30	0.5000	7.15	
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	
Select Max	pt	13.86	1.0000	13.86	
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	
Cotoran	pt	6.37	2.0000	12.74	
Enlist Duo	pt	8.60	7.0000	60.20	
Dual Magnum	pt	11.45	2.0000	22.90	
INSECTICIDES					
Acephate 90%	lb	9.30	2.0000	18.60	
Bidrin 8EC	oz	1.43	5.2000	7.44	
Diamond .83EC	oz	2.23	6.0000	13.38	
Imidacloprid 4F	oz	1.06	2.0000	2.12	
Centric 40WG	oz	5.95	2.0000	11.90	
Bifenthrin	oz	1.13	12.8000	14.46	
Lambda	oz	2.08	1.0000	2.08	
Incidental Pest Trt \$15	acre	15.00	1.5000	22.50	
Transform WG	oz	8.82	1.5000	13.23	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Cotton Seed W3FE	thous	2.32	45.0000	104.40	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.22	51.0000	11.22	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.5025	8.32	
Self-Propelled	hour	16.54	0.2075	3.42	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	
Implement	hour	9.06	0.0625	0.57	
HAND LABOR					
Implement	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR					
hour	hour	16.54	0.5052	8.36	
DIESEL FUEL					
Tractors	gal	4.48	7.2737	32.60	
Self-Propelled	gal	4.48	4.8836	21.88	
Roll-Out Pipe Irr.	gal	4.48	8.5535	38.31	
REPAIR & MAINTENANCE					
Implement	acre	10.86	1.0000	10.86	
Tractors	acre	4.51	1.0000	4.51	
Self-Propelled	acre	25.83	1.0000	25.83	
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	29.55	1.0000	29.55	
TOTAL DIRECT EXPENSES				1107.87	
FIXED EXPENSES					
Implement	acre	19.68	1.0000	19.68	
Tractors	acre	31.95	1.0000	31.95	
Self-Propelled	acre	115.36	1.0000	115.36	
Roll-Out Pipe Irr.	acre	65.01	1.0000	65.01	
TOTAL FIXED EXPENSES				232.00	
TOTAL SPECIFIED EXPENSES				1339.87	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 7.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	1500.0000	1108.35	_____
Cotton Seed	lb	0.11	2025.0000	222.75	_____
<b>-----</b>					
<b>TOTAL INCOME</b>				<b>1331.10</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	55.80	1.0000	55.80	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	217.64	1.0000	217.64	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	145.49	1.0000	145.49	_____
INSECTICIDES	acre	105.72	1.0000	105.72	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	104.40	1.0000	104.40	_____
GROWTH REGULATORS	acre	11.22	1.0000	11.22	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	16.54	0.7101	11.74	_____
UNALLOCATED LABOR	hour	16.54	0.5052	8.36	_____
DIESEL FUEL	gal	4.48	20.7109	92.79	_____
REPAIR & MAINTENANCE	acre	48.36	1.0000	48.36	_____
INTEREST ON OP. CAP.	acre	29.55	1.0000	29.55	_____
<b>-----</b>					
<b>TOTAL DIRECT EXPENSES</b>				<b>1107.87</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>223.23</b>	_____
<b>-----</b>					
<b>TOTAL FIXED EXPENSES</b>				<b>232.00</b>	_____
<b>-----</b>					
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1339.87</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-8.77</b>	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 7.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.6660				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	0.049	1.00	Nov		0.04	0.04	0.04	0.03
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid) UAN (32%)	12R-38 gal	MFWD 300	0.051	1.00	Apr	17.1791	0.05	0.05	0.07	0.04
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant Eradication	acre			1.00	May	1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid) UAN (32%)	12R-38 gal	MFWD 300	0.051	1.00	Jun	17.1791	0.05	0.05	0.07	0.04
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jul		0.04	0.04	0.06	0.03
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					19.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air ( 3 gal)	appl					1.5000				
IncidentalPestTrt\$15	acre					1.5000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb			1.00	Oct	1500.0000				
Stalk Shredder-Flail	20'	MFWD 300	0.082	1.00	Oct		0.08	0.08	0.08	0.06
Roll-Out Pipe Irr.	acre				Jan	1.0000	0.07	0.07	0.44	
<b>TOTALS</b>						0.71	0.50	1.38	0.50	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 7.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL	FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE			
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Lime (Spread)	ton	38.63					2.47	41.10	41.10
Custom Apply Fert	acre	7.50					0.48	7.98	7.98
Potash (60% K2O)	cwt	69.90					4.47	74.37	74.37
Bed-Subsoil Fold	12R-38		3.72	2.43	1.60		0.50	8.25	7.44
Bed/Disk (Hipper)	12R-38			3.41	1.42	1.47	0.40	6.70	6.15
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Clarity	pt	7.15					0.31	7.46	7.46
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34	11.34
Select Max	pt	13.86					0.59	14.45	14.45
Surfactant	pt	0.66					0.03	0.69	0.69
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.26	7.16	4.84
UAN (32%)	gal	73.87					2.76	76.63	76.63
Row Cond Folding	38'			2.83	0.80	1.22	0.16	5.01	4.72
Plant - Folding	12R-38			3.43	2.14	1.93	0.24	7.74	6.98
Cotton Seed W3FE	thous	104.40					3.34	107.74	107.74
Cotton Seed Trt.	acre	20.00					0.64	20.64	20.64
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Gramoxone SL 2.0	oz	17.76					0.57	18.33	18.33
Cotoran	pt	12.74					0.41	13.15	13.15
Surfactant	pt	0.66					0.02	0.68	0.68
Cotton Consultant	acre	8.00					0.26	8.26	8.26
Eradication	acre	1.00					0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Enlist Duo	pt	30.10					0.96	31.06	31.06
Dual Magnum	pt	11.45					0.37	11.82	11.82
Acephate 90%	lb	4.65					0.15	4.80	4.80
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Bidrin 8EC	oz	4.58					0.12	4.70	4.70
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.18	7.08	4.84
UAN (32%)	gal	73.87					1.97	75.84	75.84
App by Air ( 3 gal)	appl	6.40					0.14	6.54	6.54
Diamond .83EC	oz	13.38					0.29	13.67	13.67
Imidacloprid 4F	oz	2.12					0.05	2.17	2.17
Mepiquat Chloride	oz	3.52					0.08	3.60	3.60
Spray (Direct/Layby)	12R-38		3.08	1.04	1.53		0.12	5.77	3.83
Enlist Duo	pt	30.10					0.64	30.74	30.74
Dual Magnum	pt	11.45					0.24	11.69	11.69
Centric 40WG	oz	11.90					0.25	12.15	12.15
Mepiquat Chloride	oz	4.18					0.09	4.27	4.27
App by Air ( 3 gal)	appl	6.40					0.14	6.54	6.54
Acephate 90%	lb	6.98					0.15	7.13	7.13
Mepiquat Chloride	oz	3.52					0.08	3.60	3.60
Bifenthrin	oz	7.23					0.15	7.38	7.38
App by Air ( 3 gal)	appl	1.60					0.03	1.63	1.63
Lambda	oz	2.08					0.04	2.12	2.12
Bidrin 8EC	oz	2.86					0.06	2.92	2.92
Incidental Pest									
App by Air ( 3 gal)	appl	9.60					0.20	9.80	9.80
Incidental Pest Trt \$15	acre	22.50					0.48	22.98	22.98
App by Air ( 3 gal)	appl	6.40					0.10	6.50	6.50
Acephate 90%	lb	6.98					0.11	7.09	7.09
Bifenthrin	oz	7.23					0.12	7.35	7.35
App by Air ( 3 gal)	appl	6.40					0.10	6.50	6.50
Transform WG	oz	13.23					0.21	13.44	13.44
App by Air ( 5 gal)	appl	7.60					0.08	7.68	7.68
Thidiazuron 4lb	oz	3.50					0.04	3.54	3.54
Ethepron 6E	pt	7.12					0.08	7.20	7.20
App by Air ( 5 gal)	appl	3.80					0.04	3.84	3.84
Tribufos 6lb	pt	6.25					0.07	6.32	6.32
Ethepron 6E	pt	1.11					0.01	1.12	1.12
Cotton Picker/Module	6R-38(500)		19.87	25.23	6.69		0.28	52.07	110.98
Gin & Haul	lb	165.00					0.88	165.88	165.88
Stalk Shredder-Flail	20'		5.71	3.68	2.45		0.06	11.90	7.53
Roll-Out Pipe Irr.	acre	7.92	41.57	7.90	4.61		1.35	63.35	70.31
<b>TOTALS</b>		910.95	92.79	48.36	26.22	0.00	29.55	1107.87	232.00
									1339.87

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 7.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1331.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	24.00	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	73.87	0.00	73.87	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	72.05	0.00	41.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	4.58	69.05	27.44	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	104.40	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.22	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.07	0.00	0.00	0.00	0.00	1.76	4.18	4.80	1.76	0.23	0.65	9.77
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	7.13	0.00	0.00	0.00	0.00	3.58	7.60	17.88	15.85	12.77	0.74	27.24
REPAIR & MAINTENANCE	3.85	0.00	0.00	0.00	0.00	1.56	3.34	6.32	2.44	1.40	0.18	29.27
INTEREST ON OP. CAP.	8.53	0.00	0.00	0.00	1.71	3.02	7.24	3.08	3.53	0.87	0.34	1.23
TOTAL DIRECT EXPENSES	141.94	0.00	0.00	0.00	41.86	83.79	233.12	118.45	169.40	55.51	31.29	232.51
NET INCOME	-141.94	0.00	0.00	0.00	-41.86	-83.79	-233.12	-118.45	-169.40	-55.51	-31.29	1098.59
NET INCOME TO DATE	-141.94	-141.94	-141.94	-141.94	-183.80	-267.59	-500.71	-619.16	-788.56	-844.07	-875.36	223.23

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 7.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, conserv. tillage, furrow irr.,  
 W3FE variety, 10.5 ac-in., Delta Area, Mississippi, 2023

PRODUCT	PERCENT										
	75	80	85	90	95	100	105	110	115	120	125
PRODUCT PRICE											
Cotton Lint	0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT YIELD UNIT dollars											
50 750.00 lb	-386 -618	-358 -590	-331 -563	-303 -535	-275 -507	-248 -480	-220 -452	-192 -424	-164 -396	-137 -369	-109 -341
60 900.00 lb	-320 -552	-286 -518	-253 -485	-220 -452	-187 -419	-153 -385	-120 -352	-87 -319	-54 -286	-20 -252	12 -219
70 1050.00 lb	-253 -485	-214 -446	-175 -407	-137 -369	-98 -330	-59 -291	-20 -252	18 -213	56 -175	95 -136	134 -97
80 1200.00 lb	-186 -418	-142 -374	-98 -330	-53 -285	-9 -241	34 -197	79 -152	123 -108	167 -64	212 -19	256 24
90 1350.00 lb	-120 -352	-70 -302	-20 -252	29 -202	79 -152	128 -103	178 -53	228 -3	278 46	328 96	378 146
100 1500.00 lb	-53 -285	1 -230	56 -175	112 -119	167 -64	223 -8	278 46	334 102	389 157	444 212	500 268
110 1650.00 lb	12 -219	73 -158	134 -97	195 -36	256 24	317 85	378 146	439 207	500 268	561 329	622 390
120 1800.00 lb	79 -152	145 -86	212 -19	278 46	345 113	411 179	478 246	544 312	611 379	677 445	744 512
130 1950.00 lb	145 -86	217 -14	289 57	361 129	433 201	505 273	578 346	650 418	722 490	794 562	866 634
140 2100.00 lb	212 -19	289 57	367 135	445 213	522 290	600 368	677 445	755 523	832 600	910 678	988 756
150 2250.00 lb	278 46	361 129	445 213	528 296	611 379	694 462	777 545	860 628	943 711	1026 794	1110 878

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 8.A Estimated costs per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
 W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	
App by Air ( 3 gal)	appl	6.40	5.7500	36.80	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.52	2.3000	3.50	
Ethephon 6E	pt	3.56	2.3125	8.23	
Tribufos 6lb	pt	12.50	0.5000	6.25	
GINNING					
Gin & Haul	lb	0.11	1500.0000	165.00	
FERTILIZERS					
Potash (60% K2O)	cwt	46.60	1.5000	69.90	
UAN (32%)	gal	4.30	34.3582	147.74	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	14.30	0.5000	7.15	
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	
Select Max	pt	13.86	1.0000	13.86	
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	
Cotoran	pt	6.37	2.0000	12.74	
Enlist Duo	pt	8.60	7.0000	60.20	
Dual Magnum	pt	11.45	2.0000	22.90	
INSECTICIDES					
Acephate 90%	lb	9.30	2.0000	18.60	
Bidrin 8EC	oz	1.43	5.2000	7.44	
Centric 40WG	oz	5.95	2.0000	11.90	
Diamond .83EC	oz	2.23	6.0000	13.38	
Imidacloprid 4F	oz	1.06	2.0000	2.12	
Bifenthrin	oz	1.13	12.8000	14.46	
Lambda	oz	2.08	1.0000	2.08	
Incidental Pest Trt \$15	acre	15.00	1.5000	22.50	
Transform WG	oz	8.82	1.5000	13.23	
SEED/PLANTS					
Cotton Seed W3FE	thous	2.32	45.0000	104.40	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.22	48.0000	10.56	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.3993	6.60	
Self-Propelled	hour	16.54	0.2075	3.42	
IRRIGATE LABOR					
Special Labor	hour	9.06	0.2036	1.84	
HAND LABOR					
implements	hour	9.06	0.1235	1.11	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR					
DIESEL FUEL	hour	16.55	0.4855	8.04	
Tractors	gal	4.48	6.1665	27.64	
Self-Propelled	gal	4.48	4.8836	21.88	
1/4-mi. Pivot Irr.	gal	4.48	11.2011	50.17	
REPAIR & MAINTENANCE					
implements	acre	10.13	1.0000	10.13	
Tractors	acre	3.78	1.0000	3.78	
Self-Propelled	acre	25.83	1.0000	25.83	
1/4-mi. Pivot Irr.	acre	21.95	1.0000	21.95	
INTEREST ON OP. CAP.	acre	29.99	1.0000	29.99	
TOTAL DIRECT EXPENSES				1116.46	
FIXED EXPENSES					
implements	acre	16.44	1.0000	16.44	
Tractors	acre	26.82	1.0000	26.82	
Self-Propelled	acre	115.36	1.0000	115.36	
1/4-mi. Pivot Irr.	acre	87.96	1.0000	87.96	
TOTAL FIXED EXPENSES				246.58	
TOTAL SPECIFIED EXPENSES				1363.04	

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

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

Lime cost prorated for application every 3rd year.

Table 8.B Summary of estimated costs and returns per acre  
Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	1500.0000	1108.35	_____
Cotton Seed	lb	0.11	2025.0000	222.75	_____
				-----	
<b>TOTAL INCOME</b>				<b>1331.10</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	55.80	1.0000	55.80	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	165.00	1.0000	165.00	_____
FERTILIZERS	acre	217.64	1.0000	217.64	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	145.49	1.0000	145.49	_____
INSECTICIDES	acre	105.72	1.0000	105.72	_____
SEED/PLANTS	acre	104.40	1.0000	104.40	_____
GROWTH REGULATORS	acre	10.56	1.0000	10.56	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3135	2.82	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	16.54	0.6069	10.02	_____
UNALLOCATED LABOR	hour	16.55	0.4855	8.04	_____
DIESEL FUEL	gal	4.48	22.2512	99.69	_____
REPAIR & MAINTENANCE	acre	61.69	1.0000	61.69	_____
INTEREST ON OP. CAP.	acre	29.99	1.0000	29.99	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>1116.46</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>214.64</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>246.58</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1363.04</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-31.94</b>	_____

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

Table 8.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
 W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre		0.33	Nov		0.3330				
Lime (Spread)	ton		0.33	Nov		0.6660				
Custom Apply Fert	acre		1.00	Nov		1.0000				
Potash (60% K2O)	cwt					1.5000				
Bed-Subsoil Fold	12R-38	MFWD 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	12R-38	MFWD 300	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	12R-38	MFWD 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	12R-38	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed W3FE	thous					45.0000				
Cotton Seed Trt.	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	12R-38	MFWD 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					17.1791				
Spray (Direct/Layby)	12R-38	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.50	Jul					
App by Air ( 3 gal)	appl					1.5000				
IncidentalPestTrt\$15	acre					1.5000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Tribufos 6lb	pt					0.5000				
Ethephon 6E	pt					0.3125				
Cotton Picker/Module	6R-38(500)		0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb		1.00	Oct		1500.0000				
Stalk Shredder-Flail	20'	MFWD 300	0.082	1.00	Oct		0.08	0.08	0.08	0.06
1/4-mi. Pivot Irr.	acre				Jan	1.0000		0.20		
TOTALS							0.60	0.39	1.12	0.48

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 8.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irrig.,  
 W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Lime (Spread)	ton	38.63					2.47	41.10
Custom Apply Fert	acre	7.50					0.48	7.98
Potash (60% K2O)	cwt	69.90					4.47	74.37
Bed-Subsoil Fold	12R-38		3.72	2.43	1.60		0.50	8.25
Bed/Disk (Hipper)	12R-38			1.71	0.70	0.74	0.20	3.35
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Clarity	pt	7.15					0.31	7.46
Glyphosate 3lbs a.e.	oz	10.88					0.46	11.34
Select Max	pt	13.86					0.59	14.45
Surfactant	pt	0.66					0.03	0.69
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.26	7.16
UAN (32%)	gal	73.87					2.76	76.63
Row Cond Folding	38'		2.83	0.80	1.22		0.16	5.01
Plant - Folding	12R-38		3.43	2.14	1.93		0.24	7.74
Cotton Seed W3FE	thous	104.40					3.34	107.74
Cotton Seed Trt.	acre	20.00					0.64	20.64
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Cotoran	pt	12.74					0.41	13.15
Surfactant	pt	0.66					0.02	0.68
Cotton Consultant	acre	8.00					0.26	8.26
Eradication	acre	1.00					0.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31
Enlist Duo	pt	30.10					0.96	31.06
Dual Magnum	pt	11.45					0.37	11.82
Acephate 90%	lb	4.65					0.15	4.80
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30
Bidrin 8EC	oz	4.58					0.12	4.70
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76		0.18	7.08
UAN (32%)	gal	73.87					1.97	75.84
Spray (Direct/Layby)	12R-38		3.08	1.04	1.53		0.15	5.80
Enlist Duo	pt	30.10					0.80	30.90
Dual Magnum	pt	11.45					0.31	11.76
Centric 40WG	oz	11.90					0.32	12.22
Mepiquat Chloride	oz	3.52					0.09	3.61
App by Air ( 3 gal)	appl	6.40					0.14	6.54
Diamond .83EC	oz	13.38					0.29	13.67
Imidacloprid 4F	oz	2.12					0.05	2.17
Mepiquat Chloride	oz	3.52					0.08	3.60
App by Air ( 3 gal)	appl	6.40					0.14	6.54
Acephate 90%	lb	6.98					0.15	7.13
Mepiquat Chloride	oz	3.52					0.08	3.60
Bifenthrin	oz	7.23					0.15	7.38
App by Air ( 3 gal)	appl	1.60					0.03	1.63
Lambda	oz	2.08					0.04	2.12
Bidrin 8EC	oz	2.86					0.06	2.92
Incidental Pest								
App by Air ( 3 gal)	appl	9.60					0.20	9.80
IncidentalPestTrt\$15	acre	22.50					0.48	22.98
App by Air ( 3 gal)	appl	6.40					0.10	6.50
Acephate 90%	lb	6.98					0.11	7.09
Bifenthrin	oz	7.23					0.12	7.35
App by Air ( 3 gal)	appl	6.40					0.10	6.50
Transform WG	oz	13.23					0.21	13.44
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Thidiazuron 4lb	oz	3.50					0.04	3.54
Ethephon 6E	pt	7.12					0.08	7.20
App by Air ( 5 gal)	appl	3.80					0.04	3.84
Tribufos 6lb	pt	6.25					0.07	6.32
Ethephon 6E	pt	1.11					0.01	1.12
Cotton Picker/Module	6R-38(500)		19.87	25.23	6.69		0.28	52.07
Gin & Haul	lb	165.00					0.88	165.88
Stalk Shredder-Flail	20'		5.71	3.68	2.45		0.06	11.90
1/4-mi. Pivot Irr.	acre		50.17	21.95	1.84		1.66	75.62
TOTALS		902.37	99.69	61.69	22.72	0.00	29.99	1116.46
								246.58
								1363.04

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 8.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irr.,  
 W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1331.10
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	24.00	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.00
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	73.87	0.00	73.87	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	72.05	41.55	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	16.48	57.15	27.44	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	104.40	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	7.04	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.34	0.00	0.00	0.00	0.00	1.76	5.29	3.84	0.20	0.15	0.00	9.14
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.43	0.00	0.00	0.00	0.00	3.58	7.60	22.38	20.07	15.05	0.00	25.58
REPAIR & MAINTENANCE	3.13	0.00	0.00	0.00	0.00	1.56	3.34	21.27	1.99	1.49	0.00	28.91
INTEREST ON OP. CAP.	8.33	0.00	0.00	0.00	1.71	3.02	7.27	4.86	2.36	0.90	0.32	1.22
TOTAL DIRECT EXPENSES	138.59	0.00	0.00	0.00	41.86	83.79	234.26	187.77	112.81	57.83	29.70	229.85
NET INCOME	-138.59	0.00	0.00	0.00	-41.86	-83.79	-234.26	-187.77	-112.81	-57.83	-29.70	1101.25
NET INCOME TO DATE	-138.59	-138.59	-138.59	-138.59	-180.45	-264.24	-498.50	-686.27	-799.08	-856.91	-886.61	214.64

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 8.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, cons. tillage, pivot irrig.,  
 W3FE variety, 7.5 ac.-in., Delta Area, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	750.00	lb	-395 -641	-367 -614	-339 -586	-312 -558	-284 -530	-256 -503	-228 -475	-201 -447	-173 -420	-145 -392	-118 -364
60	900.00	lb	-328 -575	-295 -541	-262 -508	-228 -475	-195 -442	-162 -408	-129 -375	-95 -342	-62 -309	-29 -275	3 -242
70	1050.00	lb	-262 -508	-223 -469	-184 -431	-145 -392	-106 -353	-68 -314	-29 -275	9 -237	48 -198	87 -159	125 -120
80	1200.00	lb	-195 -442	-151 -397	-106 -353	-62 -309	-18 -264	26 -220	70 -176	114 -131	159 -87	203 -43	247 1
90	1350.00	lb	-128 -375	-79 -325	-29 -275	20 -225	70 -176	120 -126	170 -76	220 -26	270 23	319 73	369 123
100	1500.00	lb	-62 -309	-7 -253	48 -198	103 -142	159 -87	214 -31	270 23	325 78	380 134	436 189	491 245
110	1650.00	lb	4 -242	65 -181	126 -120	186 -59	247 1	308 62	369 123	430 184	491 245	552 306	613 367
120	1800.00	lb	70 -175	137 -109	203 -42	270 23	336 90	403 156	469 223	536 289	602 356	669 422	735 489
130	1950.00	lb	137 -109	209 -37	281 34	353 106	425 178	497 250	569 322	641 394	713 466	785 538	857 611
140	2100.00	lb	203 -42	281 34	358 112	436 189	514 267	591 345	669 422	746 500	824 577	901 655	979 732
150	2250.00	lb	270 23	353 106	436 189	519 273	602 356	685 439	769 522	852 605	935 688	1018 771	1101 854

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 9.A Estimated costs per acre  
 Cotton, 12R-38" solid, no-till  
 W3FE variety, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	
App by Air ( 3 gal)	appl	6.40	5.2500	33.60	
HARVEST AIDS					
Thidiazuron 4lb	oz	1.52	2.3000	3.50	
Ethephon 6E	pt	3.56	2.3125	8.23	
Tribufos 6lb	pt	12.50	0.5000	6.25	
GINNING					
Gin & Haul	lb	0.11	1200.0000	132.00	
FERTILIZERS					
Potash (60% K2O)	cwt	46.60	1.5000	69.90	
UAN (32%)	gal	4.30	25.4000	109.22	
FUNGICIDES					
Cotton Seed Trt.	acre	20.00	1.0000	20.00	
HERBICIDES					
Clarity	pt	14.30	0.5000	7.15	
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	
Select Max	pt	13.86	1.0000	13.86	
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	
Cotoran	pt	6.37	2.0000	12.74	
Enlist Duo	pt	8.60	7.0000	60.20	
Dual Magnum	pt	11.45	2.0000	22.90	
INSECTICIDES					
Acephate 90%	lb	9.30	2.0000	18.60	
Bidrin 8EC	oz	1.43	5.2000	7.44	
Centric 40WG	oz	5.95	2.0000	11.90	
Diamond .83EC	oz	2.23	6.0000	13.38	
Imidacloprid 4F	oz	1.06	2.0000	2.12	
Bifenthrin	oz	1.13	12.8000	14.46	
Lambda	oz	2.08	1.0000	2.08	
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	
Transform WG	oz	8.82	1.5000	13.23	
SEED/PLANTS					
Cotton Seed W3FE	thous	2.32	45.0000	104.40	
GROWTH REGULATORS					
Mepiquat Chloride	oz	0.22	48.0000	10.56	
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	
ERADICATION FEE					
Eradication	acre	1.00	1.0000	1.00	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.6660	38.63	
CROP CONSULTANT					
Cotton Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.2712	4.48	
Self-Propelled	hour	16.54	0.2075	3.42	
HAND LABOR					
Implements	hour	9.06	0.0998	0.90	
Self-Propelled	hour	9.06	0.1899	1.71	
UNALLOCATED LABOR					
hour	16.55	0.3830	6.34		
DIESEL FUEL					
Tractors	gal	4.48	4.1890	18.78	
Self-Propelled	gal	4.48	4.8836	21.88	
REPAIR & MAINTENANCE					
Implements	acre	6.98	1.0000	6.98	
Tractors	acre	2.57	1.0000	2.57	
Self-Propelled	acre	25.83	1.0000	25.83	
INTEREST ON OP. CAP.	acre	25.17	1.0000	25.17	
TOTAL DIRECT EXPENSES				938.21	
FIXED EXPENSES					
Implements	acre	10.49	1.0000	10.49	
Tractors	acre	18.22	1.0000	18.22	
Self-Propelled	acre	115.36	1.0000	115.36	
TOTAL FIXED EXPENSES				144.07	
TOTAL SPECIFIED EXPENSES				1082.28	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 9.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" solid, no-till  
 W3FE variety, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	1200.0000	886.68	_____
Cotton Seed	lb	0.11	1620.0000	178.20	_____
				-----	
<b>TOTAL INCOME</b>				<b>1064.88</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	52.60	1.0000	52.60	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	132.00	1.0000	132.00	_____
FERTILIZERS	acre	179.12	1.0000	179.12	_____
FUNGICIDES	acre	20.00	1.0000	20.00	_____
HERBICIDES	acre	145.49	1.0000	145.49	_____
INSECTICIDES	acre	98.22	1.0000	98.22	_____
SEED/PLANTS	acre	104.40	1.0000	104.40	_____
GROWTH REGULATORS	acre	10.56	1.0000	10.56	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.2897	2.61	_____
OPERATOR LABOR	hour	16.54	0.4788	7.90	_____
UNALLOCATED LABOR	hour	16.55	0.3830	6.34	_____
DIESEL FUEL	gal	4.48	9.0726	40.66	_____
REPAIR & MAINTENANCE	acre	35.38	1.0000	35.38	_____
INTEREST ON OP. CAP.	acre	25.17	1.0000	25.17	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>938.21</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>126.67</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>144.07</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1082.28</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-17.40</b>	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 9.C Estimated resource use for field operations, per acre  
Cotton, 12R-38" solid, no-till  
W3FE variety, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Nov		0.3330				
Lime (Spread)	ton			0.33	Nov		0.6660				
Custom Apply Fert	acre			1.00	Nov		1.0000				
Potash (60% K2O)	cwt						1.5000				
App by Air ( 5 gal)	appl			1.00	Mar		1.0000				
Clarity	pt						0.5000				
Glyphosate 3lbs a.e	oz						32.0000				
Select Max	pt						1.0000				
Surfactant	pt						0.2000				
Row Cond Folding	38'	MFWD	300	0.040	1.00	May		0.04	0.04	0.04	0.03
NT Plant-Folding	12R-38	MFWD	300	0.051	1.00	May		0.05	0.05	0.10	0.04
Cotton Seed W3FE	thous						45.0000				
Cotton Seed Trt.	acre						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz						48.0000				
Cotoran	pt						2.0000				
Surfactant	pt						0.2000				
Cotton Consultant	acre						1.0000				
Eradication	acre						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Enlist Duo	pt						3.5000				
Dual Magnum	pt						1.0000				
Acephate 90%	lb						0.5000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.00
Bidrin 8EC	oz						3.2000				
Fert Appl (Liquid)	12R-38	MFWD	300	0.051	1.00	Jun			0.05	0.05	0.07
UAN (32%)	gal						25.4000				0.04
Spray (Direct/Layby)	12R-38	MFWD	300	0.044	1.00	Jun			0.04	0.04	0.06
Enlist Duo	pt						3.5000				
Dual Magnum	pt						1.0000				
Centric 40WG	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
App by Air ( 3 gal)	appl						1.0000				
Diamond .83EC	oz						6.0000				
Imidacloprid 4F	oz						2.0000				
Mepiquat Chloride	oz						16.0000				
App by Air ( 3 gal)	appl						1.0000				
Acephate 90%	lb						0.7500				
Mepiquat Chloride	oz						16.0000				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl						0.25				
Lambda	oz						0.2500				
Bidrin 8EC	oz						1.0000				
Incidental Pest							2.0000				
App by Air ( 3 gal)	appl						1.0000				
IncidentalPestTrt\$15	acre						1.0000				
App by Air ( 3 gal)	appl						1.0000				
Acephate 90%	lb						0.7500				
Bifenthrin	oz						6.4000				
App by Air ( 3 gal)	appl						1.0000				
Transform WG	oz						1.5000				
App by Air ( 5 gal)	appl						1.0000				
Thidiazuron 4lb	oz						2.3000				
Ethephon 6E	pt						2.0000				
App by Air ( 5 gal)	appl						0.50				
Tribufos 6lb	pt						0.5000				
Ethephon 6E	pt						0.3125				
Cotton Picker/Module	6R-38(500)			0.172	1.00	Oct			0.17	0.34	0.13
Gin & Haul	lb				1.00	Oct	1200.0000				
Stalk Shredder-Flail	20'	MFWD	300	0.082	1.00	Oct			0.08	0.08	0.06
<b>TOTALS</b>							0.47	0.27	0.76	0.38	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 9.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" solid, no-till  
 W3FE variety, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST				TOTAL	FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Soil Test	acre	3.33				0.21	3.54	3.54
Lime (Spread)	ton	38.63				2.47	41.10	41.10
Custom Apply Fert	acre	7.50				0.48	7.98	7.98
Potash (60% K2O)	cwt	69.90				4.47	74.37	74.37
App by Air ( 5 gal)	appl	7.60				0.32	7.92	7.92
Clarity	pt	7.15				0.31	7.46	7.46
Glyphosate 3lbs a.e.	oz	10.88				0.46	11.34	11.34
Select Max	pt	13.86				0.59	14.45	14.45
Surfactant	pt	0.66				0.03	0.69	0.69
Row Cond Folding	38'		2.83	0.80	1.22	0.16	5.01	4.72
NT Plant-Folding	12R-38		3.58	2.47	2.00	0.26	8.31	7.79
Cotton Seed W3FE	thous	104.40				3.34	107.74	107.74
Cotton Seed Trt.	acre	20.00				0.64	20.64	20.64
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.04	1.31	1.46
Gramoxone SL 2.0	oz	17.76				0.57	18.33	18.33
Cotoran	pt	12.74				0.41	13.15	13.15
Surfactant	pt	0.66				0.02	0.68	0.68
Cotton Consultant	acre	8.00				0.26	8.26	8.26
Eradication	acre	1.00				0.03	1.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.04	1.31	1.46
Enlist Duo	pt	30.10				0.96	31.06	31.06
Dual Magnum	pt	11.45				0.37	11.82	11.82
Acephate 90%	lb	4.65				0.15	4.80	4.80
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40	0.03	1.30	1.46
Bidrin 8EC	oz	4.58				0.12	4.70	4.70
Fert Appl (Liquid)	12R-38		3.58	1.56	1.76	0.18	7.08	4.84
UAN (32%)	gal	109.22				2.91	112.13	112.13
Spray (Direct/Layby)	12R-38		3.08	1.04	1.53	0.15	5.80	3.83
Enlist Duo	pt	30.10				0.80	30.90	30.90
Dual Magnum	pt	11.45				0.31	11.76	11.76
Centric 40WG	oz	11.90				0.32	12.22	12.22
Mepiquat Chloride	oz	3.52				0.09	3.61	3.61
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
Diamond .83EC	oz	13.38				0.29	13.67	13.67
Imidacloprid 4F	oz	2.12				0.05	2.17	2.17
Mepiquat Chloride	oz	3.52				0.08	3.60	3.60
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
Acephate 90%	lb	6.98				0.15	7.13	7.13
Mepiquat Chloride	oz	3.52				0.08	3.60	3.60
Bifenthrin	oz	7.23				0.15	7.38	7.38
App by Air ( 3 gal)	appl	1.60				0.03	1.63	1.63
Lambda	oz	2.08				0.04	2.12	2.12
Bidrin 8EC	oz	2.86				0.06	2.92	2.92
Incidental Pest								
App by Air ( 3 gal)	appl	6.40				0.14	6.54	6.54
IncidentalPestTrt\$15	acre	15.00				0.32	15.32	15.32
App by Air ( 3 gal)	appl	6.40				0.10	6.50	6.50
Acephate 90%	lb	6.98				0.11	7.09	7.09
Bifenthrin	oz	7.23				0.12	7.35	7.35
App by Air ( 3 gal)	appl	6.40				0.10	6.50	6.50
Transform WG	oz	13.23				0.21	13.44	13.44
App by Air ( 5 gal)	appl	7.60				0.08	7.68	7.68
Thidiazuron 4lb	oz	3.50				0.04	3.54	3.54
Ethephon 6E	pt	7.12				0.08	7.20	7.20
App by Air ( 5 gal)	appl	3.80				0.04	3.84	3.84
Tribufos 6lb	pt	6.25				0.07	6.32	6.32
Ethephon 6E	pt	1.11				0.01	1.12	1.12
Cotton Picker/Module	6R-38(500)		19.87	25.23	6.69	0.28	52.07	110.98
Gin & Haul	lb	132.00		5.71	3.68	0.70	132.70	132.70
Stalk Shredder-Flail	20'				2.45	0.06	11.90	7.53
<b>TOTALS</b>		820.15	40.66	35.38	16.85	0.00	25.17	938.21
								144.07
								1082.28

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 9.E Estimated monthly income and expense flows per acre  
 Cotton, 12R-38" solid, no-till  
 W3FE variety, Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1064.88
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	20.80	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132.00
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	0.00	0.00	109.22	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	72.05	41.55	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	16.48	49.65	27.44	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	104.40	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.52	7.04	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	4.02	3.69	0.00	0.00	0.00	9.14
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	7.75	7.33	0.00	0.00	0.00	25.58
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	3.67	2.80	0.00	0.00	0.00	28.91
INTEREST ON OP. CAP.	7.63	0.00	0.00	0.00	1.71	0.00	7.25	4.91	1.67	0.64	0.32	1.04
TOTAL DIRECT EXPENSES	126.99	0.00	0.00	0.00	41.86	0.00	233.45	189.50	79.16	40.88	29.70	196.67
NET INCOME	-126.99	0.00	0.00	0.00	-41.86	0.00	-233.45	-189.50	-79.16	-40.88	-29.70	868.21
NET INCOME TO DATE	-126.99	-126.99	-126.99	-126.99	-168.85	-168.85	-402.30	-591.80	-670.96	-711.84	-741.54	126.67

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 9.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" solid, no-till  
 W3FE variety, Delta Area, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	600.00	lb	-361 -505	-338 -483	-316 -460	-294 -438	-272 -416	-250 -394	-228 -372	-205 -350	-183 -327	-161 -305	-139 -283
60	720.00	lb	-307 -451	-281 -425	-254 -398	-228 -372	-201 -345	-174 -318	-148 -292	-121 -265	-95 -239	-68 -212	-41 -185
70	840.00	lb	-254 -398	-223 -367	-192 -336	-161 -305	-130 -274	-99 -243	-68 -212	-37 -181	-6 -150	24 -119	55 -88
80	960.00	lb	-201 -345	-165 -310	-130 -274	-95 -239	-59 -203	-24 -168	11 -132	46 -97	82 -61	117 -26	153 9
90	1080.00	lb	-148 -292	-108 -252	-68 -212	-28 -172	11 -132	51 -92	91 -52	131 -12	170 26	210 66	250 106
100	1200.00	lb	-95 -239	-50 -194	-6 -150	38 -106	82 -61	126 -17	171 26	215 71	259 115	304 159	348 204
110	1320.00	lb	-41 -185	6 -137	55 -88	104 -39	153 9	202 57	250 106	299 155	348 204	397 253	445 301
120	1440.00	lb	11 -132	64 -79	117 -26	171 26	224 80	277 133	330 186	383 239	437 292	490 346	543 399
130	1560.00	lb	64 -79	122 -21	179 35	237 93	295 151	352 208	410 266	468 324	525 381	583 439	641 496
140	1680.00	lb	117 -26	179 35	242 97	304 160	366 222	428 284	490 346	552 408	614 470	676 532	738 594
150	1800.00	lb	171 27	237 93	304 160	370 226	437 293	503 359	570 426	636 492	703 559	769 625	836 692

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 10.A Estimated costs per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., W3FE variety, Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM				
		dollars		dollars					
<b>DIRECT EXPENSES</b>									
<b>CUSTOM SPRAY</b>									
App by Air ( 5 gal)	appl	7.60	2.5000	19.00	_____				
App by Air ( 3 gal)	appl	6.40	5.2500	33.60	_____				
<b>HARVEST AIDS</b>									
Thidiazuron 4lb	oz	1.52	2.3000	3.50	_____				
Ethephon 6E	pt	3.56	2.3125	8.23	_____				
Tribufos 6lb	pt	12.50	0.5000	6.25	_____				
<b>GINNING</b>									
Gin & Haul	lb	0.11	811.0000	89.21	_____				
<b>FERTILIZERS</b>									
Potash (60% K2O)	cwt	46.60	1.5000	69.90	_____				
UAN (32%)	gal	4.30	32.5498	139.96	_____				
<b>FUNGICIDES</b>									
Cotton Seed Trt.	acre	20.00	0.6700	13.40	_____				
<b>HERBICIDES</b>									
Clarity	pt	14.30	0.5000	7.15	_____				
Glyphosate 3lbs a.e	oz	0.34	32.0000	10.88	_____				
Select Max	pt	13.86	1.0000	13.86	_____				
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____				
Cotoran	pt	6.37	2.0000	12.74	_____				
Enlist Duo	pt	8.60	7.0000	60.20	_____				
Dual Magnum	pt	11.45	2.0000	22.90	_____				
<b>INSECTICIDES</b>									
Acephate 90%	lb	9.30	2.0000	18.60	_____				
Bidrin 8EC	oz	1.43	5.2000	7.44	_____				
Centric 40WG	oz	5.95	1.3400	7.97	_____				
Diamond .83EC	oz	2.23	6.0000	13.38	_____				
Imidacloprid 4F	oz	1.06	2.0000	2.12	_____				
Bifenthrin	oz	1.13	12.8000	14.46	_____				
Lambda	oz	2.08	1.0000	2.08	_____				
Incidental Pest Trt \$15	acre	15.00	1.0000	15.00	_____				
Transform WG	oz	8.82	1.5000	13.23	_____				
<b>SEED/PLANTS</b>									
Cotton Seed W3FE	thous	2.32	30.0000	69.60	_____				
<b>GROWTH REGULATORS</b>									
Mepiquat Chloride	oz	0.22	42.7200	9.40	_____				
<b>ADJUVANTS</b>									
Surfactant	pt	3.30	0.4000	1.32	_____				
<b>CUSTOM FERTILIZE</b>									
Custom Apply Fert	acre	7.50	1.0000	7.50	_____				
<b>ERADICATION FEE</b>									
Eradication	acre	1.00	1.0000	1.00	_____				
<b>CUSTOM LIME</b>									
Lime (Spread)	ton	58.00	0.6660	38.63	_____				
<b>CROP CONSULTANT</b>									
Cotton Consultant	acre	8.00	1.0000	8.00	_____				
<b>SOIL TEST</b>									
Soil Test	acre	10.00	0.3330	3.33	_____				
<b>OPERATOR LABOR</b>									
Tractors	hour	16.54	0.8159	13.50	_____				
Self-Propelled	hour	16.54	0.1958	3.23	_____				
<b>HAND LABOR</b>									
Implements	hour	9.06	0.3181	2.87	_____				
Self-Propelled	hour	9.06	0.1840	1.66	_____				
<b>UNALLOCATED LABOR</b>									
hour	16.55	0.8094	13.40	_____					
<b>DIESEL FUEL</b>									
Tractors	gal	4.48	12.6003	56.46	_____				
Self-Propelled	gal	4.48	3.4035	15.25	_____				
<b>REPAIR &amp; MAINTENANCE</b>									
Implements	acre	13.75	1.0000	13.75	_____				
Tractors	acre	7.75	1.0000	7.75	_____				
Self-Propelled	acre	10.01	1.0000	10.01	_____				
INTEREST ON OP. CAP.	acre	26.26	1.0000	26.26	_____				
<b>TOTAL DIRECT EXPENSES</b>									
				925.75	_____				
<b>FIXED EXPENSES</b>									
Implements	acre	24.03	1.0000	24.03	_____				
Tractors	acre	54.80	1.0000	54.80	_____				
Self-Propelled	acre	45.20	1.0000	45.20	_____				
<b>TOTAL FIXED EXPENSES</b>									
				124.03	_____				
<b>TOTAL SPECIFIED EXPENSES</b>									
				1049.78	_____				

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 10.B Summary of estimated costs and returns per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., W3FE variety, Delta, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Cotton Lint	lb	0.73	811.0000	599.25	_____
Cotton Seed	lb	0.11	1095.0000	120.45	_____
				-----	
<b>TOTAL INCOME</b>				<b>719.70</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	52.60	1.0000	52.60	_____
HARVEST AIDS	acre	17.98	1.0000	17.98	_____
GINNING	acre	89.21	1.0000	89.21	_____
FERTILIZERS	acre	209.86	1.0000	209.86	_____
FUNGICIDES	acre	13.40	1.0000	13.40	_____
HERBICIDES	acre	145.49	1.0000	145.49	_____
INSECTICIDES	acre	94.29	1.0000	94.29	_____
SEED/PLANTS	acre	69.60	1.0000	69.60	_____
GROWTH REGULATORS	acre	9.40	1.0000	9.40	_____
ADJUVANTS	acre	1.32	1.0000	1.32	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
ERADICATION FEE	acre	1.00	1.0000	1.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.5022	4.53	_____
OPERATOR LABOR	hour	16.54	1.0118	16.73	_____
UNALLOCATED LABOR	hour	16.55	0.8094	13.40	_____
DIESEL FUEL	gal	4.48	16.0039	71.71	_____
REPAIR & MAINTENANCE	acre	31.51	1.0000	31.51	_____
INTEREST ON OP. CAP.	acre	26.26	1.0000	26.26	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>925.75</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>-206.05</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>124.03</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1049.78</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-330.08</b>	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 10.C Estimated resource use for field operations, per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., W3FE variety, Delta, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre		0.33	Nov	0.3330					
Lime (Spread)	ton		0.33	Nov	0.6660					
Custom Apply Fert	acre		1.00	Nov	1.0000					
Potash (60% K2O)	cwt				1.5000					
Bed-Subsoil Fold	8R-38 2x1	MFWD 300	0.053	1.00	Nov		0.05	0.05	0.05	0.04
Bed/Disk (Hipper)	8R-38 2x1	MFWD 300	0.049	0.50	Nov		0.02	0.02	0.02	0.01
App by Air ( 5 gal)	appl			1.00	Mar	1.0000				
Clarity	pt					0.5000				
Glyphosate 3lbs a.e	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 300	0.051	1.00	Apr		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Row Cond Folding	38'	MFWD 300	0.040	1.00	May		0.04	0.04	0.04	0.03
Plant - Folding	8R-38 2x1	MFWD 300	0.049	1.00	May		0.04	0.04	0.09	0.03
Cotton Seed W3FE	thous					30.0000				
Cotton Seed Trt.	acre					0.6700				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Gramoxone SL 2.0	oz					48.0000				
Cotoran	pt					2.0000				
Surfactant	pt					0.2000				
Cotton Consultant	acre			1.00	May	1.0000				
Eradication	acre					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Acephate 90%	lb					0.5000				
Spray (Direct/Layby)	8R-38 2x1	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Bidrin 8EC	oz					3.2000				
Fert Appl (Liquid)	8R-38 2x1	MFWD 300	0.051	1.00	Jun		0.05	0.05	0.07	0.04
UAN (32%)	gal					16.2749				
Spray (Direct/Layby)	8R-38 2x1	MFWD 300	0.044	1.00	Jun		0.04	0.04	0.06	0.03
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Centric 40WG	oz					1.3400				
Mepiquat Chloride	oz					10.7200				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Diamond .83EC	oz					6.0000				
Imidacloprid 4F	oz					2.0000				
Mepiquat Chloride	oz					16.0000				
App by Air ( 3 gal)	appl			1.00	Jul	1.0000				
Acephate 90%	lb					0.7500				
Mepiquat Chloride	oz					16.0000				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			0.25	Jul	0.2500				
Lambda	oz					1.0000				
Bidrin 8EC	oz					2.0000				
Incidental Pest				1.00	Jul					
App by Air ( 3 gal)	appl					1.0000				
IncidentalPestTrt\$15	acre					1.0000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Acephate 90%	lb					0.7500				
Bifenthrin	oz					6.4000				
App by Air ( 3 gal)	appl			1.00	Aug	1.0000				
Transform WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Thidiazuron 4lb	oz					2.3000				
Ethephon 6E	pt					2.0000				
App by Air ( 5 gal)	appl			0.50	Sep	0.5000				
Ethephon 6E	pt					0.3125				
Tribufos 6lb	pt					0.5000				
Cotton Picker	4R2x1(350)		0.172	1.00	Oct		0.17	0.34	0.13	
Boll Buggy	4R2x1(350)	MFWD 300	0.172	1.00	Oct		0.17	0.17	0.17	0.13
Module Builder	4R2x1(350)	MFWD 300	0.172	1.00	Oct		0.17	0.17	0.34	0.13
Gin & Haul	lb			1.00		811.0000				
Stalk Shredder-Flail	15'	MFWD 300	0.110	1.00	Oct		0.11	0.11	0.11	0.08
TOTALS							1.01	0.81	1.51	0.80

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 10.D Estimated costs for field operations, per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., W3FE variety, Delta, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Lime (Spread)	ton	38.63					2.47	41.10
Custom Apply Fert	acre	7.50					0.48	7.98
Potash (60% K2O)	cwt	69.90					4.47	74.37
Bed-Subsoil Fold	8R-38 2x1		3.72	2.43	1.60		0.50	8.25
Bed/Disk (Hipper)	8R-38 2x1			1.71	0.70	0.74	0.20	3.35
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Clarity	pt	7.15					0.31	7.46
Glyphosate 3lbs a.e.	oz	10.88					0.46	11.34
Select Max	pt	13.86					0.59	14.45
Surfactant	pt	0.66					0.03	0.69
Fert Appl (Liquid)	8R-38 2x1		3.58	1.62	1.76		0.26	7.22
UAN (32%)	gal	69.98					2.61	72.59
Row Cond Folding	38'		2.83	0.80	1.22		0.16	5.01
Plant - Folding	8R-38 2x1		3.43	2.14	1.93		0.24	7.74
Cotton Seed W3FE	thous	69.60					2.23	71.83
Cotton Seed Trt.	acre	13.40					0.43	13.83
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Cotoran	pt	12.74					0.41	13.15
Surfactant	pt	0.66					0.02	0.68
Cotton Consultant	acre	8.00					0.26	8.26
Eradication	acre	1.00					0.03	1.03
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31
Enlist Duo	pt	30.10					0.96	31.06
Dual Magnum	pt	11.45					0.37	11.82
Acephate 90%	lb	4.65					0.15	4.80
Spray (Direct/Layby)	8R-38 2x1		3.08	1.04	1.53		0.15	5.80
Bidrin 8EC	oz	4.58					0.12	4.70
Fert Appl (Liquid)	8R-38 2x1		3.58	1.62	1.76		0.19	7.15
UAN (32%)	gal	69.98					1.87	71.85
Spray (Direct/Layby)	8R-38 2x1		3.08	1.04	1.53		0.15	5.80
Enlist Duo	pt	30.10					0.80	30.90
Dual Magnum	pt	11.45					0.31	11.76
Centric 40WG	oz	7.97					0.21	8.18
Mepiquat Chloride	oz	2.36					0.06	2.42
App by Air ( 3 gal)	appl	6.40					0.14	6.54
Diamond .83EC	oz	13.38					0.29	13.67
Imidacloprid 4F	oz	2.12					0.05	2.17
Mepiquat Chloride	oz	3.52					0.08	3.60
App by Air ( 3 gal)	appl	6.40					0.14	6.54
Acephate 90%	lb	6.98					0.15	7.13
Mepiquat Chloride	oz	3.52					0.08	3.60
Bifenthrin	oz	7.23					0.15	7.38
App by Air ( 3 gal)	appl	1.60					0.03	1.63
Lambda	oz	2.08					0.04	2.12
Bidrin 8EC	oz	2.86					0.06	2.92
Incidental Pest								
App by Air ( 3 gal)	appl	6.40					0.14	6.54
IncidentalPestTrt\$15	acre	15.00					0.32	15.32
App by Air ( 3 gal)	appl	6.40					0.10	6.50
Acephate 90%	lb	6.98					0.11	7.09
Bifenthrin	oz	7.23					0.12	7.35
App by Air ( 3 gal)	appl	6.40					0.10	6.50
Transform WG	oz	13.23					0.21	13.44
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Thidiazuron 4lb	oz	3.50					0.04	3.54
Ethephon 6E	pt	7.12					0.08	7.20
App by Air ( 5 gal)	appl	3.80					0.04	3.84
Ethephon 6E	pt	1.11					0.01	1.12
Tribufos 6lb	pt	6.25					0.07	6.32
Cotton Picker	4R2x1(350)		13.91	9.61	6.69		0.16	30.37
Boll Buggy	4R2x1(350)		11.92	2.95	5.13		0.11	20.11
Module Builder	4R2x1(350)		11.92	3.13	6.69		0.12	21.86
Gin & Haul	lb	89.21					0.48	89.69
Stalk Shredder-Flail	15'		7.61	4.03	3.28		0.08	15.00
TOTALS		761.61	71.71	31.51	34.66	0.00	26.26	925.75
								124.03
								1049.78

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 10.E Estimated monthly income and expense flows per acre  
Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
Cons. till., W3FE variety, Delta, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	719.70
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	20.80	12.80	11.40	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00
GINNING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.21
FERTILIZERS	69.90	0.00	0.00	0.00	0.00	69.98	0.00	69.98	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	13.40	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	72.05	41.55	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	4.65	12.55	49.65	27.44	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	69.60	0.00	0.00	0.00	0.00	0.00
GROWTH REGULATORS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.36	7.04	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.66	0.00	0.66	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ERADICATION FEE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	2.34	0.00	0.00	0.00	0.00	1.76	3.95	4.82	0.00	0.00	0.00	21.79
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.43	0.00	0.00	0.00	0.00	3.58	7.60	9.74	0.00	0.00	0.00	45.36
REPAIR & MAINTENANCE	3.13	0.00	0.00	0.00	0.00	1.62	3.34	3.70	0.00	0.00	0.00	19.72
INTEREST ON OP. CAP.	8.33	0.00	0.00	0.00	1.71	2.87	5.91	3.86	1.67	0.64	0.32	0.95
TOTAL DIRECT EXPENSES	138.59	0.00	0.00	0.00	41.86	79.81	190.16	148.56	79.16	40.88	29.70	177.03
NET INCOME	-138.59	0.00	0.00	0.00	-41.86	-79.81	-190.16	-148.56	-79.16	-40.88	-29.70	542.67
NET INCOME TO DATE	-138.59	-138.59	-138.59	-138.59	-180.45	-260.26	-450.42	-598.98	-678.14	-719.02	-748.72	-206.05

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 10.F Estimated returns for various price/yield combinations, per acre  
 Cotton, 12R-38" 2X1 full-skip (8 rows planted)  
 Cons. till., W3FE variety, Delta, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	
			PRODUCT		PRICE								
Cotton Lint			0.55	0.59	0.62	0.66	0.70	0.73	0.77	0.81	0.84	0.88	0.92
PERCENT	YIELD	UNIT	dollars										
50	405.50	lb	-535 -659	-520 -644	-505 -629	-490 -614	-475 -599	-460 -584	-445 -569	-430 -554	-415 -539	-400 -524	-385 -509
60	486.60	lb	-499 -623	-481 -605	-463 -587	-445 -569	-427 -551	-409 -533	-391 -515	-373 -497	-355 -479	-337 -461	-319 -444
70	567.70	lb	-463 -587	-442 -566	-421 -545	-400 -524	-379 -503	-358 -482	-337 -461	-316 -441	-295 -420	-275 -399	-254 -378
80	648.80	lb	-427 -551	-403 -527	-379 -503	-355 -479	-331 -455	-307 -431	-283 -408	-260 -384	-236 -360	-212 -336	-188 -312
90	729.90	lb	-391 -515	-364 -488	-337 -461	-310 -434	-283 -408	-257 -381	-230 -354	-203 -327	-176 -300	-149 -273	-122 -246
100	811.00	lb	-355 -479	-325 -449	-295 -419	-265 -390	-236 -360	-206 -330	-176 -300	-146 -270	-116 -240	-86 -210	-56 -180
110	892.10	lb	-319 -443	-286 -410	-253 -378	-221 -345	-188 -312	-155 -279	-122 -246	-89 -213	-56 -180	-23 -147	9 -114
120	973.20	lb	-283 -407	-247 -371	-212 -336	-176 -300	-140 -264	-104 -228	-68 -192	-32 -156	3 -120	39 -84	75 -48
130	1054.30	lb	-247 -371	-208 -333	-170 -294	-131 -255	-92 -216	-53 -177	-14 -138	24 -99	63 -60	102 -21	141 17
140	1135.40	lb	-211 -335	-170 -294	-128 -252	-86 -210	-44 -168	-2 -126	39 -84	81 -42	123 -0	165 41	207 83
150	1216.50	lb	-175 -300	-131 -255	-86 -210	-41 -165	3 -120	48 -75	93 -30	138 14	183 59	228 104	273 149

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 11.A Estimated costs per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM		
dollars				dollars			
<b>DIRECT EXPENSES</b>							
<b>CUSTOM SPRAY</b>							
App by Air ( 5 gal)	appl	7.60	4.0000	30.40	_____		
<b>HARVEST AIDS</b>							
Gramoxone SL	oz	0.37	16.0000	5.92	_____		
Sodium Chlorate 5L	gal	8.61	0.6000	5.17	_____		
<b>FERTILIZERS</b>							
Phosphorus(46% P2O5)	cwt	50.00	0.8700	43.50	_____		
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____		
<b>FUNGICIDES</b>							
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____		
<b>HERBICIDES</b>							
Glyphosate 3lbs a.e.	oz	0.34	64.0000	21.76	_____		
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____		
Select Max	pt	13.86	1.0000	13.86	_____		
Valor SX	oz	3.20	2.0000	6.40	_____		
Boundary	pt	11.75	2.0000	23.50	_____		
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____		
Enlist Duo	pt	8.60	3.5000	30.10	_____		
Dual Magnum	pt	11.45	1.0000	11.45	_____		
Zidua WG	oz	8.76	1.5000	13.14	_____		
<b>INSECTICIDES</b>							
Acephate 90SP	lb	6.62	0.7500	4.97	_____		
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____		
<b>SEED/PLANTS</b>							
Soybean Enlist E3	lb	1.07	50.0000	53.50	_____		
<b>ADJUVANTS</b>							
Surfactant	pt	3.30	1.0000	3.30	_____		
<b>CUSTOM FERTILIZE</b>							
Custom Apply Fert	acre	7.50	1.0000	7.50	_____		
<b>HAULING</b>							
Haul Soybeans	bu	0.27	42.0000	11.34	_____		
<b>CUSTOM LIME</b>							
Lime (Spread)	ton	58.00	0.3330	19.31	_____		
<b>CROP CONSULTANT</b>							
Soybeans Consultant	acre	6.50	1.0000	6.50	_____		
<b>INOCULANT</b>							
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____		
<b>SOIL TEST</b>							
Soil Test	acre	10.00	0.3330	3.33	_____		
<b>OPERATOR LABOR</b>							
Tractors	hour	16.54	0.2209	3.66	_____		
Harvesters	hour	16.54	0.0851	1.41	_____		
Self-Propelled	hour	16.54	0.0235	0.38	_____		
<b>HAND LABOR</b>							
Implements	hour	9.06	0.0507	0.46	_____		
Self-Propelled	hour	9.06	0.0117	0.10	_____		
<b>UNALLOCATED LABOR</b>							
	hour	16.52	0.2966	4.90	_____		
<b>DIESEL FUEL</b>							
Tractors	gal	4.48	3.4114	15.29	_____		
Harvesters	gal	4.48	1.4243	6.38	_____		
Self-Propelled	gal	4.48	0.2993	1.34	_____		
<b>REPAIR &amp; MAINTENANCE</b>							
Implements	acre	5.98	1.0000	5.98	_____		
Tractors	acre	2.09	1.0000	2.09	_____		
Harvesters	acre	4.15	1.0000	4.15	_____		
Self-Propelled	acre	0.40	1.0000	0.40	_____		
INTEREST ON OP. CAP.	acre	18.26	1.0000	18.26	_____		
<hr/>							
<b>TOTAL DIRECT EXPENSES</b>				<b>487.91</b>	_____		
<b>FIXED EXPENSES</b>							
Implements	acre	14.68	1.0000	14.68	_____		
Tractors	acre	14.84	1.0000	14.84	_____		
Harvesters	acre	18.26	1.0000	18.26	_____		
Self-Propelled	acre	2.92	1.0000	2.92	_____		
<hr/>							
<b>TOTAL FIXED EXPENSES</b>				<b>50.70</b>	_____		
<hr/>							
<b>TOTAL SPECIFIED EXPENSES</b>				<b>538.61</b>	_____		

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.B Summary of estimated costs and returns per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	13.66	42.0000	573.72	_____
TOTAL INCOME				573.72	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	30.40	1.0000	30.40	_____
HARVEST AIDS	acre	11.09	1.0000	11.09	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	12.21	1.0000	12.21	_____
HERBICIDES	acre	144.63	1.0000	144.63	_____
INSECTICIDES	acre	12.97	1.0000	12.97	_____
SEED/PLANTS	acre	53.50	1.0000	53.50	_____
ADJUVANTS	acre	3.30	1.0000	3.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0625	0.56	_____
OPERATOR LABOR	hour	16.54	0.3295	5.45	_____
UNALLOCATED LABOR	hour	16.52	0.2966	4.90	_____
DIESEL FUEL	gal	4.48	5.1352	23.01	_____
REPAIR & MAINTENANCE	acre	12.62	1.0000	12.62	_____
INTEREST ON OP. CAP.	acre	18.26	1.0000	18.26	_____
TOTAL DIRECT EXPENSES				487.91	_____
RETURNS ABOVE DIRECT EXPENSES				85.81	_____
TOTAL FIXED EXPENSES				50.70	_____
TOTAL SPECIFIED EXPENSES				538.61	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				35.11	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.C Estimated resource use for field operations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Non-irrigated, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre				0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD	300	0.204	0.20	Oct			0.04	0.04	0.04
Lime (Spread)	ton				0.33	Oct	0.3330				
Custom Apply Fert	acre				1.00	Oct	1.0000				
Phosphorus(46% P205)	cwt						0.8700				
Potash (60% K2O)	cwt						1.3300				
Disk Harrow	32'	MFWD	300	0.061	1.00	Oct			0.06	0.06	0.06
Field Cultivate Fld	32'	MFWD	300	0.046	1.00	Oct			0.04	0.04	0.04
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				
Valor SX	oz						2.0000				
Surfactant	pt						0.4000				
Plant & Pre-Folding	16R-30	MFWD	300	0.050	1.00	Apr			0.05	0.05	0.10
Soybean Enlist E3	lb						50.0000				
CruiserMaxx Vibrance	oz						1.6000				
Inoculant -Soybean	acre						1.0000				
Boundary	pt						2.0000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Soybeans Consultant	acre				1.00	May	1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.01
Enlist Duo	pt						3.5000				
Dual Magnum	pt						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz						32.0000				
Zidua WG	oz						1.5000				
App by Air ( 5 gal)	appl				1.00	Aug	1.0000				
Acephate 90SP	lb						0.7500				
Incidental Pest					1.00	Aug					
App by Air ( 5 gal)	appl						1.0000				
IncidentalPestTrt \$8	acre						1.0000				
App by Air ( 5 gal)	appl				1.00	Aug	1.0000				
Gramoxone SL	oz						16.0000				
Sodium Chlorate 5L	gal						0.6000				
Surfactant	pt						0.2000				
Header -Soybean	30' Flex	325 hp		0.085	1.00	Sep			0.08	0.08	0.08
Haul Soybeans	bu	MFWD	300	0.021	1.00	Sep	42.0000		0.02	0.02	0.02
Grain Cart Soybean	700 bu								0.02	0.02	0.01
TOTALS									0.32	0.30	0.39
											0.29

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.D Estimated costs for field operations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Non-irrigated, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Subsoiler	3 shank		2.83	0.46	1.29		0.29	4.87
Lime (Spread)	ton	19.31					1.24	20.55
Custom Apply Fert	acre	7.50					0.48	7.98
Phosphorus (46% P2O5)	cwt	43.50					2.78	46.28
Potash (60% K2O)	cwt	61.98					3.97	65.95
Disk Harrow	32'		4.25	1.97	1.93		0.52	8.67
Field Cultivate Fld	32'		3.23	1.13	1.46		0.37	6.19
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34
2,4-D Amine 4	pt	6.66					0.28	6.94
Select Max	pt	13.86					0.59	14.45
Valor SX	oz	6.40					0.27	6.67
Surfactant	pt	1.32					0.06	1.38
Plant & Pre-Folding	16R-30		3.51	3.01	2.06		0.27	8.85
Soybean Enlist E3	lb	53.50					1.71	55.21
CruiserMaxx Vibrance	oz	12.21					0.39	12.60
Inoculant -Soybean	acre	1.55					0.05	1.60
Boundary	pt	23.50					0.75	24.25
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Surfactant	pt	1.32					0.04	1.36
Soybeans Consultant	acre	6.50					0.17	6.67
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Enlist Duo	pt	30.10					0.80	30.90
Dual Magnum	pt	11.45					0.31	11.76
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Glyphosate 3lbs a.e	oz	10.88					0.29	11.17
Zidua WG	oz	13.14					0.35	13.49
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Acephate 90SP	lb	4.97					0.05	5.02
Incidental Pest								
App by Air ( 5 gal)	appl	7.60					0.08	7.68
IncidentalPestTrt \$8	acre	8.00					0.09	8.09
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Gramoxone SL	oz	5.92					0.06	5.98
Sodium Chlorate 5L	gal	5.17					0.06	5.23
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	30' Flex		6.38	5.15	2.68		0.08	14.29
Haul Soybeans	bu	11.34					0.06	11.40
Grain Cart Soybean	700 bu		1.47	0.50	0.67		0.01	2.65
TOTALS		423.11	23.01	12.62	10.91	0.00	18.26	487.91
								50.70
								538.61

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 11.E Estimated monthly income and expense flows per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	573.72
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00	22.80	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.09	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	37.80	0.00	41.26	65.57	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	0.00	0.00	12.97	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	53.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.68	0.00	0.00	0.00	0.00	0.00	2.06	0.82	0.00	0.00	0.00	3.35
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	10.31	0.00	0.00	0.00	0.00	0.00	3.51	1.34	0.00	0.00	0.00	7.85
REPAIR & MAINTENANCE	3.56	0.00	0.00	0.00	0.00	0.00	3.01	0.40	0.00	0.00	0.00	5.65
INTEREST ON OP. CAP.	9.86	0.00	0.00	0.00	1.98	0.00	3.78	1.98	0.00	0.00	0.51	0.15
TOTAL DIRECT EXPENSES	164.03	0.00	0.00	0.00	48.70	0.00	122.20	76.61	0.00	0.00	48.03	28.34
NET INCOME	-164.03	0.00	0.00	0.00	-48.70	0.00	-122.20	-76.61	0.00	0.00	-48.03	545.38
NET INCOME TO DATE	-164.03	-164.03	-164.03	-164.03	-212.73	-212.73	-334.93	-411.54	-411.54	-411.54	-459.57	85.81

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 11.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Non-irrigated, Delta Area, Mississippi, 2023

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
PRODUCT PRICE													
Soybeans		10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07	
PERCENT YIELD UNIT dollars													
50	21.00	bu	-267 -317	-252 -303	-238 -289	-224 -274	-209 -260	-195 -246	-181 -231	-166 -217	-152 -203	-137 -188	-123 -174
60	25.20	bu	-225 -275	-207 -258	-190 -241	-173 -224	-156 -207	-139 -189	-121 -172	-104 -155	-87 -138	-70 -120	-53 -103
70	29.40	bu	-183 -233	-163 -213	-143 -193	-123 -173	-102 -153	-82 -133	-62 -113	-42 -93	-22 -73	-2 -53	17 -33
80	33.60	bu	-141 -192	-118 -169	-95 -146	-72 -123	-49 -100	-26 -77	-3 -54	19 -31	42 -8	65 14	88 37
90	37.80	bu	-99 -150	-73 -124	-47 -98	-22 -72	3 -46	29 -21	55 4	81 30	107 56	132 82	158 107
100	42.00	bu	-57 -108	-28 -79	-0 -50	28 -22	57 6	85 35	114 63	143 92	171 121	200 149	229 178
110	46.20	bu	-15 -66	15 -34	47 -3	78 28	110 59	142 91	173 122	205 154	236 186	268 217	299 249
120	50.40	bu	26 -24	60 9	95 44	129 78	163 113	198 147	232 181	267 216	301 250	335 285	370 319
130	54.60	bu	68 17	105 54	142 91	179 129	217 166	254 203	291 241	329 278	366 315	403 352	440 390
140	58.80	bu	109 59	150 99	190 139	230 179	270 219	310 260	350 300	391 340	431 380	471 420	511 460
150	63.00	bu	151 101	194 144	237 187	280 230	323 273	366 316	409 359	453 402	496 445	539 488	582 531

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 12.A Estimated costs per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	5.0000	38.00	_____
HARVEST AIDS					
Gramoxone SL	oz	0.37	16.0000	5.92	_____
Sodium Chlorate 5L	gal	8.61	0.6000	5.17	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
Miravis Top	oz	5.31	13.7000	72.75	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	64.0000	21.76	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Select Max	pt	13.86	1.0000	13.86	_____
Valor SX	oz	3.20	2.0000	6.40	_____
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Enlist Duo	pt	8.60	3.5000	30.10	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
Zidua WG	oz	8.76	1.5000	13.14	_____
INSECTICIDES					
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Incidental Pest Trt	acre	\$8	8.00	8.00	_____
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.07	50.0000	53.50	_____
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.3601	5.97	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0235	0.38	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
HAND LABOR					
Implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0117	0.10	_____
UNALLOCATED LABOR					
hour	16.51	0.3512	5.80	_____	
DIESEL FUEL					
Tractors	gal	4.48	5.0744	22.75	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.2993	1.34	_____
Roll-Out Pipe Irr.	gal	4.48	7.3316	32.85	_____
REPAIR & MAINTENANCE					
Implements	acre	6.83	1.0000	6.83	_____
Tractors	acre	3.16	1.0000	3.16	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.40	1.0000	0.40	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	21.26	1.0000	21.26	_____
TOTAL DIRECT EXPENSES				640.27	_____
FIXED EXPENSES					
Implements	acre	18.30	1.0000	18.30	_____
Tractors	acre	22.39	1.0000	22.39	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	2.92	1.0000	2.92	_____
Roll-Out Pipe Irr.	acre	65.01	1.0000	65.01	_____
TOTAL FIXED EXPENSES				126.88	_____
TOTAL SPECIFIED EXPENSES				767.15	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.B Summary of estimated costs and returns per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
INCOME				dollars	dollars
Soybeans	bu	13.66	60.0000	819.60	_____
<b>TOTAL INCOME</b>				<b>819.60</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	38.00	1.0000	38.00	_____
HARVEST AIDS	acre	11.09	1.0000	11.09	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	84.96	1.0000	84.96	_____
HERBICIDES	acre	144.63	1.0000	144.63	_____
INSECTICIDES	acre	12.97	1.0000	12.97	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	53.50	1.0000	53.50	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0625	0.56	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	16.54	0.4687	7.76	_____
UNALLOCATED LABOR	hour	16.51	0.3512	5.80	_____
DIESEL FUEL	gal	4.48	14.1298	63.32	_____
REPAIR & MAINTENANCE	acre	21.70	1.0000	21.70	_____
INTEREST ON OP. CAP.	acre	21.26	1.0000	21.26	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>640.27</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>179.33</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>126.88</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>767.15</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>52.45</b>	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.C Estimated resource use for field operations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre				0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD	300	0.204	0.20	Oct			0.04	0.04	0.04
Lime (Spread)	ton				0.33	Oct	0.3330				
Custom Apply Fert	acre				1.00	Oct	1.0000				
Phosphorus(46% P205)	cwt						0.8700				
Potash (60% K2O)	cwt						1.3300				
Disk Harrow	32'	MFWD	300	0.061	1.00	Oct			0.06	0.06	0.06
Field Cultivate Fld	32'	MFWD	300	0.046	1.00	Oct			0.04	0.04	0.04
Bed/Lister-Roll-Fo	16R-30	MFWD	300	0.060	1.00	Oct			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				
Valor SX	oz						2.0000				
Surfactant	pt						0.4000				
Plant & Pre-Folding	16R-30	MFWD	300	0.050	1.00	Apr			0.05	0.05	0.10
Soybean Enlist E3	lb						50.0000				
CruiserMaxx Vibrance	oz						1.6000				
Inoculant -Soybean	acre						1.0000				
Boundary	pt						2.0000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Soybeans Consultant	acre				1.00	May	1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.01
Enlist Duo	pt						3.5000				
Dual Magnum	pt						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz						32.0000				
Zidua WG	oz						1.5000				
App by Air ( 5 gal)	appl				1.00	Jul	1.0000				
Miravis Top	oz						13.7000				
Surfactant	pt						0.1000				
App by Air ( 5 gal)	appl				1.00	Aug	1.0000				
Acephate 90SP	lb						0.7500				
Incidental Pest					1.00	Aug					
App by Air ( 5 gal)	appl						1.0000				
IncidentalPestTrt \$8	acre						1.0000				
App by Air ( 5 gal)	appl				1.00	Aug	1.0000				
Gramoxone SL	oz						16.0000				
Sodium Chlorate 5L	gal						0.6000				
Surfactant	pt						0.2000				
Header -Soybean	30' Flex	325 hp		0.085	1.00	Sep			0.08	0.08	0.08
Haul Soybeans	bu						60.0000				
Grain Cart Soybean	700 bu	MFWD	300	0.021	1.00	Sep			0.02	0.02	0.02
Roll-Out Pipe Irr.	acre						1.0000		0.07	0.07	0.44
----- ----- -----											
TOTALS							0.46	0.44	0.89	0.35	

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance

levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.D Estimated costs for field operations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Subsoiler	3 shank		2.83	0.46	1.29		0.29	4.87
Lime (Spread)	ton	19.31					1.24	20.55
Custom Apply Fert	acre	7.50					0.48	7.98
Phosphorus (46% P2O5)	cwt	43.50					2.78	46.28
Potash (60% K2O)	cwt	61.98					3.97	65.95
Disk Harrow	32'		4.25	1.97	1.93		0.52	8.67
Field Cultivate Fld	32'		3.23	1.13	1.46		0.37	6.19
Bed/Lister-Roll-Fo	16R-30		4.20	1.18	1.90		0.47	7.75
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34
2,4-D Amine 4	pt	6.66					0.28	6.94
Select Max	pt	13.86					0.59	14.45
Valor SX	oz	6.40					0.27	6.67
Surfactant	pt	1.32					0.06	1.38
Plant & Pre-Folding	16R-30		3.51	3.01	2.06		0.27	8.85
Soybean Enlist E3	lb	53.50					1.71	55.21
CruiserMaxx Vibrance	oz	12.21					0.39	12.60
Inoculant -Soybean	acre	1.55					0.05	1.60
Boundary	pt	23.50					0.75	24.25
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Surfactant	pt	1.32					0.04	1.36
Soybeans Consultant	acre	6.50					0.17	6.67
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Enlist Duo	pt	30.10					0.80	30.90
Dual Magnum	pt	11.45					0.31	11.76
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Glyphosate 3lbs a.e	oz	10.88					0.29	11.17
Zidua WG	oz	13.14					0.35	13.49
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Miravis Top	oz	72.75					1.16	73.91
Surfactant	pt	0.33					0.01	0.34
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Acephate 90SP	lb	4.97					0.05	5.02
Incidental Pest								
App by Air ( 5 gal)	appl	7.60					0.08	7.68
IncidentalPestTrt \$8	acre	8.00					0.09	8.09
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Gramoxone SL	oz	5.92					0.06	5.98
Sodium Chlorate 5L	gal	5.17					0.06	5.23
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	30' Flex		6.38	5.15	2.68		0.08	14.29
Haul Soybeans	bu	16.20					0.09	16.29
Grain Cart Soybean	700 bu		1.47	0.50	0.67		0.01	2.65
Roll-Out Pipe Irr.	acre	7.92	36.11	7.90	4.61		1.21	57.75
TOTALS		516.57	63.32	21.70	17.42	0.00	21.26	640.27
								126.88
								767.15

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 12.E Estimated monthly income and expense flows per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	819.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	7.60	22.80	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.09	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	12.21	0.00	0.00	0.00	72.75	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	37.80	0.00	41.26	65.57	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	0.00	0.00	12.97	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	0.00	53.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.33	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.21	0.00	0.00	0.00	0.00	0.00	2.06	1.05	2.87	0.23	0.00	4.00
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	16.17	0.00	0.00	0.00	0.00	0.00	3.51	1.34	22.76	10.95	0.00	8.59
REPAIR & MAINTENANCE	5.10	0.00	0.00	0.00	0.00	0.00	3.01	0.40	5.96	1.40	0.00	5.83
INTEREST ON OP. CAP.	10.50	0.00	0.00	0.00	1.98	0.00	3.78	1.99	0.82	1.49	0.51	0.19
TOTAL DIRECT EXPENSES	174.60	0.00	0.00	0.00	48.70	0.00	122.20	76.85	40.33	94.75	48.03	34.81
NET INCOME	-174.60	0.00	0.00	0.00	-48.70	0.00	-122.20	-76.85	-40.33	-94.75	-48.03	784.79
NET INCOME TO DATE	-174.60	-174.60	-174.60	-174.60	-223.30	-223.30	-345.50	-422.35	-462.68	-557.43	-605.46	179.33

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 12.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Soybeans	PRODUCT PRICE												
	10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07		
PERCENT	YIELD	UNIT	dollars										
50	30.00	bu	-324 -451	-304 -431	-283 -410	-263 -390	-242 -369	-222 -349	-201 -328	-181 -308	-160 -287	-140 -267	-119 -246
60	36.00	bu	-264 -391	-240 -367	-215 -342	-191 -318	-166 -293	-141 -268	-117 -244	-92 -219	-68 -195	-43 -170	-19 -145
70	42.00	bu	-205 -331	-176 -303	-147 -274	-119 -245	-90 -217	-61 -188	-32 -159	-4 -131	24 -102	53 -73	81 -45
80	48.00	bu	-145 -272	-112 -239	-79 -206	-46 -173	-14 -140	18 -108	51 -75	84 -42	117 -9	149 22	182 55
90	54.00	bu	-85 -212	-48 -175	-11 -138	25 -101	62 -64	98 -27	135 9	172 45	209 82	246 119	283 156
100	60.00	bu	-25 -152	15 -111	56 -70	97 -29	138 11	179 52	220 93	261 134	302 175	343 216	384 257
110	66.00	bu	34 -92	79 -47	124 -2	169 42	214 87	259 132	304 177	349 222	394 268	439 313	485 358
120	72.00	bu	94 -32	143 16	192 65	241 114	290 163	339 213	389 262	438 311	487 360	536 409	585 458
130	78.00	bu	153 27	207 80	260 133	313 186	367 240	420 293	473 346	526 399	580 453	633 506	686 559
140	84.00	bu	213 86	271 144	328 201	385 259	443 316	500 373	558 431	615 488	672 545	730 603	787 660
150	90.00	bu	273 146	335 208	396 269	458 331	519 392	580 454	642 515	703 577	765 638	826 699	888 761

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 13.A Estimated costs per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.0000	30.40	_____
HARVEST AIDS					
Gramoxone SL	oz	0.37	16.0000	5.92	_____
Sodium Chlorate 5L	gal	8.61	0.6000	5.17	_____
FERTILIZERS					
Phosphorus(46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
Miravis Top	oz	5.31	13.7000	72.75	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	64.0000	21.76	_____
Select Max	pt	13.86	1.0000	13.86	_____
Valor SX	oz	3.20	2.0000	6.40	_____
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Enlist Duo	pt	8.60	3.5000	30.10	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
INSECTICIDES					
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.07	50.0000	53.50	_____
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.3362	5.57	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0352	0.57	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0176	0.15	_____
UNALLOCATED LABOR					
hour	16.50	0.2284	3.77	_____	
DIESEL FUEL					
Tractors	gal	4.48	3.8348	17.16	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.4490	2.01	_____
Contour Flood Irr.	gal	4.48	10.9974	49.26	_____
REPAIR & MAINTENANCE					
Implements	acre	5.50	1.0000	5.50	_____
Tractors	acre	2.44	1.0000	2.44	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.60	1.0000	0.60	_____
Contour Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	20.75	1.0000	20.75	_____
TOTAL DIRECT EXPENSES				618.92	_____
FIXED EXPENSES					
Implements	acre	12.62	1.0000	12.62	_____
Tractors	acre	17.27	1.0000	17.27	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	4.38	1.0000	4.38	_____
Contour Flood Irr.	acre	51.51	1.0000	51.51	_____
TOTAL FIXED EXPENSES				104.04	_____
TOTAL SPECIFIED EXPENSES				722.96	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.B Summary of estimated costs and returns per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
INCOME				dollars	dollars
Soybeans	bu	13.66	53.0000	723.98	_____
<b>TOTAL INCOME</b>				<b>723.98</b>	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	30.40	1.0000	30.40	_____
HARVEST AIDS	acre	11.09	1.0000	11.09	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	84.96	1.0000	84.96	_____
HERBICIDES	acre	124.83	1.0000	124.83	_____
INSECTICIDES	acre	12.97	1.0000	12.97	_____
SEED/PLANTS	acre	53.50	1.0000	53.50	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0683	0.61	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	16.54	0.4566	7.55	_____
UNALLOCATED LABOR	hour	16.50	0.2284	3.77	_____
DIESEL FUEL	gal	4.48	16.7057	74.81	_____
REPAIR & MAINTENANCE	acre	27.00	1.0000	27.00	_____
INTEREST ON OP. CAP.	acre	20.75	1.0000	20.75	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>618.92</b>	_____
RETURNS ABOVE DIRECT EXPENSES				105.06	_____
<b>TOTAL FIXED EXPENSES</b>				<b>104.04</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>722.96</b>	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				1.02	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.C Estimated resource use for field operations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	OVER MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Disk Harrow	32'	MFWD 300	0.061	1.00	Nov		0.06	0.06	0.06	0.05
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Sprayer 600-825gal	90' 250hp			0.011	1.00 Feb				0.01	0.01 0.01
Glyphosate 3lbs a.e.	oz					32.0000				
Select Max	pt					1.0000				
Surfactant	pt					0.4000				
Valor SX	oz					2.0000				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	May		0.05	0.05	0.10	0.04
Soybean Enlist E3	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Sprayer 600-825gal	90' 250hp			0.011	1.00 May				0.01	0.01 0.01
Enlist Duo	pt					3.5000				
Dual Magnum	pt					1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00 Jun				0.01	0.01 0.01
Glyphosate 3lbs a.e.	oz					32.0000				
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Sep	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00 Oct			0.08	0.08	0.08	0.07
Haul Soybeans	bu					53.0000				
Grain Cart Soybean	700 bu	MFWD 300	0.021	1.00 Oct			0.02	0.02	0.02	0.01
Contour Flood Irr.	acre				Jul	1.0000	0.20	0.20	0.51	
-----										
<b>TOTALS</b>							0.45	0.42	0.83	0.22

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.D Estimated costs for field operations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Disk Harrow	32'		4.25	1.97	1.93		0.52	8.67
Lime (Spread)	ton	19.31					1.24	20.55
Custom Apply Fert	acre	7.50					0.48	7.98
Phosphorus (46% P2O5)	cwt	43.50					2.78	46.28
Potash (60% K2O)	cwt	61.98					3.97	65.95
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.06	1.34
Glyphosate 3lbs a.e.	oz	10.88					0.52	11.40
Select Max	pt	13.86					0.67	14.53
Surfactant	pt	1.32					0.06	1.38
Valor SX	oz	6.40					0.31	6.71
Soybeans Consultant	acre	6.50					0.21	6.71
Plant & Pre-Folding	16R-30		3.51	3.01	2.06		0.27	8.85
Soybean Enlist E3	lb	53.50					1.71	55.21
CruiserMaxx Vibrance	oz	12.21					0.39	12.60
Inoculant -Soybean	acre	1.55					0.05	1.60
Boundary	pt	23.50					0.75	24.25
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Surfactant	pt	1.32					0.04	1.36
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.04	1.32
Enlist Duo	pt	30.10					0.96	31.06
Dual Magnum	pt	11.45					0.37	11.82
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Glyphosate 3lbs a.e.	oz	10.88					0.29	11.17
App by Air ( 5 gal)	appl	7.60					0.16	7.76
Miravis Top	oz	72.75					1.55	74.30
Surfactant	pt	0.33					0.01	0.34
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Acephate 90SP	lb	4.97					0.08	5.05
Incidental Pest								
App by Air ( 5 gal)	appl	7.60					0.08	7.68
IncidentalPestTrt \$8	acre	8.00					0.09	8.09
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Gramoxone SL	oz	5.92					0.06	5.98
Sodium Chlorate 5L	gal	5.17					0.06	5.23
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	30' Flex		6.38	5.15	2.68		0.08	14.29
Haul Soybeans	bu	14.31					0.08	14.39
Grain Cart Soybean	700 bu		1.47	0.50	0.67		0.01	2.65
Contour Flood Irr.	acre	2.25	57.19	15.77	6.18		1.78	83.17
TOTALS		481.61	74.81	27.00	14.75	0.00	20.75	618.92
								104.04
								722.96

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 13.E Estimated monthly income and expense flows per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	723.98
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	7.60	15.20	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.09	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	72.75	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	31.14	0.00	0.00	82.81	10.88	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	0.00	4.97	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	53.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.32	0.00	0.00	1.32	0.00	0.33	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.93	0.00	0.00	0.41	0.00	0.00	2.92	2.43	1.75	1.75	0.21	3.35
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	4.25	0.00	0.00	0.67	0.00	0.00	4.18	19.99	18.69	18.69	0.49	7.85
REPAIR & MAINTENANCE	1.97	0.00	0.00	0.20	0.00	0.00	3.21	9.44	3.22	3.22	0.09	5.65
INTEREST ON OP. CAP.	9.20	0.00	0.00	1.62	0.00	0.00	5.37	1.20	2.22	0.58	0.39	0.17
TOTAL DIRECT EXPENSES	152.97	0.00	0.00	35.36	0.00	0.00	173.57	46.19	106.56	36.81	36.13	31.33
NET INCOME	-152.97	0.00	0.00	-35.36	0.00	0.00	-173.57	-46.19	-106.56	-36.81	-36.13	692.65
NET INCOME TO DATE	-152.97	-152.97	-152.97	-188.33	-188.33	-188.33	-361.90	-408.09	-514.65	-551.46	-587.59	105.06

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 13.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, full-season, Enlist E3, stale seedbed, 16R30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
		PRODUCT PRICE											
Soybeans		10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07	
PERCENT	YIELD	UNIT	dollars										
50	26.50	bu	-340 -444	-322 -426	-304 -408	-285 -389	-267 -371	-249 -353	-231 -335	-213 -317	-195 -299	-177 -281	-159 -263
60	31.80	bu	-287 -391	-265 -369	-243 -347	-222 -326	-200 -304	-178 -282	-157 -261	-135 -239	-113 -217	-91 -195	-70 -174
70	37.10	bu	-234 -338	-209 -313	-183 -287	-158 -262	-133 -237	-107 -211	-82 -186	-57 -161	-31 -135	-6 -110	18 -85
80	42.40	bu	-181 -285	-152 -256	-123 -227	-94 -198	-65 -169	-36 -140	-7 -111	21 -82	50 -54	78 -25	107 3
90	47.70	bu	-128 -232	-96 -200	-63 -167	-31 -135	1 -102	34 -69	66 -37	99 -4	131 27	164 60	196 92
100	53.00	bu	-75 -179	-39 -143	-3 -107	32 -71	68 -35	105 1	141 37	177 73	213 109	249 145	286 182
110	58.30	bu	-23 -127	16 -87	56 -47	96 -7	136 32	176 71	215 111	255 151	295 191	335 231	375 271
120	63.60	bu	29 -74	73 -30	116 12	160 56	203 99	246 142	290 186	333 229	377 273	420 316	464 360
130	68.90	bu	82 -21	129 25	176 72	223 119	270 166	317 213	364 260	412 308	459 355	506 402	553 449
140	74.20	bu	135 31	186 82	236 132	287 183	338 234	388 284	439 335	490 386	540 436	591 487	642 538
150	79.50	bu	188 84	242 138	296 192	351 247	405 301	459 355	514 410	568 464	622 518	677 573	731 627

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 14.A Estimated costs per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.0000	30.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
Miravis Top	oz	5.31	13.7000	72.75	_____
HERBICIDES					
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Enlist Duo	pt	8.60	3.5000	30.10	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
INSECTICIDES					
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Prevathon	oz	1.16	14.0000	16.24	_____
Bifenthrin	oz	1.13	6.4000	7.23	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.07	50.0000	53.50	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.0720	1.19	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0117	0.19	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
Implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0058	0.05	_____
UNALLOCATED LABOR					
hour	16.52	0.1452	2.40	_____	
DIESEL FUEL					
Tractors	gal	4.48	1.1121	4.98	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.1496	0.67	_____
1/2-mi Pivot Irr.	gal	4.48	16.4057	73.50	_____
REPAIR & MAINTENANCE					
Implements	acre	3.83	1.0000	3.83	_____
Tractors	acre	0.68	1.0000	0.68	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
1/2-mi Pivot Irr.	acre	12.00	1.0000	12.00	_____
INTEREST ON OP. CAP.	acre	17.19	1.0000	17.19	_____
TOTAL DIRECT EXPENSES				577.01	_____
FIXED EXPENSES					
Implements	acre	7.83	1.0000	7.83	_____
Tractors	acre	4.84	1.0000	4.84	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	1.46	1.0000	1.46	_____
1/2-mi Pivot Irr.	acre	49.95	1.0000	49.95	_____
TOTAL FIXED EXPENSES				82.34	_____
TOTAL SPECIFIED EXPENSES				659.35	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.B Summary of estimated costs and returns per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Soybeans	bu	13.66	50.0000	683.00	_____
<b>TOTAL INCOME</b>				<b>683.00</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	30.40	1.0000	30.40	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	84.96	1.0000	84.96	_____
HERBICIDES	acre	82.81	1.0000	82.81	_____
INSECTICIDES	acre	36.44	1.0000	36.44	_____
SEED/PLANTS	acre	53.50	1.0000	53.50	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0566	0.51	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	16.54	0.1689	2.79	_____
UNALLOCATED LABOR	hour	16.52	0.1452	2.40	_____
DIESEL FUEL	gal	4.48	19.0919	85.53	_____
REPAIR & MAINTENANCE	acre	20.86	1.0000	20.86	_____
INTEREST ON OP. CAP.	acre	17.19	1.0000	17.19	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>577.01</b>	_____
RETURNS ABOVE DIRECT EXPENSES				<b>105.99</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>82.34</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>659.35</b>	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				<b>23.65</b>	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.C Estimated resource use for field operations, per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
-----hours-----											
Soil Test	acre			0.33	Nov	0.3330					
Lime (Spread)	ton			0.33	Nov	0.3330					
Custom Apply Fert	acre			1.00	Nov	1.0000					
Phosphorus (46% P2O5)	cwt					0.8700					
Potash (60% K2O)	cwt					1.3300					
Soybeans Consultant	acre			1.00	May	1.0000					
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	Jun			0.05	0.05	0.10	0.04
Soybean Enlist E3	lb					50.0000					
CruiserMaxx Vibrance	oz					1.6000					
Inoculant -Soybean	acre					1.0000					
Boundary	pt					2.0000					
Gramoxone SL 2.0	oz					48.0000					
Surfactant	pt					0.4000					
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.01	
Enlist Duo	pt					3.5000					
Dual Magnum	pt					1.0000					
App by Air ( 5 gal)	appl			1.00	Aug	1.0000					
Miravis Top	oz					13.7000					
Surfactant	pt					0.1000					
App by Air ( 5 gal)	appl			1.00	Aug	1.0000					
Acephate 90SP	lb					0.7500					
App by Air ( 5 gal)	appl			1.00	Aug	1.0000					
Prevathon	oz					14.0000					
Surfactant	pt					0.1000					
Bifenthrin	oz					6.4000					
Incidental Pest				1.00	Sep						
App by Air ( 5 gal)	appl					1.0000					
IncidentalPestTrt \$8	acre					1.0000					
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct			0.08	0.08	0.08	0.07
Haul Soybeans	bu					50.0000					
Grain Cart Soybean	700 bu	MFWD 300	0.021	1.00	Oct			0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre					1.0000			0.05		
-----											
TOTALS								0.16	0.15	0.27	0.14

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.D Estimated costs for field operations, per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Soil Test	acre	3.33				0.21	3.54	3.54
Lime (Spread)	ton	19.31				1.24	20.55	20.55
Custom Apply Fert	acre	7.50				0.48	7.98	7.98
Phosphorus (46% P2O5)	cwt	43.50				2.78	46.28	46.28
Potash (60% K2O)	cwt	61.98				3.97	65.95	65.95
Soybeans Consultant	acre	6.50				0.21	6.71	6.71
Plant & Pre-Folding	16R-30		3.51	3.01	2.02	0.23	8.77	8.94
Soybean Enlist E3	lb	53.50				1.43	54.93	54.93
CruiserMaxx Vibrance	oz	12.21				0.33	12.54	12.54
Inoculant -Soybean	acre	1.55				0.04	1.59	1.59
Boundary	pt	23.50				0.63	24.13	24.13
Gramoxone SL 2.0	oz	17.76				0.47	18.23	18.23
Surfactant	pt	1.32				0.04	1.36	1.36
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41	0.03	1.31	1.46
Enlist Duo	pt	30.10				0.64	30.74	30.74
Dual Magnum	pt	11.45				0.24	11.69	11.69
App by Air ( 5 gal)	appl	7.60				0.12	7.72	7.72
Miravis Top	oz	72.75				1.16	73.91	73.91
Surfactant	pt	0.33				0.01	0.34	0.34
App by Air ( 5 gal)	appl	7.60				0.12	7.72	7.72
Acephate 90SP	lb	4.97				0.08	5.05	5.05
App by Air ( 5 gal)	appl	7.60				0.12	7.72	7.72
Prevathon	oz	16.24				0.26	16.50	16.50
Surfactant	pt	0.33				0.01	0.34	0.34
Bifenthrin	oz	7.23				0.12	7.35	7.35
Incidental Pest								
App by Air ( 5 gal)	appl	7.60				0.08	7.68	7.68
IncidentalPestTrt \$8	acre	8.00				0.09	8.09	8.09
Header -Soybean	30' Flex		6.38	5.15	2.62	0.08	14.23	19.97
Haul Soybeans	bu	13.50				0.07	13.57	13.57
Grain Cart Soybean	700 bu		1.47	0.50	0.65	0.01	2.63	2.02
1/2-mi Pivot Irr.	acre		73.50	12.00	0.47	1.89	87.86	49.95
<b>TOTALS</b>		447.26	85.53	20.86	6.17	0.00	17.19	577.01
								82.34
								659.35

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 14.E Estimated monthly income and expense flows per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	683.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.80	7.60	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	72.75	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.26	41.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.44	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.66	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.06	0.46	0.04	0.00	3.27
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.56	30.07	22.05	0.00	7.85
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.42	1.11	0.68	0.00	5.65
INTEREST ON OP. CAP.	8.68	0.00	0.00	0.00	0.00	0.00	0.22	4.04	1.56	2.36	0.17	0.16
TOTAL DIRECT EXPENSES	144.30	0.00	0.00	0.00	0.00	0.00	7.06	154.92	74.75	149.78	15.77	30.43
NET INCOME	-144.30	0.00	0.00	0.00	0.00	0.00	-7.06	-154.92	-74.75	-149.78	-15.77	652.57
NET INCOME TO DATE	-144.30	-144.30	-144.30	-144.30	-144.30	-144.30	-151.36	-306.28	-381.03	-530.81	-546.58	105.99

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 14.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07
PERCENT	YIELD	UNIT	dollars										
50	25.00	bu	-314 -396	-297 -379	-279 -362	-262 -345	-245 -328	-228 -311	-211 -293	-194 -276	-177 -259	-160 -242	-143 -225
60	30.00	bu	-264 -346	-243 -326	-223 -305	-202 -285	-182 -264	-161 -244	-141 -223	-120 -203	-100 -182	-79 -162	-59 -141
70	35.00	bu	-214 -296	-190 -272	-166 -248	-142 -224	-118 -201	-94 -177	-70 -153	-47 -129	-23 -105	0 -81	24 -57
80	40.00	bu	-164 -246	-137 -219	-109 -192	-82 -164	-55 -137	-27 -110	-0 -82	26 -55	54 -28	81 -0	108 26
90	45.00	bu	-114 -196	-83 -166	-53 -135	-22 -104	8 -74	39 -43	69 -12	100 18	131 48	161 79	192 110
100	50.00	bu	-64 -147	-30 -112	3 -78	37 -44	71 -10	105 23	140 57	174 91	208 126	242 160	276 194
110	55.00	bu	-14 -97	22 -59	60 -22	97 15	135 53	172 90	210 128	248 165	285 203	323 240	360 278
120	60.00	bu	34 -47	75 -6	116 34	157 75	198 116	239 157	280 198	321 239	362 280	403 321	444 362
130	65.00	bu	84 2	129 46	173 91	218 135	262 180	306 224	351 268	395 313	440 357	484 402	528 446
140	70.00	bu	134 52	182 100	230 147	278 195	325 243	373 291	421 339	469 387	517 434	565 482	612 530
150	75.00	bu	184 102	235 153	287 204	338 255	389 307	440 358	491 409	543 460	594 512	645 563	696 614

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 15.A Estimated costs per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 Non-irrigated, All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	3.0000	22.80	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
HERBICIDES					
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Enlist Duo	pt	8.60	3.5000	30.10	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
INSECTICIDES					
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Prevathon	oz	1.16	14.0000	16.24	_____
Bifenthrin	oz	1.13	6.4000	7.23	_____
Incidental Pest Trt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Enlist E3	lb	1.07	50.0000	53.50	_____
ADJUVANTS					
Surfactant	pt	3.30	0.5000	1.65	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.0720	1.19	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0117	0.19	_____
HAND LABOR					
implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0058	0.05	_____
UNALLOCATED LABOR					
DIESEL FUEL					
Tractors	gal	4.48	1.1121	4.98	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.1496	0.67	_____
REPAIR & MAINTENANCE					
implements	acre	3.83	1.0000	3.83	_____
Tractors	acre	0.68	1.0000	0.68	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	-----
TOTAL DIRECT EXPENSES				400.40	_____
FIXED EXPENSES					
implements	acre	7.83	1.0000	7.83	_____
Tractors	acre	4.84	1.0000	4.84	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	1.46	1.0000	1.46	_____
TOTAL FIXED EXPENSES				32.39	_____
TOTAL SPECIFIED EXPENSES				432.79	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.B Summary of estimated costs and returns per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 Non-irrigated, All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Soybeans	bu	13.66	25.0000	341.50	_____
<b>TOTAL INCOME</b>				<b>341.50</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	22.80	1.0000	22.80	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	12.21	1.0000	12.21	_____
HERBICIDES	acre	82.81	1.0000	82.81	_____
INSECTICIDES	acre	36.44	1.0000	36.44	_____
SEED/PLANTS	acre	53.50	1.0000	53.50	_____
ADJUVANTS	acre	1.65	1.0000	1.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0566	0.51	_____
OPERATOR LABOR	hour	16.54	0.1689	2.79	_____
UNALLOCATED LABOR	hour	16.52	0.1452	2.40	_____
DIESEL FUEL	gal	4.48	2.6861	12.03	_____
REPAIR & MAINTENANCE	acre	8.86	1.0000	8.86	_____
INTEREST ON OP. CAP.	acre	13.98	1.0000	13.98	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>400.40</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>-58.90</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>32.39</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>432.79</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>-91.29</b>	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.C Estimated resource use for field operations, per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 Non-irrigated, All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR	
-----hours-----											
Soil Test	acre			0.33	Nov	0.3330					
Lime (Spread)	ton			0.33	Nov	0.3330					
Custom Apply Fert	acre			1.00	Nov	1.0000					
Phosphorus (46% P2O5)	cwt					0.8700					
Potash (60% K2O)	cwt					1.3300					
Soybeans Consultant	acre			1.00	May	1.0000					
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	Jun			0.05	0.05	0.10	0.04
Soybean Enlist E3	lb					50.0000					
CruiserMaxx Vibrance	oz					1.6000					
Inoculant -Soybean	acre					1.0000					
Boundary	pt					2.0000					
Gramoxone SL 2.0	oz					48.0000					
Surfactant	pt					0.4000					
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.01	
Enlist Duo	pt					3.5000					
Dual Magnum	pt					1.0000					
App by Air ( 5 gal)	appl			1.00	Aug	1.0000					
Acephate 90SP	lb					0.7500					
App by Air ( 5 gal)	appl			1.00	Aug	1.0000					
Prevathon	oz					14.0000					
Surfactant	pt					0.1000					
Bifenthrin	oz					6.4000					
Incidental Pest				1.00	Sep						
App by Air ( 5 gal)	appl					1.0000					
IncidentalPestTrt \$8	acre					1.0000					
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct			0.08	0.08	0.08	0.07
Haul Soybeans	bu					25.0000					
Grain Cart Soybean	700 bu	MFWD 300	0.021	1.00	Oct			0.02	0.02	0.02	0.01
-----											
<b>TOTALS</b>						0.16	0.15	0.22	0.14		

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.D Estimated costs for field operations, per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 Non-irrigated, All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33				0.21	3.54	3.54
Lime (Spread)	ton	19.31				1.24	20.55	20.55
Custom Apply Fert	acre	7.50				0.48	7.98	7.98
Phosphorus (46% P2O5)	cwt	43.50				2.78	46.28	46.28
Potash (60% K2O)	cwt	61.98				3.97	65.95	65.95
Soybeans Consultant	acre	6.50				0.21	6.71	6.71
Plant & Pre-Folding	16R-30		3.51	3.01	2.02	0.23	8.77	8.94
Soybean Enlist E3	lb	53.50				1.43	54.93	54.93
CruiserMaxx Vibrance	oz	12.21				0.33	12.54	12.54
Inoculant -Soybean	acre	1.55				0.04	1.59	1.59
Boundary	pt	23.50				0.63	24.13	24.13
Gramoxone SL 2.0	oz	17.76				0.47	18.23	18.23
Surfactant	pt	1.32				0.04	1.36	1.36
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41	0.03	1.31	1.46
Enlist Duo	pt	30.10				0.64	30.74	30.74
Dual Magnum	pt	11.45				0.24	11.69	11.69
App by Air ( 5 gal)	appl	7.60				0.12	7.72	7.72
Acephate 90SP	lb	4.97				0.08	5.05	5.05
App by Air ( 5 gal)	appl	7.60				0.12	7.72	7.72
Prevathon	oz	16.24				0.26	16.50	16.50
Surfactant	pt	0.33				0.01	0.34	0.34
Bifenthrin	oz	7.23				0.12	7.35	7.35
Incidental Pest								
App by Air ( 5 gal)	appl	7.60				0.08	7.68	7.68
IncidentalPestTrt \$8	acre	8.00				0.09	8.09	8.09
Header -Soybean	30' Flex		6.38	5.15	2.62	0.08	14.23	19.97
Haul Soybeans	bu	6.75				0.04	6.79	6.79
Grain Cart Soybean	700 bu		1.47	0.50	0.65	0.01	2.63	2.02
TOTALS		359.83	12.03	8.86	5.70	0.00	13.98	400.40
								32.39
								432.79

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 15.E Estimated monthly income and expense flows per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 Non-irrigated, All Areas, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	341.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.20	7.60	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.26	41.55	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.44	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.33	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.02	0.41	0.00	0.00	3.27
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51	0.67	0.00	0.00	7.85
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	0.20	0.00	0.00	5.65
INTEREST ON OP. CAP.	8.68	0.00	0.00	0.00	0.00	0.00	0.21	3.17	0.91	0.71	0.17	0.13
TOTAL DIRECT EXPENSES	144.30	0.00	0.00	0.00	0.00	0.00	6.71	121.55	43.74	44.68	15.77	23.65
NET INCOME	-144.30	0.00	0.00	0.00	0.00	0.00	-6.71	-121.55	-43.74	-44.68	-15.77	317.85
NET INCOME TO DATE	-144.30	-144.30	-144.30	-144.30	-144.30	-144.30	-151.01	-272.56	-316.30	-360.98	-376.75	-58.90

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre\*. Lease costs are based on hourly usage costs.

Table 15.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, double crop after wheat, Enlist E3, 16R30"  
 Non-irrigated, All Areas, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Soybeans			10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07
PERCENT	YIELD	UNIT	dollars										
50	12.50	bu	-268 -301	-260 -292	-251 -284	-243 -275	-234 -267	-226 -258	-217 -250	-209 -241	-200 -233	-192 -224	-183 -215
60	15.00	bu	-244 -276	-233 -266	-223 -255	-213 -245	-203 -235	-192 -225	-182 -214	-172 -204	-162 -194	-151 -184	-141 -173
70	17.50	bu	-219 -251	-207 -239	-195 -227	-183 -215	-171 -203	-159 -191	-147 -179	-135 -167	-123 -155	-111 -143	-99 -131
80	20.00	bu	-194 -226	-180 -212	-166 -199	-153 -185	-139 -171	-125 -158	-112 -144	-98 -130	-84 -117	-71 -103	-57 -89
90	22.50	bu	-169 -201	-153 -186	-138 -170	-123 -155	-107 -140	-92 -124	-77 -109	-61 -94	-46 -78	-30 -63	-15 -47
100	25.00	bu	-144 -176	-127 -159	-110 -142	-93 -125	-75 -108	-58 -91	-41 -74	-24 -57	-7 -40	9 -22	26 -5
110	27.50	bu	-119 -151	-100 -132	-81 -114	-62 -95	-44 -76	-25 -57	-6 -39	12 -20	30 -1	49 17	68 36
120	30.00	bu	-94 -126	-73 -106	-53 -85	-32 -65	-12 -44	8 -24	28 -3	49 16	69 37	90 57	110 78
130	32.50	bu	-69 -101	-47 -79	-25 -57	-2 -35	19 -13	41 9	63 31	85 53	108 75	130 97	152 120
140	35.00	bu	-44 -76	-20 -53	3 -29	27 -5	51 18	74 42	98 66	122 90	146 114	170 138	194 162
150	37.50	bu	-19 -51	6 -26	31 -0	57 24	82 50	108 76	134 101	159 127	185 152	210 178	236 204

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 16.A Estimated costs per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
				dollars	dollars
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.0000	30.40	_____
HARVEST AIDS					
Gramoxone SL	oz	0.37	16.0000	5.92	_____
Sodium Chlorate 5L	gal	8.61	0.6000	5.17	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	96.0000	32.64	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Select Max	pt	13.86	1.0000	13.86	_____
Valor SX	oz	3.20	2.0000	6.40	_____
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
Zidua WG	oz	8.76	1.5000	13.14	_____
INSECTICIDES					
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Incidental Pest Trt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.15	50.0000	57.50	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	42.0000	11.34	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.2209	3.66	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0235	0.38	_____
HAND LABOR					
Implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0117	0.10	_____
UNALLOCATED LABOR					
hour	16.52	0.2966	4.90	_____	
DIESEL FUEL					
Tractors	gal	4.48	3.4114	15.29	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.2993	1.34	_____
REPAIR & MAINTENANCE					
Implements	acre	5.98	1.0000	5.98	_____
Tractors	acre	2.09	1.0000	2.09	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.40	1.0000	0.40	_____
INTEREST ON OP. CAP.	acre	18.16	1.0000	18.16	_____
TOTAL DIRECT EXPENSES				483.21	_____
FIXED EXPENSES					
Implements	acre	14.68	1.0000	14.68	_____
Tractors	acre	14.84	1.0000	14.84	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	2.92	1.0000	2.92	_____
TOTAL FIXED EXPENSES				50.70	_____
TOTAL SPECIFIED EXPENSES				533.91	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.B Summary of estimated costs and returns per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Soybeans	bu	13.66	42.0000	573.72	_____
<b>TOTAL INCOME</b>				<b>573.72</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	30.40	1.0000	30.40	_____
HARVEST AIDS	acre	11.09	1.0000	11.09	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	12.21	1.0000	12.21	_____
HERBICIDES	acre	136.03	1.0000	136.03	_____
INSECTICIDES	acre	12.97	1.0000	12.97	_____
SEED/PLANTS	acre	57.50	1.0000	57.50	_____
ADJUVANTS	acre	3.30	1.0000	3.30	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	11.34	1.0000	11.34	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0625	0.56	_____
OPERATOR LABOR	hour	16.54	0.3295	5.45	_____
UNALLOCATED LABOR	hour	16.52	0.2966	4.90	_____
DIESEL FUEL	gal	4.48	5.1352	23.01	_____
REPAIR & MAINTENANCE	acre	12.62	1.0000	12.62	_____
INTEREST ON OP. CAP.	acre	18.16	1.0000	18.16	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>483.21</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>90.51</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>50.70</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>533.91</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>39.81</b>	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.C Estimated resource use for field operations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Non-irrigated, Delta Area, Mississippi, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	PERF	TIMES	INPUT	POWER	ALLOC	UNALL		
		SIZE	RATE	OVER	MTH	AMOUNT	IMPLEMENT	UNIT	LABOR	LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 300	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	32'	MFWD 300	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 300	0.046	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				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	Apr		0.05	0.05	0.10	0.04
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
Dual Magnum	pt					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz					32.0000				
Zidua WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air ( 5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Haul Soybeans	bu					42.0000				
Grain Cart Soybean	700 bu	MFWD 300	0.021	1.00	Sep		0.02	0.02	0.02	0.01
-----										
TOTALS						0.32	0.30	0.39	0.29	

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.D Estimated costs for field operations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Non-irrigated, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33				0.21	3.54	3.54
Subsoiler	3 shank		2.83	0.46	1.29	0.29	4.87	2.96 7.83
Lime (Spread)	ton	19.31				1.24	20.55	20.55
Custom Apply Fert	acre	7.50				0.48	7.98	7.98
Phosphorus (46% P2O5)	cwt	43.50				2.78	46.28	46.28
Potash (60% K2O)	cwt	61.98				3.97	65.95	65.95
Disk Harrow	32'		4.25	1.97	1.93	0.52	8.67	7.45 16.12
Field Cultivate Fld	32'		3.23	1.13	1.46	0.37	6.19	6.44 12.63
App by Air ( 5 gal)	appl	7.60				0.32	7.92	7.92
Glyphosate 3lbs a.e	oz	10.88				0.46	11.34	11.34
2,4-D Amine 4	pt	6.66				0.28	6.94	6.94
Select Max	pt	13.86				0.59	14.45	14.45
Valor SX	oz	6.40				0.27	6.67	6.67
Surfactant	pt	1.32				0.06	1.38	1.38
Plant & Pre-Folding	16R-30		3.51	3.01	2.06	0.27	8.85	8.94 17.79
Soybean Seed RR2X	lb	57.50				1.84	59.34	59.34
CruiserMaxx Vibrance	oz	12.21				0.39	12.60	12.60
Inoculant -Soybean	acre	1.55				0.05	1.60	1.60
Boundary	pt	23.50				0.75	24.25	24.25
Gramoxone SL 2.0	oz	17.76				0.57	18.33	18.33
Surfactant	pt	1.32				0.04	1.36	1.36
Soybeans Consultant	acre	6.50				0.17	6.67	6.67
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41	0.03	1.31	1.46 2.77
Glyphosate 3lbs a.e	oz	10.88				0.29	11.17	11.17
Engenia	oz	10.62				0.28	10.90	10.90
Dual Magnum	pt	11.45				0.31	11.76	11.76
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41	0.03	1.31	1.46 2.77
Glyphosate 3lbs a.e	oz	10.88				0.29	11.17	11.17
Zidua WG	oz	13.14				0.35	13.49	13.49
App by Air ( 5 gal)	appl	7.60				0.08	7.68	7.68
Acephate 90SP	lb	4.97				0.05	5.02	5.02
Incidental Pest								
App by Air ( 5 gal)	appl	7.60				0.08	7.68	7.68
IncidentalPestTrt \$8	acre	8.00				0.09	8.09	8.09
App by Air ( 5 gal)	appl	7.60				0.08	7.68	7.68
Gramoxone SL	oz	5.92				0.06	5.98	5.98
Sodium Chlorate 5L	gal	5.17				0.06	5.23	5.23
Surfactant	pt	0.66				0.01	0.67	0.67
Header -Soybean	30' Flex		6.38	5.15	2.68	0.08	14.29	19.97 34.26
Haul Soybeans	bu	11.34				0.06	11.40	11.40
Grain Cart Soybean	700 bu		1.47	0.50	0.67	0.01	2.65	2.02 4.67
TOTALS		418.51	23.01	12.62	10.91	0.00	18.16	483.21 50.70 533.91

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 16.E Estimated monthly income and expense flows per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	573.72
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00	22.80	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.09	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	37.80	0.00	41.26	56.97	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	0.00	0.00	12.97	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	57.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.34
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.68	0.00	0.00	0.00	0.00	0.00	2.06	0.82	0.00	0.00	0.00	3.35
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	10.31	0.00	0.00	0.00	0.00	0.00	3.51	1.34	0.00	0.00	0.00	7.85
REPAIR & MAINTENANCE	3.56	0.00	0.00	0.00	0.00	0.00	3.01	0.40	0.00	0.00	0.00	5.65
INTEREST ON OP. CAP.	9.86	0.00	0.00	0.00	1.98	0.00	3.91	1.75	0.00	0.00	0.51	0.15
TOTAL DIRECT EXPENSES	164.03	0.00	0.00	0.00	48.70	0.00	126.33	67.78	0.00	0.00	48.03	28.34
NET INCOME	-164.03	0.00	0.00	0.00	-48.70	0.00	-126.33	-67.78	0.00	0.00	-48.03	545.38
NET INCOME TO DATE	-164.03	-164.03	-164.03	-164.03	-212.73	-212.73	-339.06	-406.84	-406.84	-406.84	-454.87	90.51

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

\* Lease costs are based on hourly usage costs.

Table 16.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Non-irrigated, Delta Area, Mississippi, 2023

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Soybeans		10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07	
PERCENT	YIELD	UNIT	dollars										
50	21.00	bu	-262 -313	-248 -298	-233 -284	-219 -270	-204 -255	-190 -241	-176 -227	-161 -212	-147 -198	-133 -183	-118 -169
60	25.20	bu	-220 -271	-203 -253	-186 -236	-168 -219	-151 -202	-134 -185	-117 -167	-99 -150	-82 -133	-65 -116	-48 -99
70	29.40	bu	-178 -229	-158 -209	-138 -189	-118 -169	-98 -148	-78 -128	-58 -108	-38 -88	-17 -68	2 -48	22 -28
80	33.60	bu	-136 -187	-113 -164	-90 -141	-67 -118	-44 -95	-21 -72	0 -49	23 -26	46 -3	69 19	92 42
90	37.80	bu	-94 -145	-68 -119	-43 -93	-17 -68	8 -42	34 -16	60 9	85 35	111 61	137 86	163 112
100	42.00	bu	-52 -103	-24 -74	4 -46	33 -17	61 11	90 39	119 68	147 97	176 125	205 154	233 183
110	46.20	bu	-11 -61	20 -30	52 1	83 32	115 64	146 96	178 127	209 159	241 190	272 222	304 253
120	50.40	bu	30 -19	65 14	99 49	134 83	168 117	202 152	237 186	271 221	306 255	340 289	375 324
130	54.60	bu	72 22	110 59	147 96	184 133	221 171	259 208	296 245	333 283	371 320	408 357	445 394
140	58.80	bu	114 63	154 104	194 144	235 184	275 224	315 264	355 304	395 345	435 385	476 425	516 465
150	63.00	bu	156 105	199 148	242 191	285 234	328 277	371 320	414 363	457 407	500 450	543 493	586 536

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 17.A Estimated costs per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	5.0000	38.00	_____
<b>HARVEST AIDS</b>					
Gramoxone SL	oz	0.37	16.0000	5.92	_____
Sodium Chlorate 5L	gal	8.61	0.6000	5.17	_____
<b>FERTILIZERS</b>					
Phosphorus (46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
<b>FUNGICIDES</b>					
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
Miravis Top	oz	5.31	13.7000	72.75	_____
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e.	oz	0.34	96.0000	32.64	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Select Max	pt	13.86	1.0000	13.86	_____
Valor SX	oz	3.20	2.0000	6.40	_____
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
Zidua WG	oz	8.76	1.5000	13.14	_____
<b>INSECTICIDES</b>					
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
<b>IRRIGATION SUPPLIES</b>					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
<b>SEED/PLANTS</b>					
Soybean Seed RR2X	lb	1.15	50.0000	57.50	_____
<b>ADJUVANTS</b>					
Surfactant	pt	3.30	1.1000	3.63	_____
<b>CUSTOM FERTILIZE</b>					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
<b>HAULING</b>					
Haul Soybeans	bu	0.27	60.0000	16.20	_____
<b>CUSTOM LIME</b>					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
<b>CROP CONSULTANT</b>					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
<b>INOCULANT</b>					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.3601	5.97	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0235	0.38	_____
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	0.3000	2.73	_____
Implements	hour	9.06	0.0625	0.57	_____
<b>HAND LABOR</b>					
Implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0117	0.10	_____
<b>UNALLOCATED LABOR</b>					
hour		16.51	0.3512	5.80	_____
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	5.0744	22.75	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.2993	1.34	_____
Roll-Out Pipe Irr.	gal	4.48	7.3316	32.85	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	6.83	1.0000	6.83	_____
Tractors	acre	3.16	1.0000	3.16	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.40	1.0000	0.40	_____
Roll-Out Pipe Irr.	acre	7.16	1.0000	7.16	_____
INTEREST ON OP. CAP.	acre	21.16	1.0000	21.16	-----
TOTAL DIRECT EXPENSES				635.57	_____
<b>FIXED EXPENSES</b>					
Implements	acre	18.30	1.0000	18.30	_____
Tractors	acre	22.39	1.0000	22.39	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	2.92	1.0000	2.92	_____
Roll-Out Pipe Irr.	acre	65.01	1.0000	65.01	_____
TOTAL FIXED EXPENSES				126.88	-----
TOTAL SPECIFIED EXPENSES				762.45	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.B Summary of estimated costs and returns per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
INCOME				dollars	dollars
Soybeans	bu	13.66	60.0000	819.60	_____
<b>TOTAL INCOME</b>				<b>819.60</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	38.00	1.0000	38.00	_____
HARVEST AIDS	acre	11.09	1.0000	11.09	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	84.96	1.0000	84.96	_____
HERBICIDES	acre	136.03	1.0000	136.03	_____
INSECTICIDES	acre	12.97	1.0000	12.97	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	57.50	1.0000	57.50	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	16.20	1.0000	16.20	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0625	0.56	_____
IRRIGATE LABOR	hour	9.06	0.3625	3.30	_____
OPERATOR LABOR	hour	16.54	0.4687	7.76	_____
UNALLOCATED LABOR	hour	16.51	0.3512	5.80	_____
DIESEL FUEL	gal	4.48	14.1298	63.32	_____
REPAIR & MAINTENANCE	acre	21.70	1.0000	21.70	_____
INTEREST ON OP. CAP.	acre	21.16	1.0000	21.16	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>635.57</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>184.03</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>126.88</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>762.45</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>57.15</b>	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.C Estimated resource use for field operations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	OVER MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Subsoiler	3 shank	MFWD 300	0.204	0.20	Oct		0.04	0.04	0.04	0.03
Lime (Spread)	ton			0.33	Oct	0.3330				
Custom Apply Fert	acre			1.00	Oct	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Disk Harrow	32'	MFWD 300	0.061	1.00	Oct		0.06	0.06	0.06	0.05
Field Cultivate Fld	32'	MFWD 300	0.046	1.00	Oct		0.04	0.04	0.04	0.04
Bed/Lister-Roll-Fo	16R-30	MFWD 300	0.060	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				
2,4-D Amine 4	pt					2.0000				
Select Max	pt					1.0000				
Valor SX	oz					2.0000				
Surfactant	pt					0.4000				
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	Apr		0.05	0.05	0.10	0.04
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Soybeans Consultant	acre			1.00	May	1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
Dual Magnum	pt					1.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz					32.0000				
Zidua WG	oz					1.5000				
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
Incidental Pest				1.00	Aug					
App by Air ( 5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Gramoxone SL	oz					16.0000				
Sodium Chlorate 5L	gal					0.6000				
Surfactant	pt					0.2000				
Header -Soybean Haul Soybeans	30' Flex	325 hp	0.085	1.00	Sep		0.08	0.08	0.08	0.07
Grain Cart Soybean Roll-Out Pipe Irr.	700 bu	MFWD 300	0.021	1.00	Sep		0.02	0.02	0.02	0.01
	acre				Jul	1.0000	0.07	0.07	0.44	
TOTALS							0.46	0.44	0.89	0.35

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.D Estimated costs for field operations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Subsoiler	3 shank		2.83	0.46	1.29		0.29	4.87
Lime (Spread)	ton	19.31					1.24	20.55
Custom Apply Fert	acre	7.50					0.48	7.98
Phosphorus (46% P2O5)	cwt	43.50					2.78	46.28
Potash (60% K2O)	cwt	61.98					3.97	65.95
Disk Harrow	32'		4.25	1.97	1.93		0.52	8.67
Field Cultivate Fld	32'		3.23	1.13	1.46		0.37	6.19
Bed/Lister-Roll-Fo	16R-30		4.20	1.18	1.90		0.47	7.75
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34
2,4-D Amine 4	pt	6.66					0.28	6.94
Select Max	pt	13.86					0.59	14.45
Valor SX	oz	6.40					0.27	6.67
Surfactant	pt	1.32					0.06	1.38
Plant & Pre-Folding	16R-30		3.51	3.01	2.06		0.27	8.85
Soybean Seed RR2X	lb	57.50					1.84	59.34
CruiserMaxx Vibrance	oz	12.21					0.39	12.60
Inoculant -Soybean	acre	1.55					0.05	1.60
Boundary	pt	23.50					0.75	24.25
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Surfactant	pt	1.32					0.04	1.36
Soybeans Consultant	acre	6.50					0.17	6.67
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Glyphosate 3lbs a.e	oz	10.88					0.29	11.17
Engenia	oz	10.62					0.28	10.90
Dual Magnum	pt	11.45					0.31	11.76
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Glyphosate 3lbs a.e	oz	10.88					0.29	11.17
Zidua WG	oz	13.14					0.35	13.49
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Miravis Top	oz	72.75					1.16	73.91
Surfactant	pt	0.33					0.01	0.34
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Acephate 90SP	lb	4.97					0.05	5.02
Incidental Pest								
App by Air ( 5 gal)	appl	7.60					0.08	7.68
IncidentalPestTrt \$8	acre	8.00					0.09	8.09
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Gramoxone SL	oz	5.92					0.06	5.98
Sodium Chlorate 5L	gal	5.17					0.06	5.23
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	30' Flex		6.38	5.15	2.68		0.08	14.29
Haul Soybeans	bu	16.20					0.09	16.29
Grain Cart Soybean	700 bu		1.47	0.50	0.67		0.01	2.65
Roll-Out Pipe Irr.	acre	7.92	36.11	7.90	4.61		1.21	57.75
<b>TOTALS</b>		511.97	63.32	21.70	17.42	0.00	21.16	635.57
								126.88
								762.45

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 17.E Estimated monthly income and expense flows per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	819.60
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	7.60	22.80	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.09	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	0.00	72.75	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	37.80	0.00	41.26	56.97	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	0.00	0.00	12.97	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	0.00	57.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	1.32	0.00	1.32	0.00	0.00	0.33	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.20
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.21	0.00	0.00	0.00	0.00	0.00	2.06	1.05	2.87	0.23	0.00	4.00
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	16.17	0.00	0.00	0.00	0.00	0.00	3.51	1.34	22.76	10.95	0.00	8.59
REPAIR & MAINTENANCE	5.10	0.00	0.00	0.00	0.00	0.00	3.01	0.40	5.96	1.40	0.00	5.83
INTEREST ON OP. CAP.	10.50	0.00	0.00	0.00	1.98	0.00	3.91	1.76	0.82	1.49	0.51	0.19
TOTAL DIRECT EXPENSES	174.60	0.00	0.00	0.00	48.70	0.00	126.33	68.02	40.33	94.75	48.03	34.81
NET INCOME	-174.60	0.00	0.00	0.00	-48.70	0.00	-126.33	-68.02	-40.33	-94.75	-48.03	784.79
NET INCOME TO DATE	-174.60	-174.60	-174.60	-174.60	-223.30	-223.30	-349.63	-417.65	-457.98	-552.73	-600.76	184.03

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

\* Lease costs are based on hourly usage costs.

Table 17.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Furrow irrigated, 9 ac-in., Delta Area, Mississippi, 2023

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Soybeans		10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07	
-----PRODUCT PRICE-----													
PERCENT	YIELD	UNIT	-----dollars-----										
50	30.00	bu	-320 -446	-299 -426	-279 -405	-258 -385	-238 -364	-217 -344	-197 -324	-176 -303	-156 -283	-135 -262	-115 -242
60	36.00	bu	-260 -387	-235 -362	-211 -337	-186 -313	-161 -288	-137 -264	-112 -239	-88 -214	-63 -190	-38 -165	-14 -141
70	42.00	bu	-200 -327	-171 -298	-143 -269	-114 -241	-85 -212	-56 -183	-28 -155	0 -126	29 -97	57 -69	86 -40
80	48.00	bu	-140 -267	-107 -234	-74 -201	-42 -169	-9 -136	23 -103	56 -70	88 -37	121 -5	154 27	187 60
90	54.00	bu	-80 -207	-43 -170	-6 -133	29 -96	66 -60	103 -23	140 13	177 50	214 87	251 124	288 161
100	60.00	bu	-20 -147	20 -106	61 -65	102 -24	143 16	184 57	225 98	265 139	306 180	347 221	388 262
110	66.00	bu	38 -87	84 -42	129 2	174 47	219 92	264 137	309 182	354 227	399 272	444 317	489 362
120	72.00	bu	98 -28	147 21	197 70	246 119	295 168	344 217	393 266	443 316	492 365	541 414	590 463
130	78.00	bu	158 31	211 85	265 138	318 191	371 244	425 298	478 351	531 404	584 457	638 511	691 564
140	84.00	bu	218 91	275 148	333 206	390 263	447 321	505 378	562 435	620 493	677 550	734 607	792 665
150	90.00	bu	278 151	339 212	401 274	462 335	524 397	585 458	647 520	708 581	770 643	831 704	893 766

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 18.A Estimated costs per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.0000	30.40	_____
HARVEST AIDS					
Gramoxone SL	oz	0.37	16.0000	5.92	_____
Sodium Chlorate 5L	gal	8.61	0.6000	5.17	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
Miravis Top	oz	5.31	13.7000	72.75	_____
HERBICIDES					
Glyphosate 3lbs a.e.	oz	0.34	96.0000	32.64	_____
Select Max	pt	13.86	1.0000	13.86	_____
Valor SX	oz	3.20	2.0000	6.40	_____
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
INSECTICIDES					
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.15	50.0000	57.50	_____
ADJUVANTS					
Surfactant	pt	3.30	1.1000	3.63	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	53.0000	14.31	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.3362	5.57	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0352	0.57	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.3125	2.82	_____
HAND LABOR					
Implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0176	0.15	_____
UNALLOCATED LABOR					
hour	16.50	0.2284	3.77	_____	
DIESEL FUEL					
Tractors	gal	4.48	3.8348	17.16	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.4490	2.01	_____
Contour Flood Irr.	gal	4.48	10.9974	49.26	_____
REPAIR & MAINTENANCE					
Implements	acre	5.50	1.0000	5.50	_____
Tractors	acre	2.44	1.0000	2.44	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.60	1.0000	0.60	_____
Contour Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	20.61	1.0000	20.61	_____
TOTAL DIRECT EXPENSES				614.18	_____
FIXED EXPENSES					
Implements	acre	12.62	1.0000	12.62	_____
Tractors	acre	17.27	1.0000	17.27	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	4.38	1.0000	4.38	_____
Contour Flood Irr.	acre	51.51	1.0000	51.51	_____
TOTAL FIXED EXPENSES				104.04	_____
TOTAL SPECIFIED EXPENSES				718.22	_____

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.B Summary of estimated costs and returns per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Soybeans	bu	13.66	53.0000	723.98	_____
TOTAL INCOME				723.98	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	30.40	1.0000	30.40	_____
HARVEST AIDS	acre	11.09	1.0000	11.09	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	84.96	1.0000	84.96	_____
HERBICIDES	acre	116.23	1.0000	116.23	_____
INSECTICIDES	acre	12.97	1.0000	12.97	_____
SEED/PLANTS	acre	57.50	1.0000	57.50	_____
ADJUVANTS	acre	3.63	1.0000	3.63	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	14.31	1.0000	14.31	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0683	0.61	_____
IRRIGATE LABOR	hour	9.06	0.3125	2.82	_____
OPERATOR LABOR	hour	16.54	0.4566	7.55	_____
UNALLOCATED LABOR	hour	16.50	0.2284	3.77	_____
DIESEL FUEL	gal	4.48	16.7057	74.81	_____
REPAIR & MAINTENANCE	acre	27.00	1.0000	27.00	_____
INTEREST ON OP. CAP.	acre	20.61	1.0000	20.61	_____
TOTAL DIRECT EXPENSES				614.18	_____
RETURNS ABOVE DIRECT EXPENSES				109.80	_____
TOTAL FIXED EXPENSES				104.04	_____
TOTAL SPECIFIED EXPENSES				718.22	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				5.76	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.C Estimated resource use for field operations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Nov		0.3330				
Disk Harrow	32'	MFWD 300	0.061	1.00	Nov			0.06	0.06	0.06	0.05
Lime (Spread)	ton			0.33	Nov		0.3330				
Custom Apply Fert	acre			1.00	Nov		1.0000				
Phosphorus (46% P2O5)	cwt						0.8700				
Potash (60% K2O)	cwt						1.3300				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Feb			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz						32.0000				
Select Max	pt						1.0000				
Surfactant	pt						0.4000				
Valor SX	oz						2.0000				
Soybeans Consultant	acre				1.00	May	1.0000				
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	May			0.05	0.05	0.10	0.04
Soybean Seed RR2X	lb						50.0000				
CruiserMaxx Vibrance	oz						1.6000				
Inoculant -Soybean	acre						1.0000				
Boundary	pt						2.0000				
Gramoxone SL 2.0	oz						48.0000				
Surfactant	pt						0.4000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz						32.0000				
Engenia	oz						12.8000				
Dual Magnum	pt						1.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz						32.0000				
App by Air ( 5 gal)	appl				1.00	Jul	1.0000				
Miravis Top	oz						13.7000				
Surfactant	pt						0.1000				
App by Air ( 5 gal)	appl				1.00	Aug	1.0000				
Acephate 90SP	lb						0.7500				
Incidental Pest					1.00	Sep					
App by Air ( 5 gal)	appl						1.0000				
IncidentalPestTrt \$8	acre						1.0000				
App by Air ( 5 gal)	appl				1.00	Sep	1.0000				
Gramoxone SL	oz						16.0000				
Sodium Chlorate 5L	gal						0.6000				
Surfactant	pt						0.2000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct			0.08	0.08	0.08	0.07
Haul Soybeans	bu						53.0000				
Grain Cart Soybean	700 bu	MFWD 300	0.021	1.00	Oct			0.02	0.02	0.02	0.01
Contour Flood Irr.	acre					Jul	1.0000	0.20	0.20	0.51	
-----											
TOTALS							0.45	0.42	0.83	0.22	

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.D Estimated costs for field operations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Disk Harrow	32'		4.25	1.97	1.93		0.52	8.67
Lime (Spread)	ton	19.31					1.24	20.55
Custom Apply Fert	acre	7.50					0.48	7.98
Phosphorus (46% P2O5)	cwt	43.50					2.78	46.28
Potash (60% K2O)	cwt	61.98					3.97	65.95
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.06	1.34
Glyphosate 3lbs a.e.	oz	10.88					0.52	11.40
Select Max	pt	13.86					0.67	14.53
Surfactant	pt	1.32					0.06	1.38
Valor SX	oz	6.40					0.31	6.71
Soybeans Consultant	acre	6.50					0.21	6.71
Plant & Pre-Folding	16R-30		3.51	3.01	2.06		0.27	8.85
Soybean Seed RR2X	lb	57.50					1.84	59.34
CruiserMaxx Vibrance	oz	12.21					0.39	12.60
Inoculant -Soybean	acre	1.55					0.05	1.60
Boundary	pt	23.50					0.75	24.25
Gramoxone SL 2.0	oz	17.76					0.57	18.33
Surfactant	pt	1.32					0.04	1.36
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.04	1.32
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23
Engenia	oz	10.62					0.34	10.96
Dual Magnum	pt	11.45					0.37	11.82
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Glyphosate 3lbs a.e.	oz	10.88					0.29	11.17
App by Air ( 5 gal)	appl	7.60					0.16	7.76
Miravis Top	oz	72.75					1.55	74.30
Surfactant	pt	0.33					0.01	0.34
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Acephate 90SP	lb	4.97					0.08	5.05
Incidental Pest								
App by Air ( 5 gal)	appl	7.60					0.08	7.68
IncidentalPestTrt \$8	acre	8.00					0.09	8.09
App by Air ( 5 gal)	appl	7.60					0.08	7.68
Gramoxone SL	oz	5.92					0.06	5.98
Sodium Chlorate 5L	gal	5.17					0.06	5.23
Surfactant	pt	0.66					0.01	0.67
Header -Soybean	30' Flex		6.38	5.15	2.68		0.08	14.29
Haul Soybeans	bu	14.31					0.08	14.39
Grain Cart Soybean	700 bu		1.47	0.50	0.67		0.01	2.65
Contour Flood Irr.	acre	2.25	57.19	15.77	6.18		1.78	83.17
TOTALS		477.01	74.81	27.00	14.75	0.00	20.61	614.18
								104.04
								718.22

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 18.E Estimated monthly income and expense flows per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	723.98
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	7.60	15.20	0.00
HARVEST AIDS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.09	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	72.75	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	31.14	0.00	0.00	74.21	10.88	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	0.00	4.97	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	57.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	1.32	0.00	0.00	1.32	0.00	0.33	0.00	0.66	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.31
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	1.93	0.00	0.00	0.41	0.00	0.00	2.92	2.43	1.75	1.75	0.21	3.35
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	4.25	0.00	0.00	0.67	0.00	0.00	4.18	19.99	18.69	18.69	0.49	7.85
REPAIR & MAINTENANCE	1.97	0.00	0.00	0.20	0.00	0.00	3.21	9.44	3.22	3.22	0.09	5.65
INTEREST ON OP. CAP.	9.20	0.00	0.00	1.62	0.00	0.00	5.23	1.20	2.22	0.58	0.39	0.17
TOTAL DIRECT EXPENSES	152.97	0.00	0.00	35.36	0.00	0.00	168.83	46.19	106.56	36.81	36.13	31.33
NET INCOME	-152.97	0.00	0.00	-35.36	0.00	0.00	-168.83	-46.19	-106.56	-36.81	-36.13	692.65
NET INCOME TO DATE	-152.97	-152.97	-152.97	-188.33	-188.33	-188.33	-357.16	-403.35	-509.91	-546.72	-582.85	109.80

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

\* Lease costs are based on hourly usage costs.

Table 18.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, full-season, RR2X/XF, stale seedbed, 16R 30"  
 Flood irrigated, 13.5 ac-in., Delta Area, Mississippi, 2023

PRODUCT	PERCENT	PERCENT												
		75	80	85	90	95	100	105	110	115	120	125		
Soybeans		10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07		
-----PRODUCT PRICE-----														
PERCENT	YIELD	UNIT	-----dollars-----											
50	26.50	bu	-335 -439	-317 -421	-299 -403	-281 -385	-263 -367	-244 -349	-226 -330	-208 -312	-190 -294	-172 -276	-154 -258	
60	31.80	bu	-282 -386	-260 -364	-239 -343	-217 -321	-195 -299	-174 -278	-152 -256	-130 -234	-108 -212	-87 -191	-65 -169	
70	37.10	bu	-229 -333	-204 -308	-179 -283	-153 -257	-128 -232	-103 -207	-77 -181	-52 -156	-27 -131	-1 -105	23 -80	
80	42.40	bu	-176 -280	-147 -251	-118 -223	-90 -194	-61 -165	-32 -136	-3 -107	25 -78	54 -49	83 -20	112 8	
90	47.70	bu	-124 -228	-91 -195	-58 -162	-26 -130	6 -97	38 -65	71 -32	103 -0	136 32	169 65	201 97	
100	53.00	bu	-71 -175	-34 -139	1 -102	37 -66	73 -30	109 5	145 41	182 78	218 114	254 150	290 186	
110	58.30	bu	-18 -122	21 -82	61 -42	101 -2	140 36	180 76	220 116	260 156	300 196	340 235	379 275	
120	63.60	bu	34 -69	77 -26	121 17	164 60	208 104	251 147	295 191	338 234	382 277	425 321	468 364	
130	68.90	bu	87 -16	134 30	181 77	228 124	275 171	322 218	369 265	416 312	463 359	510 406	557 453	
140	74.20	bu	140 36	190 86	241 137	292 188	342 238	393 289	444 340	494 390	545 441	596 492	647 542	
150	79.50	bu	193 89	247 143	301 197	355 251	410 306	464 360	518 414	573 469	627 523	681 577	736 632	

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 19.A Estimated costs per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.0000	30.40	_____
FERTILIZERS					
Phosphorus (46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
FUNGICIDES					
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
Miravis Top	oz	5.31	13.7000	72.75	_____
HERBICIDES					
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Glyphosate 3lbs a.e.	oz	0.34	32.0000	10.88	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
INSECTICIDES					
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Prevathon	oz	1.16	14.0000	16.24	_____
Bifenthrin	oz	1.13	6.4000	7.23	_____
Incidental Pest Trt \$8	acre	8.00	1.0000	8.00	_____
SEED/PLANTS					
Soybean Seed RR2X	lb	1.15	50.0000	57.50	_____
ADJUVANTS					
Surfactant	pt	3.30	0.6000	1.98	_____
CUSTOM FERTILIZE					
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING					
Haul Soybeans	bu	0.27	50.0000	13.50	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
CROP CONSULTANT					
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT					
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.0720	1.19	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0117	0.19	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	0.0518	0.47	_____
HAND LABOR					
implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0058	0.05	_____
UNALLOCATED LABOR					
hour	hour	16.52	0.1452	2.40	_____
DIESEL FUEL					
Tractors	gal	4.48	1.1121	4.98	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.1496	0.67	_____
1/2-mi Pivot Irr.	gal	4.48	16.4057	73.50	_____
REPAIR & MAINTENANCE					
implements	acre	3.83	1.0000	3.83	_____
Tractors	acre	0.68	1.0000	0.68	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
1/2-mi Pivot Irr.	acre	12.00	1.0000	12.00	_____
INTEREST ON OP. CAP.	acre	17.11	1.0000	17.11	_____
TOTAL DIRECT EXPENSES				572.33	_____
FIXED EXPENSES					
implements	acre	7.83	1.0000	7.83	_____
Tractors	acre	4.84	1.0000	4.84	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	1.46	1.0000	1.46	_____
1/2-mi Pivot Irr.	acre	49.95	1.0000	49.95	_____
TOTAL FIXED EXPENSES				82.34	_____
TOTAL SPECIFIED EXPENSES				654.67	_____

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.B Summary of estimated costs and returns per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Soybeans	bu	13.66	50.0000	683.00	_____
TOTAL INCOME				683.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	30.40	1.0000	30.40	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	84.96	1.0000	84.96	_____
HERBICIDES	acre	74.21	1.0000	74.21	_____
INSECTICIDES	acre	36.44	1.0000	36.44	_____
SEED/PLANTS	acre	57.50	1.0000	57.50	_____
ADJUVANTS	acre	1.98	1.0000	1.98	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	13.50	1.0000	13.50	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0566	0.51	_____
IRRIGATE LABOR	hour	9.06	0.0518	0.47	_____
OPERATOR LABOR	hour	16.54	0.1689	2.79	_____
UNALLOCATED LABOR	hour	16.52	0.1452	2.40	_____
DIESEL FUEL	gal	4.48	19.0919	85.53	_____
REPAIR & MAINTENANCE	acre	20.86	1.0000	20.86	_____
INTEREST ON OP. CAP.	acre	17.11	1.0000	17.11	_____
TOTAL DIRECT EXPENSES				572.33	_____
RETURNS ABOVE DIRECT EXPENSES				110.67	_____
TOTAL FIXED EXPENSES				82.34	_____
TOTAL SPECIFIED EXPENSES				654.67	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				28.33	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.C Estimated resource use for field operations, per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P2O5)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	Jun		0.05	0.05	0.10	0.04
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul				0.01	0.01
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
Dual Magnum	pt					1.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Miravis Top	oz					13.7000				
Surfactant	pt					0.1000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
Haul Soybeans	bu					50.0000				
Grain Cart Soybean	700 bu	MFWD 300	0.021	1.00	Oct		0.02	0.02	0.02	0.01
1/2-mi Pivot Irr.	acre					1.0000			0.05	
-----										
TOTALS							0.16	0.15	0.27	0.14

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.D Estimated costs for field operations, per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Lime (Spread)	ton	19.31					1.24	20.55
Custom Apply Fert	acre	7.50					0.48	7.98
Phosphorus (46% P2O5)	cwt	43.50					2.78	46.28
Potash (60% K2O)	cwt	61.98					3.97	65.95
Soybeans Consultant	acre	6.50					0.21	6.71
Plant & Pre-Folding	16R-30		3.51	3.01	2.02		0.23	8.77
Soybean Seed RR2X	lb	57.50					1.53	59.03
CruiserMaxx Vibrance	oz	12.21					0.33	12.54
Inoculant -Soybean	acre	1.55					0.04	1.59
Boundary	pt	23.50					0.63	24.13
Gramoxone SL 2.0	oz	17.76					0.47	18.23
Surfactant	pt	1.32					0.04	1.36
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.41		0.03	1.31
Glyphosate 3lbs a.e	oz	10.88					0.23	11.11
Engenia	oz	10.62					0.23	10.85
Dual Magnum	pt	11.45					0.24	11.69
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Miravis Top	oz	72.75					1.16	73.91
Surfactant	pt	0.33					0.01	0.34
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Acephate 90SP	lb	4.97					0.08	5.05
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Prevathon	oz	16.24					0.26	16.50
Surfactant	pt	0.33					0.01	0.34
Bifenthrin	oz	7.23					0.12	7.35
Incidental Pest								
App by Air ( 5 gal)	appl	7.60					0.08	7.68
IncidentalPestTrt \$8	acre	8.00					0.09	8.09
Header -Soybean	30' Flex		6.38	5.15	2.62		0.08	14.23
Haul Soybeans	bu	13.50					0.07	13.57
Grain Cart Soybean	700 bu		1.47	0.50	0.65		0.01	2.63
1/2-mi Pivot Irr.	acre		73.50	12.00	0.47		1.89	87.86
TOTALS		442.66	85.53	20.86	6.17	0.00	17.11	572.33
								82.34
								654.67

Note: Cost of production estimates are based on 2022 input prices.  
 These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 19.E Estimated monthly income and expense flows per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	683.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.80	7.60	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	72.75	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.26	32.95	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.44	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.66	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.06	0.46	0.04	0.00	3.27
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.56	30.07	22.05	0.00	7.85
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.42	1.11	0.68	0.00	5.65
INTEREST ON OP. CAP.	8.68	0.00	0.00	0.00	0.00	0.00	0.22	4.14	1.38	2.36	0.17	0.16
TOTAL DIRECT EXPENSES	144.30	0.00	0.00	0.00	0.00	0.00	7.06	159.02	65.97	149.78	15.77	30.43
NET INCOME	-144.30	0.00	0.00	0.00	0.00	0.00	-7.06	-159.02	-65.97	-149.78	-15.77	652.57
NET INCOME TO DATE	-144.30	-144.30	-144.30	-144.30	-144.30	-144.30	-151.36	-310.38	-376.35	-526.13	-541.90	110.67

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

\* Lease costs are based on hourly usage costs.

Table 19.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 1/2 mile pivot irrigated, 7.5 ac-in., All Areas, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Soybeans			10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07
<b>PERCENT YIELD UNIT</b>													
			<b>PRODUCT PRICE</b>										
			<b>dollars</b>										
50	25.00	bu	-309 -391	-292 -374	-275 -357	-258 -340	-241 -323	-224 -306	-206 -289	-189 -272	-172 -255	-155 -238	-138 -221
60	30.00	bu	-259 -341	-239 -321	-218 -300	-198 -280	-177 -259	-157 -239	-136 -218	-116 -198	-95 -177	-75 -157	-54 -136
70	35.00	bu	-209 -292	-185 -268	-161 -244	-137 -220	-114 -196	-90 -172	-66 -148	-42 -124	-18 -100	5 -76	29 -52
80	40.00	bu	-159 -242	-132 -214	-105 -187	-77 -160	-50 -132	-23 -105	4 -78	31 -50	58 -23	86 3	113 31
90	45.00	bu	-109 -192	-79 -161	-48 -130	-17 -100	12 -69	43 -38	74 -7	105 22	135 53	166 84	197 115
100	50.00	bu	-60 -142	-25 -108	8 -74	42 -39	76 -5	110 28	144 62	178 96	213 130	247 164	281 199
110	55.00	bu	-10 -92	27 -54	64 -17	102 20	140 57	177 95	215 132	252 170	290 207	327 245	365 283
120	60.00	bu	39 -42	80 -1	121 39	162 80	203 121	244 162	285 203	326 244	367 285	408 326	449 367
130	65.00	bu	89 7	133 51	178 95	222 140	267 184	311 229	355 273	400 317	444 362	489 406	533 451
140	70.00	bu	139 57	187 104	235 152	282 200	330 248	378 296	426 343	474 391	521 439	569 487	617 535
150	75.00	bu	189 106	240 158	291 209	342 260	394 311	445 363	496 414	547 465	599 516	650 567	701 619

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 20.A Estimated costs per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 Non-irrigated, All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	3.0000	22.80	_____
FERTILIZERS				dollars	
Phosphorus (46% P2O5)	cwt	50.00	0.8700	43.50	_____
Potash (60% K2O)	cwt	46.60	1.3300	61.98	_____
FUNGICIDES				dollars	
CruiserMaxx Vibrance	oz	7.63	1.6000	12.21	_____
HERBICIDES				dollars	
Boundary	pt	11.75	2.0000	23.50	_____
Gramoxone SL 2.0	oz	0.37	48.0000	17.76	_____
Glyphosate 3lbs a.e.	oz	0.34	32.0000	10.88	_____
Engenia	oz	0.83	12.8000	10.62	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
INSECTICIDES				dollars	
Acephate 90SP	lb	6.62	0.7500	4.97	_____
Prevathon	oz	1.16	14.0000	16.24	_____
Bifenthrin	oz	1.13	6.4000	7.23	_____
Incidental Pest Trt	\$8 acre	8.00	1.0000	8.00	_____
SEED/PLANTS				dollars	
Soybean Seed RR2X	lb	1.15	50.0000	57.50	_____
ADJUVANTS				dollars	
Surfactant	pt	3.30	0.5000	1.65	_____
CUSTOM FERTILIZE				dollars	
Custom Apply Fert	acre	7.50	1.0000	7.50	_____
HAULING				dollars	
Haul Soybeans	bu	0.27	25.0000	6.75	_____
CUSTOM LIME				dollars	
Lime (Spread)	ton	58.00	0.3330	19.31	_____
CROP CONSULTANT				dollars	
Soybeans Consultant	acre	6.50	1.0000	6.50	_____
INOCULANT				dollars	
Inoculant -Soybean	acre	1.55	1.0000	1.55	_____
SOIL TEST				dollars	
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR				dollars	
Tractors	hour	16.54	0.0720	1.19	_____
Harvesters	hour	16.54	0.0851	1.41	_____
Self-Propelled	hour	16.54	0.0117	0.19	_____
HAND LABOR				dollars	
Implements	hour	9.06	0.0507	0.46	_____
Self-Propelled	hour	9.06	0.0058	0.05	_____
UNALLOCATED LABOR				dollars	
16.52	hour	16.52	0.1452	2.40	_____
DIESEL FUEL				dollars	
Tractors	gal	4.48	1.1121	4.98	_____
Harvesters	gal	4.48	1.4243	6.38	_____
Self-Propelled	gal	4.48	0.1496	0.67	_____
REPAIR & MAINTENANCE				dollars	
Implements	acre	3.83	1.0000	3.83	_____
Tractors	acre	0.68	1.0000	0.68	_____
Harvesters	acre	4.15	1.0000	4.15	_____
Self-Propelled	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	13.90	1.0000	13.90	_____
TOTAL DIRECT EXPENSES				-----	395.72
FIXED EXPENSES				dollars	
Implements	acre	7.83	1.0000	7.83	_____
Tractors	acre	4.84	1.0000	4.84	_____
Harvesters	acre	18.26	1.0000	18.26	_____
Self-Propelled	acre	1.46	1.0000	1.46	_____
TOTAL FIXED EXPENSES				-----	
TOTAL SPECIFIED EXPENSES				-----	
428.11				-----	

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 20.B Summary of estimated costs and returns per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 Non-irrigated, All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
			dollars	dollars	
INCOME					
Soybeans	bu	13.66	25.0000	341.50	_____
TOTAL INCOME				341.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	22.80	1.0000	22.80	_____
FERTILIZERS	acre	105.48	1.0000	105.48	_____
FUNGICIDES	acre	12.21	1.0000	12.21	_____
HERBICIDES	acre	74.21	1.0000	74.21	_____
INSECTICIDES	acre	36.44	1.0000	36.44	_____
SEED/PLANTS	acre	57.50	1.0000	57.50	_____
ADJUVANTS	acre	1.65	1.0000	1.65	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	6.75	1.0000	6.75	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
CROP CONSULTANT	acre	6.50	1.0000	6.50	_____
INOCULANT	acre	1.55	1.0000	1.55	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.0566	0.51	_____
OPERATOR LABOR	hour	16.54	0.1689	2.79	_____
UNALLOCATED LABOR	hour	16.52	0.1452	2.40	_____
DIESEL FUEL	gal	4.48	2.6861	12.03	_____
REPAIR & MAINTENANCE	acre	8.86	1.0000	8.86	_____
INTEREST ON OP. CAP.	acre	13.90	1.0000	13.90	_____
TOTAL DIRECT EXPENSES				395.72	_____
RETURNS ABOVE DIRECT EXPENSES				-54.22	_____
TOTAL FIXED EXPENSES				32.39	_____
TOTAL SPECIFIED EXPENSES				428.11	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-86.61	_____

Note: Cost of production estimates are based on 2022 input prices. These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 20.C Estimated resource use for field operations, per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 Non-irrigated, All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Nov	0.3330				
Lime (Spread)	ton			0.33	Nov	0.3330				
Custom Apply Fert	acre			1.00	Nov	1.0000				
Phosphorus (46% P205)	cwt					0.8700				
Potash (60% K2O)	cwt					1.3300				
Soybeans Consultant	acre			1.00	May	1.0000				
Plant & Pre-Folding	16R-30	MFWD 300	0.050	1.00	Jun		0.05	0.05	0.10	0.04
Soybean Seed RR2X	lb					50.0000				
CruiserMaxx Vibrance	oz					1.6000				
Inoculant -Soybean	acre					1.0000				
Boundary	pt					2.0000				
Gramoxone SL 2.0	oz					48.0000				
Surfactant	pt					0.4000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.01
Glyphosate 3lbs a.e	oz					32.0000				
Engenia	oz					12.8000				
Dual Magnum	pt					1.0000				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Acephate 90SP	lb					0.7500				
App by Air ( 5 gal)	appl			1.00	Aug	1.0000				
Prevathon	oz					14.0000				
Surfactant	pt					0.1000				
Bifenthrin	oz					6.4000				
Incidental Pest				1.00	Sep					
App by Air ( 5 gal)	appl					1.0000				
IncidentalPestTrt \$8	acre					1.0000				
Header -Soybean	30' Flex	325 hp	0.085	1.00	Oct		0.08	0.08	0.08	0.07
Haul Soybeans	bu					25.0000				
Grain Cart Soybean	700 bu	MFWD 300	0.021	1.00	Oct		0.02	0.02	0.02	0.01
<b>TOTALS</b>							<b>0.16</b>	<b>0.15</b>	<b>0.22</b>	<b>0.14</b>

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance

levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 20.D Estimated costs for field operations, per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 Non-irrigated, All Areas, Mississippi, 2023

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget. **Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre.

Table 20.E Estimated monthly income and expense flows per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 Non-irrigated, All Areas, Mississippi, 2023

ITEM	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	341.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.20	7.60	0.00
FERTILIZERS	105.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.21	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.26	32.95	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.44	8.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.33	0.00	0.00
CUSTOM FERTILIZE	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
CUSTOM LIME	19.31	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	6.50	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.02	0.41	0.00	0.00	3.27
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51	0.67	0.00	0.00	7.85
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	0.20	0.00	0.00	5.65
INTEREST ON OP. CAP.	8.68	0.00	0.00	0.00	0.00	0.00	0.21	3.27	0.73	0.71	0.17	0.13
TOTAL DIRECT EXPENSES	144.30	0.00	0.00	0.00	0.00	0.00	6.71	125.65	34.96	44.68	15.77	23.65
NET INCOME	-144.30	0.00	0.00	0.00	0.00	0.00	-6.71	-125.65	-34.96	-44.68	-15.77	317.85
NET INCOME TO DATE	-144.30	-144.30	-144.30	-144.30	-144.30	-144.30	-151.01	-276.66	-311.62	-356.30	-372.07	-54.22

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

These fertilizer rates are based on the assumption that 30-40% of the soybean fields would be mixed to light textured fields and not heavy clay exclusively. Also, rates are based on maintenance levels associated with the expected yield in the budget.

**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.** The budget does not include a second fungicide application to control Asian soybean rust, but the cost of treatment could range from \$10 to \$18 plus application cost per acre

\* Lease costs are based on hourly usage costs.

Table 20.F Estimated returns for various price/yield combinations, per acre  
 Soybeans, double crop after wheat, RR2X/XF, 16R 30"  
 Non-irrigated, All Areas, Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
Soybeans			10.24	10.92	11.61	12.29	12.97	13.66	14.34	15.02	15.70	16.39	17.07
<b>PERCENT YIELD UNIT</b>													
			<b>PRODUCT PRICE</b>										
			<b>dollars</b>										
50	12.50	bu	-264 -296	-255 -288	-247 -279	-238 -271	-230 -262	-221 -253	-213 -245	-204 -236	-195 -228	-187 -219	-178 -211
60	15.00	bu	-239 -271	-229 -261	-218 -251	-208 -240	-198 -230	-188 -220	-177 -210	-167 -200	-157 -189	-147 -179	-136 -169
70	17.50	bu	-214 -246	-202 -234	-190 -222	-178 -210	-166 -198	-154 -187	-142 -175	-130 -163	-118 -151	-106 -139	-94 -127
80	20.00	bu	-189 -221	-175 -208	-162 -194	-148 -180	-134 -167	-121 -153	-107 -139	-93 -126	-80 -112	-66 -98	-52 -85
90	22.50	bu	-164 -196	-149 -181	-133 -166	-118 -150	-103 -135	-87 -120	-72 -104	-56 -89	-41 -73	-26 -58	-10 -43
100	25.00	bu	-139 -171	-122 -154	-105 -137	-88 -120	-71 -103	-54 -86	-37 -69	-20 -52	-2 -35	14 -18	31 -1
110	27.50	bu	-114 -147	-95 -128	-77 -109	-58 -90	-39 -71	-20 -53	-1 -34	16 -15	35 3	54 21	73 40
120	30.00	bu	-89 -122	-69 -101	-48 -81	-28 -60	-7 -40	12 -19	33 0	53 21	74 41	94 62	115 82
130	32.50	bu	-64 -97	-42 -74	-20 -52	1 -30	23 -8	46 13	68 36	90 58	112 80	134 102	157 124
140	35.00	bu	-39 -72	-15 -48	7 -24	31 -0	55 23	79 47	103 71	127 95	151 118	175 142	199 166
150	37.50	bu	-14 -47	10 -21	36 3	61 29	87 55	113 80	138 106	164 131	189 157	215 183	241 208

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 21.A Estimated costs per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

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

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 21.B Summary of estimated costs and returns per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____
TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.88	1.0000	8.88	_____
FERTILIZERS	acre	509.00	1.0000	509.00	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	1.45	1.0000	1.45	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	127.50	1.0000	127.50	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1462	1.33	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	16.54	0.5761	9.54	_____
UNALLOCATED LABOR	hour	16.56	0.4478	7.42	_____
DIESEL FUEL	gal	4.48	17.3427	77.68	_____
REPAIR & MAINTENANCE	acre	28.66	1.0000	28.66	_____
INTEREST ON OP. CAP.	acre	35.37	1.0000	35.37	_____
TOTAL DIRECT EXPENSES				1014.03	_____
RETURNS ABOVE DIRECT EXPENSES				338.97	_____
TOTAL FIXED EXPENSES				139.29	_____
TOTAL SPECIFIED EXPENSES				1153.32	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				199.68	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 21.C Estimated resource use for field operations, per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 21.D Estimated costs for field operations, per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Lime (Spread)	ton	38.63					2.47	41.10
Spin Spreader	5 ton		2.18	0.70	1.71		0.29	4.88
Phosphorus (46% P2O5)	cwt	97.85					6.26	104.11
Potash (60% K2O)	cwt	69.90					4.47	74.37
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96		0.44	7.37
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Glyphosate 3lbs a.e.	oz	10.88					0.46	11.34
Clarity	pt	7.15					0.31	7.46
Select Max	pt	13.86					0.59	14.45
Plant & Pre-Folding	16R-30		2.63	2.97	2.06		0.29	7.95
Corn Seed BtRR	thous	127.50					4.76	132.26
Fert 10-34-0	gal	21.44					0.80	22.24
Zinc Plus	pt	7.36					0.27	7.63
Custom Apply Fert	acre	7.50					0.24	7.74
UAN + Sulfur (28%)	gal	141.87					4.54	146.41
Spray (Broadcast)	60'		1.46	0.46	1.02		0.09	3.03
Atrazine 4L	pt	12.00					0.38	12.38
Halex GT	pt	37.80					1.21	39.01
App by Air ( 3 gal)	appl	1.28					0.03	1.31
Bifenthrin	oz	1.45					0.04	1.49
Corn Consultant	acre	6.00					0.16	6.16
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83		0.25	9.44
UAN (32%)	gal	129.00					3.44	132.44
App Fert by Air	cwt	8.00					0.17	8.17
Urea, Solid (46% N)	cwt	41.58					0.89	42.47
Header - Corn	8R-30		7.80	8.95	4.01		0.11	20.87
Grain Cart Corn	700 bu		1.31	0.57	0.80		0.01	2.69
Haul Corn	bu	50.60					0.27	50.87
Stalk Shredder Flex	20'		4.28	3.10	2.59		0.05	10.02
Roll-Out Pipe Irr.	acre	7.92	50.70	7.90	4.84		1.55	72.91
<b>TOTALS</b>		<b>850.50</b>	<b>77.68</b>	<b>28.66</b>	<b>21.82</b>	<b>0.00</b>	<b>35.37</b>	<b>1014.03</b>
								<b>139.29</b>
								<b>1153.32</b>

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 21.E Estimated monthly income and expense flows per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	0.00	0.00	0.00	0.00
FERTILIZERS	167.75	0.00	0.00	0.00	0.00	28.80	141.87	129.00	41.58	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	127.50	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	8.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.30	0.00	0.00	0.00	0.00	2.06	1.02	3.06	3.10	0.23	0.65	7.40
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	7.08	0.00	0.00	0.00	0.00	2.63	1.46	4.08	36.44	11.86	0.74	13.39
REPAIR & MAINTENANCE	2.79	0.00	0.00	0.00	0.00	2.97	0.46	2.28	6.31	1.05	0.18	12.62
INTEREST ON OP. CAP.	14.31	0.00	0.00	0.00	1.68	6.12	6.46	3.93	2.20	0.21	0.02	0.44
TOTAL DIRECT EXPENSES	238.19	0.00	0.00	0.00	41.17	170.08	208.57	151.08	105.55	13.35	1.59	84.45
NET INCOME	-238.19	0.00	0.00	0.00	-41.17	-170.08	-208.57	-151.08	-105.55	-13.35	-1.59	1268.55
NET INCOME TO DATE	-238.19	-238.19	-238.19	-238.19	-279.36	-449.44	-658.01	-809.09	-914.64	-927.99	-929.58	338.97

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 21.F Estimated returns for various price/yield combinations, per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Furrow Irrigated, 13 ac-in., Delta Area, Mississippi, 2023

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 22.A Estimated costs per acre  
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal  
 Non-irrigated, Delta Area, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 22.B Summary of estimated costs and returns per acre  
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal  
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Corn	bu	6.15	170.0000	1045.50	_____
TOTAL INCOME				1045.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.88	1.0000	8.88	_____
FERTILIZERS	acre	411.59	1.0000	411.59	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	1.45	1.0000	1.45	_____
SEED/PLANTS	acre	105.00	1.0000	105.00	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1354	1.22	_____
OPERATOR LABOR	hour	16.54	0.4466	7.38	_____
UNALLOCATED LABOR	hour	16.56	0.4020	6.66	_____
DIESEL FUEL	gal	4.48	5.3810	24.09	_____
REPAIR & MAINTENANCE	acre	17.42	1.0000	17.42	_____
INTEREST ON OP. CAP.	acre	28.91	1.0000	28.91	_____
TOTAL DIRECT EXPENSES				788.85	_____
RETURNS ABOVE DIRECT EXPENSES				256.65	_____
TOTAL FIXED EXPENSES				58.65	_____
TOTAL SPECIFIED EXPENSES				847.50	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				198.00	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 22.C Estimated resource use for field operations, per acre  
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal  
 Non-irrigated, Delta Area, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 22.D Estimated costs for field operations, per acre  
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal  
 Non-irrigated, Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----										
Soil Test	acre	3.33					0.21	3.54		3.54
Lime (Spread)	ton	38.63					2.47	41.10		41.10
Spin Spreader	5 ton		2.18	0.70	1.71		0.29	4.88	3.35	8.23
Phosphorus (46% P2O5)	cwt	81.50					5.22	86.72		86.72
Potash (60% K2O)	cwt	58.25					3.73	61.98		61.98
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96		0.44	7.37	7.37	14.74
App by Air ( 5 gal)	appl	7.60					0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	10.88					0.46	11.34		11.34
Clarity	pt	7.15					0.31	7.46		7.46
Select Max	pt	13.86					0.59	14.45		14.45
Plant & Pre-Folding	12R-38		2.77	2.45	2.16		0.28	7.66	7.61	15.27
Corn Seed BtRR	thous	105.00					3.92	108.92		108.92
Fert 10-34-0	gal	21.44					0.80	22.24		22.24
Zinc Plus	pt	7.36					0.27	7.63		7.63
Custom Apply Fert	acre	7.50					0.24	7.74		7.74
UAN + Sulfur (28%)	gal	85.14					2.72	87.86		87.86
Spray (Broadcast)	60'		1.46	0.46	1.02		0.09	3.03	2.02	5.05
Atrazine 4L	pt	12.00					0.38	12.38		12.38
Halex GT	pt	37.80					1.21	39.01		39.01
App by Air ( 3 gal)	appl	1.28					0.03	1.31		1.31
Bifenthrin	oz	1.45					0.04	1.49		1.49
Corn Consultant	acre	6.00					0.16	6.16		6.16
Fert Appl (Liquid)	12R-38		2.68	1.52	1.85		0.16	6.21	4.52	10.73
UAN (32%)	gal	157.90					4.21	162.11		162.11
Header - Corn	8R-38		6.17	6.89	3.17		0.09	16.32	24.86	41.18
Grain Cart Corn	700 bu		1.31	0.57	0.80		0.01	2.69	2.25	4.94
Haul Corn	bu	39.10					0.21	39.31		39.31
Stalk Shredder Flex	20'		4.28	3.10	2.59		0.05	10.02	6.67	16.69
-----										
TOTALS		703.17	24.09	17.42	15.26	0.00	28.91	788.85	58.65	847.50

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 22.E Estimated monthly income and expense flows per acre  
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal  
 Non-irrigated, Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1045.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	0.00	0.00	0.00	0.00
FERTILIZERS	139.75	0.00	0.00	0.00	0.00	28.80	85.14	157.90	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.67	0.00	0.00	0.00	0.00	2.16	1.02	1.85	0.00	0.00	0.00	6.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.42	0.00	0.00	0.00	0.00	2.77	1.46	2.68	0.00	0.00	0.00	11.76
REPAIR & MAINTENANCE	2.43	0.00	0.00	0.00	0.00	2.45	0.46	1.52	0.00	0.00	0.00	10.56
INTEREST ON OP. CAP.	12.36	0.00	0.00	0.00	1.68	5.27	4.64	4.60	0.00	0.00	0.00	0.36
TOTAL DIRECT EXPENSES	205.59	0.00	0.00	0.00	41.17	146.45	150.02	177.28	0.00	0.00	0.00	68.34
NET INCOME	-205.59	0.00	0.00	0.00	-41.17	-146.45	-150.02	-177.28	0.00	0.00	0.00	977.16
NET INCOME TO DATE	-205.59	-205.59	-205.59	-205.59	-246.76	-393.21	-543.23	-720.51	-720.51	-720.51	-720.51	256.65

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

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

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

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

\* Lease costs are based on hourly usage costs.

Table 22.F Estimated returns for various price/yield combinations, per acre  
 Corn, stale seedbed, BtRR, 12row 38", 170 bu yield goal  
 Non-irrigated, Delta Area, Mississippi, 2023

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 23.A Estimated costs per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 23.B Summary of estimated costs and returns per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____
TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	8.88	1.0000	8.88	_____
FERTILIZERS	acre	509.00	1.0000	509.00	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	1.45	1.0000	1.45	_____
SEED/PLANTS	acre	127.50	1.0000	127.50	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1462	1.33	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	16.54	0.4976	8.23	_____
UNALLOCATED LABOR	hour	16.56	0.4478	7.42	_____
DIESEL FUEL	gal	4.48	17.2274	77.15	_____
REPAIR & MAINTENANCE	acre	42.71	1.0000	42.71	_____
INTEREST ON OP. CAP.	acre	35.48	1.0000	35.48	_____
TOTAL DIRECT EXPENSES				1016.74	_____
RETURNS ABOVE DIRECT EXPENSES				336.26	_____
TOTAL FIXED EXPENSES				156.94	_____
TOTAL SPECIFIED EXPENSES				1173.68	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				179.32	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 23.C Estimated resource use for field operations, per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 23.D Estimated costs for field operations, per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Soil Test	acre	3.33					0.21	3.54	3.54	
Lime (Spread)	ton	38.63					2.47	41.10	41.10	
Spin Spreader	5 ton		2.18	0.70	1.71		0.29	4.88	3.35	8.23
Phosphorus (46% P2O5)	cwt	97.85					6.26	104.11	104.11	
Potash (60% K2O)	cwt	69.90					4.47	74.37	74.37	
Bed/Disk w/roller	12R-30/40		3.24	1.73	1.96		0.44	7.37	14.74	
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92	
Glyphosate 3lbs a.e.	oz	10.88					0.46	11.34	11.34	
Clarity	pt	7.15					0.31	7.46	7.46	
Select Max	pt	13.86					0.59	14.45	14.45	
Plant & Pre-Folding	16R-30		2.63	2.97	2.06		0.29	7.95	8.63	16.58
Corn Seed BtRR	thous	127.50					4.76	132.26	132.26	
Fert 10-34-0	gal	21.44					0.80	22.24	22.24	
Zinc Plus	pt	7.36					0.27	7.63	7.63	
Custom Apply Fert	acre	7.50					0.24	7.74	7.74	
UAN + Sulfur (28%)	gal	141.87					4.54	146.41	146.41	
Spray (Broadcast)	60'		1.46	0.46	1.02		0.09	3.03	2.02	5.05
Atrazine 4L	pt	12.00					0.38	12.38	12.38	
Halex GT	pt	37.80					1.21	39.01	39.01	
App by Air ( 3 gal)	appl	1.28					0.03	1.31	1.31	
Bifenthrin	oz	1.45					0.04	1.49	1.49	
Corn Consultant	acre	6.00					0.16	6.16	6.16	
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83		0.25	9.44	6.84	16.28
UAN (32%)	gal	129.00					3.44	132.44	132.44	
App Fert by Air	cwt	8.00					0.17	8.17	8.17	
Urea, Solid (46% N)	cwt	41.58					0.89	42.47	42.47	
Header - Corn	8R-30		7.80	8.95	4.01		0.11	20.87	31.85	52.72
Grain Cart Corn	700 bu		1.31	0.57	0.80		0.01	2.69	2.25	4.94
Haul Corn	bu	50.60					0.27	50.87	50.87	
Stalk Shredder Flex	20'		4.28	3.10	2.59		0.05	10.02	6.67	16.69
1/4-mi. Pivot Irr.	acre	50.17	21.95	1.84			1.66	75.62	87.96	163.58
<b>TOTALS</b>		<b>842.58</b>	<b>77.15</b>	<b>42.71</b>	<b>18.82</b>	<b>0.00</b>	<b>35.48</b>	<b>1016.74</b>	<b>156.94</b>	<b>1173.68</b>

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 23.E Estimated monthly income and expense flows per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	0.00	0.00	0.00	0.00
FERTILIZERS	167.75	0.00	0.00	0.00	0.00	28.80	141.87	129.00	41.58	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	127.50	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	8.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.67	0.00	0.00	0.00	0.00	2.06	2.36	2.98	0.20	0.15	0.00	7.40
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	5.42	0.00	0.00	0.00	0.00	2.63	1.46	19.13	20.07	15.05	0.00	13.39
REPAIR & MAINTENANCE	2.43	0.00	0.00	0.00	0.00	2.97	0.46	20.75	1.99	1.49	0.00	12.62
INTEREST ON OP. CAP.	14.14	0.00	0.00	0.00	1.68	6.12	6.50	4.81	1.53	0.26	0.00	0.44
TOTAL DIRECT EXPENSES	235.37	0.00	0.00	0.00	41.17	170.08	209.95	185.40	73.37	16.95	0.00	84.45
NET INCOME	-235.37	0.00	0.00	0.00	-41.17	-170.08	-209.95	-185.40	-73.37	-16.95	0.00	1268.55
NET INCOME TO DATE	-235.37	-235.37	-235.37	-235.37	-276.54	-446.62	-656.57	-841.97	-915.34	-932.29	-932.29	336.26

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 23.F Estimated returns for various price/yield combinations, per acre  
 Corn, stale seedbed, BtRR, 16-row 30", 220 bu yield goal  
 Pivot Irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 24.A Estimated costs per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area,  
 Mississippi, 2023

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

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

Fertilization decisions should be based on soil tests.

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

Lime cost prorated for application every 3rd year.

Table 24.B Summary of estimated costs and returns per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area,  
 Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 24.C Estimated resource use for field operations, per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	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
Disk Harrow	42'	MFWD 225	0.046	1.00	Oct			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
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
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
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar			0.04	0.04	0.09
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
UAN (32%)	gal					30.0000				
Cultivate	12R-38	MFWD 225	0.054	1.00	May			0.05	0.05	0.05
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	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep			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	0.07
Roll-Out Pipe Irr.	acre				Jul	1.0000		0.07	0.07	0.46
<b>TOTALS</b>								<b>0.76</b>	<b>0.74</b>	<b>1.27</b>
										<b>0.61</b>

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 24.D Estimated costs for field operations, per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2023

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

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 24.E Estimated monthly income and expense flows per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, furrow irrigated, 13 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1353.00
<b>DIRECT EXPENSES</b>												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	6.40	0.00	0.00	0.00
FERTILIZERS	167.75	0.00	0.00	0.00	0.00	0.00	141.87	129.00	41.58	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	8.24	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	99.62	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	8.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	8.98	0.00	0.00	0.00	0.00	3.49	0.63	3.79	3.10	0.23	0.65	6.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	14.81	0.00	0.00	0.00	0.00	5.00	0.71	5.50	36.44	11.86	0.74	11.76
REPAIR & MAINTENANCE	6.00	0.00	0.00	0.00	0.00	3.17	0.20	2.72	6.31	1.05	0.18	10.56
INTEREST ON OP. CAP.	15.31	0.00	0.00	0.00	1.68	4.16	6.42	3.99	2.52	0.21	0.02	0.42
TOTAL DIRECT EXPENSES	254.81	0.00	0.00	0.00	41.17	115.44	207.13	153.73	120.51	13.35	1.59	79.90
NET INCOME	-254.81	0.00	0.00	0.00	-41.17	-115.44	-207.13	-153.73	-120.51	-13.35	-1.59	1273.10
NET INCOME TO DATE	-254.81	-254.81	-254.81	-254.81	-295.98	-411.42	-618.55	-772.28	-892.79	-906.14	-907.73	365.37

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 24.F Estimated returns for various price/yield combinations, per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, furrow irrigated, 13 ac-in.,Delta Area, Mississippi, 2023

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 25.A Estimated costs per acre  
 Corn, conventional tillage, RR2, 12-row 38"  
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 25.B Summary of estimated costs and returns per acre  
 Corn, conventional tillage, RR2, 12-row 38"  
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	6.15	170.0000	1045.50	_____
TOTAL INCOME				1045.50	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.28	1.0000	15.28	_____
FERTILIZERS	acre	382.79	1.0000	382.79	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	9.69	1.0000	9.69	_____
SEED/PLANTS	acre	82.04	1.0000	82.04	_____
CUSTOM FERTILIZE	acre	7.50	1.0000	7.50	_____
HAULING	acre	39.10	1.0000	39.10	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
OPERATOR LABOR	hour	16.54	0.6089	10.07	_____
UNALLOCATED LABOR	hour	16.54	0.5480	9.07	_____
DIESEL FUEL	gal	4.48	7.2145	32.31	_____
REPAIR & MAINTENANCE	acre	20.43	1.0000	20.43	_____
INTEREST ON OP. CAP.	acre	28.30	1.0000	28.30	_____
TOTAL DIRECT EXPENSES				767.37	_____
RETURNS ABOVE DIRECT EXPENSES				278.13	_____
TOTAL FIXED EXPENSES				73.96	_____
TOTAL SPECIFIED EXPENSES				841.33	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				204.17	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 25.C Estimated resource use for field operations, per acre  
 Corn, conventional tillage, RR2, 12-row 38"  
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 25.D Estimated costs for field operations, per acre  
 Corn, conventional tillage, RR2, 12-row 38"  
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 25.E Estimated monthly income and expense flows per acre  
 Corn, conventional tillage, RR2, 12-row 38"  
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1045.50
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	6.40	0.00	0.00	0.00
FERTILIZERS	139.75	0.00	0.00	0.00	0.00	0.00	85.14	157.90	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	8.24	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	82.04	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.10
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	7.94	0.00	0.00	0.00	0.00	3.30	0.63	1.85	0.00	0.00	0.00	6.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	12.47	0.00	0.00	0.00	0.00	4.69	0.71	2.68	0.00	0.00	0.00	11.76
REPAIR & MAINTENANCE	5.29	0.00	0.00	0.00	0.00	2.86	0.20	1.52	0.00	0.00	0.00	10.56
INTEREST ON OP. CAP.	13.27	0.00	0.00	0.00	1.68	3.47	4.60	4.60	0.32	0.00	0.00	0.36
TOTAL DIRECT EXPENSES	220.68	0.00	0.00	0.00	41.17	96.36	148.58	177.28	14.96	0.00	0.00	68.34
NET INCOME	-220.68	0.00	0.00	0.00	-41.17	-96.36	-148.58	-177.28	-14.96	0.00	0.00	977.16
NET INCOME TO DATE	-220.68	-220.68	-220.68	-220.68	-261.85	-358.21	-506.79	-684.07	-699.03	-699.03	-699.03	278.13

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 25.F Estimated returns for various price/yield combinations, per acre  
 Corn, conventional tillage, RR2, 12-row 38"  
 170 bu yield goal, non-irrigated, Delta Area, Mississippi, 2023

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 26.A Estimated costs per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, pivot irrigated, 7.5 ac-in., Delta Area,  
 Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 26.B Summary of estimated costs and returns per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, pivot irrigated, 7.5 ac-in., Delta Area,  
 Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Corn	bu	6.15	220.0000	1353.00	_____
				-----	
TOTAL INCOME				1353.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	15.28	1.0000	15.28	_____
FERTILIZERS	acre	480.20	1.0000	480.20	_____
HERBICIDES	acre	81.69	1.0000	81.69	_____
INSECTICIDES	acre	9.69	1.0000	9.69	_____
SEED/PLANTS	acre	99.62	1.0000	99.62	_____
CUSTOM FERTILIZE	acre	15.50	1.0000	15.50	_____
HAULING	acre	50.60	1.0000	50.60	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1263	1.14	_____
IRRIGATE LABOR	hour	9.06	0.2036	1.84	_____
OPERATOR LABOR	hour	16.54	0.6823	11.28	_____
UNALLOCATED LABOR	hour	16.55	0.6141	10.17	_____
DIESEL FUEL	gal	4.48	19.2663	86.29	_____
REPAIR & MAINTENANCE	acre	44.24	1.0000	44.24	_____
INTEREST ON OP. CAP.	acre	34.84	1.0000	34.84	_____
				-----	
TOTAL DIRECT EXPENSES				990.34	_____
RETURNS ABOVE DIRECT EXPENSES				362.66	_____
TOTAL FIXED EXPENSES				169.36	_____
				-----	
TOTAL SPECIFIED EXPENSES				1159.70	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				193.30	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 26.C Estimated resource use for field operations, per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	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
Disk Harrow	42'	MFWD 225	0.046	1.00	Oct			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
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
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
Plant - Folding	12R-38	MFWD 225	0.049	1.00	Mar			0.04	0.04	0.09
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) UAN (32%)	12R-38	MFWD 225	0.051	1.00	May			0.05	0.05	0.07
gal						30.0000				
Cultivate	12R-38	MFWD 225	0.054	1.00	May			0.05	0.05	0.05
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	0.09
Grain Cart Corn	700 bu	MFWD 225	0.025	1.00	Sep			0.02	0.02	0.02
Haul Corn	bu					220.0000				
Stalk Shredder Flex 1/4-mi. Pivot Irr.	20'	MFWD 225	0.082	1.00	Sep			0.08	0.08	0.07
					Jul	1.0000			0.20	
TOTALS								0.68	0.66	1.01
										0.61

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 26.D Estimated costs for field operations, per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

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

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 26.E Estimated monthly income and expense flows per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, pivot irrigated, 7.5 ac-in., Delta Area, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1353.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	1.28	6.40	0.00	0.00	0.00
FERTILIZERS	167.75	0.00	0.00	0.00	0.00	0.00	141.87	129.00	41.58	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.89	0.00	49.80	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	8.24	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	99.62	0.00	0.00	0.00	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	7.50	0.00	8.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.60
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	8.35	0.00	0.00	0.00	0.00	3.49	1.97	3.71	0.20	0.15	0.00	6.56
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	13.15	0.00	0.00	0.00	0.00	5.00	0.71	20.55	20.07	15.05	0.00	11.76
REPAIR & MAINTENANCE	5.64	0.00	0.00	0.00	0.00	3.17	0.20	21.19	1.99	1.49	0.00	10.56
INTEREST ON OP. CAP.	15.14	0.00	0.00	0.00	1.68	4.16	6.46	4.87	1.85	0.26	0.00	0.42
TOTAL DIRECT EXPENSES	251.99	0.00	0.00	0.00	41.17	115.44	208.51	188.05	88.33	16.95	0.00	79.90
NET INCOME	-251.99	0.00	0.00	0.00	-41.17	-115.44	-208.51	-188.05	-88.33	-16.95	0.00	1273.10
NET INCOME TO DATE	-251.99	-251.99	-251.99	-251.99	-293.16	-408.60	-617.11	-805.16	-893.49	-910.44	-910.44	362.66

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 26.F Estimated returns for various price/yield combinations, per acre  
 Corn, conventional tillage, RR2, 12-row 38",  
 220 bu yld goal, pivot irrigated, 7.5 ac-in.,Delta Area, Mississippi, 2023

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 27.A Estimated costs per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2023

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

Note: Cost of production estimates are based on 2022 input prices. ~~Partialization decisions should be based on pilot tests.~~

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

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

Table 27.B Summary of estimated costs and returns per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Grain Sorghum	bu	5.84	100.0000	584.00	_____
TOTAL INCOME				584.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	7.60	1.0000	7.60	_____
FERTILIZERS	acre	287.47	1.0000	287.47	_____
HERBICIDES	acre	71.96	1.0000	71.96	_____
INSECTICIDES	acre	47.23	1.0000	47.23	_____
SEED/PLANTS	acre	15.79	1.0000	15.79	_____
ADJUVANTS	acre	0.99	1.0000	0.99	_____
HAULING	acre	25.00	1.0000	25.00	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	6.00	1.0000	6.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1772	1.61	_____
OPERATOR LABOR	hour	16.54	0.4598	7.62	_____
UNALLOCATED LABOR	hour	16.57	0.4138	6.86	_____
DIESEL FUEL	gal	4.48	5.6208	25.16	_____
REPAIR & MAINTENANCE	acre	15.44	1.0000	15.44	_____
INTEREST ON OP. CAP.	acre	17.05	1.0000	17.05	_____
TOTAL DIRECT EXPENSES				577.74	_____
RETURNS ABOVE DIRECT EXPENSES				6.26	_____
TOTAL FIXED EXPENSES				62.42	_____
TOTAL SPECIFIED EXPENSES				640.16	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-56.16	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 27.C Estimated resource use for field operations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 27.D Estimated costs for field operations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33				0.21	3.54	3.54
Lime (Spread)	ton	38.63				2.47	41.10	41.10
Disk Harrow	32'		3.18	1.92	1.93	0.41	7.44	7.07 14.51
App by Air ( 5 gal)	appl	7.60				0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	10.88				0.46	11.34	11.34
2,4-D Amine 4	pt	6.66				0.28	6.94	6.94
Select Max	pt	13.86				0.59	14.45	14.45
Surfactant	pt	0.99				0.04	1.03	1.03
Spin Spreader	5 ton		2.18	0.70	1.71	0.15	4.74	3.35 8.09
DAP	cwt	72.02				2.30	74.32	74.32
Potash (60% K2O)	cwt	46.60				1.49	48.09	48.09
Field Cultivate Fld	32'		2.42	1.09	1.46	0.16	5.13	6.16 11.29
Plant - Folding	12R-30		3.26	2.40	2.55	0.26	8.47	7.90 16.37
Sorghum Concept+ Po	lb	15.79				0.51	16.30	16.30
Sprayer 800gal	80' 250hp		0.76	0.21	0.48	0.05	1.50	1.52 3.02
Lexar	pt	40.56				1.30	41.86	41.86
Sorghum Consultant	acre	6.00				0.16	6.16	6.16
Fert Appl (Liquid)	12R-30		4.08	2.28	2.83	0.25	9.44	6.84 16.28
UAN + Sulfur (28%)	gal	168.85				4.50	173.35	173.35
Sprayer 800gal	80' 250hp		0.76	0.21	0.48	0.03	1.48	1.52 3.00
Sivanto Prime	oz	13.44				0.29	13.73	13.73
Sprayer 800gal	80' 250hp		0.76	0.21	0.48	0.02	1.47	1.52 2.99
Warrior II	oz	4.11				0.07	4.18	4.18
Sprayer 800gal	80' 250hp		0.76	0.21	0.48	0.02	1.47	1.52 2.99
Prevathon	oz	16.24				0.26	16.50	16.50
Sprayer 800gal	80' 250hp		0.76	0.21	0.48	0.02	1.47	1.52 2.99
Sivanto Prime	oz	13.44				0.22	13.66	13.66
Header Wheat/Sorghum	25' Rigid		6.24	6.00	3.21	0.08	15.53	23.50 39.03
Haul Sorghum	bu	25.00				0.13	25.13	25.13
<b>TOTALS</b>		504.00	25.16	15.44	16.09	0.00	17.05	577.74 62.42 640.16

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 27.E Estimated monthly income and expense flows per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	584.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	118.62	168.85	0.00	0.00	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	31.40	0.00	40.56	0.00	0.00	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.44	33.79	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	15.79	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
CUSTOM LIME	38.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	1.93	0.00	0.00	0.00	0.00	6.20	2.83	0.48	1.44	0.00	3.21
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	3.18	0.00	0.00	0.00	0.00	8.62	4.08	0.76	2.28	0.00	6.24
REPAIR & MAINTENANCE	0.00	1.92	0.00	0.00	0.00	0.00	4.40	2.28	0.21	0.63	0.00	6.00
INTEREST ON OP. CAP.	2.68	0.41	0.00	0.00	1.69	0.00	6.22	4.91	0.32	0.61	0.00	0.21
TOTAL DIRECT EXPENSES	44.64	7.44	0.00	0.00	41.68	0.00	200.41	188.95	15.21	38.75	0.00	40.66
NET INCOME	-44.64	-7.44	0.00	0.00	-41.68	0.00	-200.41	-188.95	-15.21	-38.75	0.00	543.34
NET INCOME TO DATE	-44.64	-52.08	-52.08	-52.08	-93.76	-93.76	-294.17	-483.12	-498.33	-537.08	-537.08	6.26

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 27.F Estimated returns for various price/yield combinations, per acre  
 Grain sorghum, 12-row 30", 100 bu yield goal  
 All Areas, Mississippi, 2023

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 28.A Estimated costs per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 28.B Summary of estimated costs and returns per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Wheat	bu	8.90	70.0000	623.00	_____
TOTAL INCOME				623.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	21.60	1.0000	21.60	_____
FERTILIZERS	acre	203.31	1.0000	203.31	_____
FUNGICIDES	acre	48.58	1.0000	48.58	_____
HERBICIDES	acre	56.80	1.0000	56.80	_____
INSECTICIDES	acre	4.11	1.0000	4.11	_____
SEED/PLANTS	acre	34.20	1.0000	34.20	_____
CUSTOM FERTILIZE	acre	24.38	1.0000	24.38	_____
HAULING	acre	18.20	1.0000	18.20	_____
CUSTOM LIME	acre	38.63	1.0000	38.63	_____
CROP CONSULTANT	acre	5.50	1.0000	5.50	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1049	0.95	_____
OPERATOR LABOR	hour	16.54	0.3151	5.22	_____
UNALLOCATED LABOR	hour	16.53	0.2521	4.17	_____
DIESEL FUEL	gal	4.48	3.8602	17.28	_____
REPAIR & MAINTENANCE	acre	12.19	1.0000	12.19	_____
INTEREST ON OP. CAP.	acre	18.15	1.0000	18.15	_____
TOTAL DIRECT EXPENSES				516.60	_____
RETURNS ABOVE DIRECT EXPENSES				106.40	_____
TOTAL FIXED EXPENSES				48.16	_____
TOTAL SPECIFIED EXPENSES				564.76	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				58.24	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 28.C Estimated resource use for field operations, per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 28.D Estimated costs for field operations, per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33							0.18	3.51	3.51
Lime (Spread)	ton	38.63							2.06	40.69	40.69
Disk Harrow	32'		3.18	1.92	1.83				0.37	7.30	7.07
Spin Spreader	5 ton		2.18	0.70	1.64				0.24	4.76	3.35
DAP	cwt	55.40							2.95	58.35	58.35
Potash (60% K2O)	cwt	34.95							1.86	36.81	36.81
Field Cultivate Fld	32'		2.42	1.09	1.39				0.26	5.16	11.32
Grain Drill	30'		3.26	2.48	2.44				0.39	8.57	8.08
Wheat Seed Private	lb	34.20							1.64	35.84	35.84
CruiserMaxx Vibrance	oz	34.34							1.65	35.99	35.99
Wheat Consultant	acre	5.50							0.26	5.76	5.76
App by Air ( 5 gal)	appl	7.60							0.32	7.92	7.92
Axiom	oz	21.00							0.90	21.90	21.90
App by Air ( 3 gal)	appl	6.40							0.17	6.57	6.57
Warrior II	oz	4.11							0.11	4.22	4.22
Harmony Extra SG	oz	7.76							0.21	7.97	7.97
Axial XL	oz	28.04							0.75	28.79	28.79
App Fert by Air	cwt	12.19							0.33	12.52	12.52
Fert 41-0-0-4	cwt	56.48							1.51	57.99	57.99
App Fert by Air	cwt	12.19							0.26	12.45	12.45
Fert 41-0-0-4	cwt	56.48							1.20	57.68	57.68
App by Air ( 5 gal)	appl	7.60							0.12	7.72	7.72
Prosaro	oz	14.24							0.23	14.47	14.47
Header Wheat/Sorghum	25' Rigid		6.24	6.00	3.04				0.08	15.36	23.50
Haul Wheat	bu	18.20							0.10	18.30	18.30
TOTALS		458.64	17.28	12.19	10.34	0.00	18.15	516.60	48.16	564.76	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

Table 28.E Estimated monthly income and expense flows per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2023

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

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 28.F Estimated returns for various price/yield combinations, per acre  
 Wheat followed by soybeans, 70 bu yield goal  
 All Areas, Mississippi, 2023

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

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 29.A Estimated costs per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	5.5000	41.80	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Regiment	oz	45.96	0.5000	22.98	
Facet L	pt	17.50	2.0000	35.00	
Permit	oz	20.07	0.6700	13.45	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Seed Conv.	lb	0.33	75.0000	24.75	
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	
Rice Seed Cv(Levees)	lb	0.33	13.6000	4.49	
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	
MSO	pt	1.34	1.0000	1.34	
Dyne-A-Pak	pt	6.01	0.5000	3.01	
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.5475	9.05	
Harvesters	hour	16.54	0.1269	2.10	
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	
UNALLOCATED LABOR					
hour	16.53	0.4947	8.18		
DIESEL FUEL					
Tractors	gal	4.48	7.5785	33.96	
Harvesters	gal	4.48	2.7765	12.44	
Flood Irr.	gal	4.48	26.8827	120.45	
REPAIR & MAINTENANCE					
Implements	acre	10.04	1.0000	10.04	
Tractors	acre	4.73	1.0000	4.73	
Harvesters	acre	6.86	1.0000	6.86	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	23.79	1.0000	23.79	
TOTAL DIRECT EXPENSES				1020.16	
FIXED EXPENSES					
Implements	acre	25.53	1.0000	25.53	
Tractors	acre	33.46	1.0000	33.46	
Harvesters	acre	30.19	1.0000	30.19	
Flood Irr.	acre	52.19	1.0000	52.19	
TOTAL FIXED EXPENSES				141.37	
TOTAL SPECIFIED EXPENSES				1161.53	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 29.B Summary of estimated costs and returns per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	160.0000	1080.00	_____
<b>TOTAL INCOME</b>				1080.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	51.40	1.0000	51.40	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	54.93	1.0000	54.93	_____
ADJUVANTS	acre	8.20	1.0000	8.20	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	16.54	0.6745	11.15	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	16.53	0.4947	8.18	_____
DIESEL FUEL	gal	4.48	37.2377	166.85	_____
REPAIR & MAINTENANCE	acre	35.94	1.0000	35.94	_____
INTEREST ON OP. CAP.	acre	23.79	1.0000	23.79	_____
<b>TOTAL DIRECT EXPENSES</b>				1020.16	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				59.84	_____
<b>TOTAL FIXED EXPENSES</b>				141.37	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1161.53	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-81.53	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 29.C Estimated resource use for field operations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Sep		0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct			0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb		1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Seed Conv.	lb						75.0000				
Rice Seed Trt/Insect	lbseed						75.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr			0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr		1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
Class Act NG	pt						0.5000				
MSO	pt						0.5000				
Seed Levees				1.00	Apr						
Rice Seed Cv(Levees)	lb						13.6000				
Rice Seed Trt/Insect	lbseed						13.6000				
Rice Consultant	acre			1.00	May		1.0000				
App Fert by Air	cwt			1.00	May		1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
App by Air ( 5 gal)	appl			1.00	May		1.0000				
Regiment	oz						0.5000				
Dyne-A-Pak	pt						0.5000				
App Fert by Air	cwt			1.00	May		2.5000				
Urea, Solid (46% N)	cwt						2.5000				
NBPT	pt						0.7500				
Rice Management				1.00	May						
RICE MGT. LABOR	hour								0.30		
App by Air ( 5 gal)	appl			1.00	May		1.0000				
Facet L	pt						2.0000				
Permit	oz						0.6700				
Crop Oil Conc.(Pet.)	pt						0.4000				
App by Air ( 5 gal)	appl			0.50	Jun		0.5000				
Clincher SF	oz						7.5000				
MSO	pt						0.5000				
Rice Management				1.00	Jun						
RICE MGT. LABOR	hour								0.50		
App Fert by Air	cwt			1.00	Jun		1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management				1.00	Jul						
RICE MGT. LABOR	hour								0.50		
App by Air ( 5 gal)	appl			1.00	Jul		1.0000				
Ameristar Top	oz						10.0000				
Surfactant	pt						0.1000				
App by Air ( 3 gal)	appl			1.50	Jul		1.5000				
Tenhu SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour								0.20		
Header - Draper (CL)	40' Rigid	425 hp	0.126	1.00	Aug			0.12	0.12	0.12	0.11
Grain Cart Rice	700 bu	MFWD 225	0.055	0.20	Aug			0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour								0.25		
Haul Rice	bu			1.00	Aug		160.0000				
Dry Rice	bu			1.00	Aug		160.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.12	0.12	3.64	
TOTALS								0.67	0.67	6.02	0.49

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 29.D Estimated costs for field operations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.02	3.35	3.35
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Conv.	lb	24.75					0.79	25.54	25.54
Rice Seed Trt/Insect	lbseed	21.75					0.70	22.45	22.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
Class Act NG	pt	2.38					0.08	2.46	2.46
MSO	pt	0.67					0.02	0.69	0.69
Seed Levees									
Rice Seed Cv(Levees)	lb	4.49					0.14	4.63	4.63
Rice Seed Trt/Insect	lbseed	3.94					0.13	4.07	4.07
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
Rice Management									
RICE MGT. LABOR	hour				2.72		0.07	2.79	2.79
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	0.67					0.01	0.68	0.68
Rice Management									
RICE MGT. LABOR	hour			4.53			0.10	4.63	4.63
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			4.53			0.07	4.60	4.60
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (CL)	40' Rigid		12.44	9.49	3.99		0.28	26.20	34.89
Grain Cart Rice	700 bu		0.57	0.24	0.34		0.01	1.16	0.98
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	4.50	125.34	15.21	34.03		4.28	183.36	58.38
TOTALS		725.72	166.85	35.94	67.86	0.00	23.79	1020.16	141.37
									1161.53

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

Fertilization decisions should be based on soil tests.

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

Table 29.E Estimated monthly income and expense flows per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.93	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	0.67	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	16.70	9.52	11.33	11.33	10.08	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	14.81	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	10.07	4.58
INTEREST ON OP. CAP.	1.04	0.00	0.00	0.00	1.30	0.00	5.78	9.25	2.99	1.65	1.65	0.13
TOTAL DIRECT EXPENSES	17.27	0.00	0.00	0.00	31.88	0.00	186.45	356.75	142.93	105.01	156.61	23.26
NET INCOME	-17.27	0.00	0.00	0.00	-31.88	0.00	-186.45	-356.75	-142.93	-105.01	923.39	-23.26
NET INCOME TO DATE	-17.27	-17.27	-17.27	-17.27	-49.15	-49.15	-235.60	-592.35	-735.28	-840.29	83.10	59.84

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

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

\* Lease costs are based on hourly usage costs

Table 29.F Estimated returns for various price/yield combinations, per acre  
 Contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice													
<b>PERCENT</b>													
<b>YIELD</b>													
<b>UNIT</b>													
dollars													
50	80.00	bu	-554 -695	-527 -668	-500 -641	-473 -614	-446 -587	-419 -560	-392 -533	-365 -506	-338 -479	-311 -452	-284 -425
60	96.00	bu	-485 -627	-453 -594	-420 -562	-388 -529	-356 -497	-323 -465	-291 -432	-258 -400	-226 -367	-194 -335	-161 -303
70	112.00	bu	-416 -558	-378 -520	-341 -482	-303 -444	-265 -406	-227 -369	-189 -331	-152 -293	-114 -255	-76 -217	-38 -180
80	128.00	bu	-347 -489	-304 -446	-261 -402	-218 -359	-175 -316	-131 -273	-88 -230	-45 -186	-2 -143	40 -100	84 -57
90	144.00	bu	-279 -420	-230 -371	-181 -323	-133 -274	-84 -226	-36 -177	12 -128	61 -80	109 -31	158 16	206 65
100	160.00	bu	-210 -351	-156 -297	-102 -243	-48 -189	5 -135	59 -81	113 -27	167 26	221 80	275 134	329 188
110	176.00	bu	-141 -282	-81 -223	-22 -163	36 -104	96 -45	155 14	215 73	274 133	333 192	393 251	452 311
120	192.00	bu	-72 -213	-7 -148	57 -84	121 -19	186 45	251 110	316 175	381 239	445 304	510 369	575 434
130	208.00	bu	-3 -144	66 -74	136 -4	207 65	277 135	347 206	417 276	487 346	558 416	628 486	698 557
140	224.00	bu	65 -76	140 -0	216 75	292 150	367 226	443 301	518 377	594 453	670 528	745 604	821 679
150	240.00	bu	134 -7	215 73	296 154	377 235	458 316	539 397	620 478	701 559	782 640	863 721	944 802

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 30.A Estimated costs per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	5.5000	41.80	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Regiment	oz	45.96	0.5000	22.98	_____
Facet L	pt	17.50	2.0000	35.00	_____
Permit	oz	20.07	0.6700	13.45	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.33	75.0000	24.75	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.33	13.6000	4.49	_____
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	6.01	0.5000	3.01	_____
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4999	8.25	_____
Harvesters	hour	16.54	0.1269	2.10	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
hour	16.53	0.4947	8.18	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	_____
Harvesters	gal	4.48	2.7765	12.44	_____
Flood Irr.	gal	4.48	21.9949	98.55	_____
REPAIR & MAINTENANCE					
Implements	acre	9.98	1.0000	9.98	_____
Tractors	acre	4.48	1.0000	4.48	_____
Harvesters	acre	6.86	1.0000	6.86	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	22.96	1.0000	22.96	_____
TOTAL DIRECT EXPENSES				975.37	_____
FIXED EXPENSES					
Implements	acre	25.05	1.0000	25.05	_____
Tractors	acre	31.58	1.0000	31.58	_____
Harvesters	acre	30.19	1.0000	30.19	_____
Flood Irr.	acre	80.85	1.0000	80.85	_____
TOTAL FIXED EXPENSES				167.67	_____
TOTAL SPECIFIED EXPENSES				1143.04	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 30.B Summary of estimated costs and returns per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	51.40	1.0000	51.40	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	54.93	1.0000	54.93	_____
ADJUVANTS	acre	8.87	1.0000	8.87	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	16.54	0.6268	10.35	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4947	8.18	_____
DIESEL FUEL	gal	4.48	31.9758	143.27	_____
REPAIR & MAINTENANCE	acre	35.63	1.0000	35.63	_____
INTEREST ON OP. CAP.	acre	22.96	1.0000	22.96	_____
TOTAL DIRECT EXPENSES				975.37	_____
RETURNS ABOVE DIRECT EXPENSES				104.63	_____
TOTAL FIXED EXPENSES				167.67	_____
TOTAL SPECIFIED EXPENSES				1143.04	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-63.04	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 30.C Estimated resource use for field operations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre				0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb						75.0000				
Rice Seed Trt/Insect	lbseed						75.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed Cv(Levees)	lb						13.6000				
Rice Seed Trt/Insect	lbseed						13.6000				
Rice Consultant	acre				1.00	May	1.0000				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
App by Air ( 5 gal)	appl				1.00	May	1.0000				
Regiment	oz						0.5000				
Dyne-A-Pak	pt						0.5000				
App Fert by Air	cwt				1.00	May	2.5000				
Urea, Solid (46% N)	cwt						2.5000				
NBPT	pt						0.7500				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				1.00	May	1.0000				
Facet L	pt						2.0000				
Permit	oz						0.6700				
Crop Oil Conc.(Pet.)	pt						0.4000				
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management					1.00	Jun					
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt				1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management					1.00	Jul					
RICE MGT. LABOR	hour									0.20	
App by Air ( 5 gal)	appl				1.00	Jul	1.0000				
Ameristar Top	oz						10.0000				
Surfactant	pt						0.1000				
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (CL)	40' Rigid	425 hp		0.126	1.00	Aug		0.12	0.12	0.12	0.11
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	160.0000				
Dry Rice	bu				1.00	Aug	160.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.62	0.62	4.03	0.49	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 30.D Estimated costs for field operations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Conv.	lb	24.75					0.79	25.54	25.54
Rice Seed Trt/Insect	lbseed	21.75					0.70	22.45	22.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed Cv(Levees)	lb	4.49					0.14	4.63	4.63
Rice Seed Trt/Insect	lbseed	3.94					0.13	4.07	4.07
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (CL)	40' Rigid		12.44	9.49	3.99		0.28	26.20	34.89
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	2.25	101.57	14.89	22.79		3.39	144.89	84.61
TOTALS		724.14	143.27	35.63	49.37	0.00	22.96	975.37	167.67
									1143.04

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

Fertilization decisions should be based on soil tests.

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

Table 30.E Estimated monthly income and expense flows per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.93	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.73	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	14.18	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	9.94	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	5.53	8.94	2.74	1.45	1.64	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	178.97	344.95	130.95	92.41	155.49	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-178.97	-344.95	-130.95	-92.41	924.51	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-231.66	-576.61	-707.56	-799.97	124.54	104.63

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs

Table 30.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice  
 Flood irrigated, 27 ac-in, Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice													
<b>PERCENT</b> <b>YIELD</b> <b>UNIT</b> <b>dollars</b>													
50	80.00	bu	-509 -677	-482 -650	-455 -623	-428 -596	-401 -569	-374 -542	-347 -515	-320 -488	-293 -461	-266 -434	-239 -407
60	96.00	bu	-440 -608	-408 -576	-376 -543	-343 -511	-311 -478	-278 -446	-246 -414	-214 -381	-181 -349	-149 -316	-116 -284
70	112.00	bu	-371 -539	-334 -501	-296 -464	-258 -426	-220 -388	-182 -350	-145 -312	-107 -275	-69 -237	-31 -199	6 -161
80	128.00	bu	-303 -470	-259 -427	-216 -384	-173 -341	-130 -297	-87 -254	-43 -211	-0 -168	42 -125	85 -81	128 -38
90	144.00	bu	-234 -401	-185 -353	-137 -304	-88 -256	-39 -207	8 -158	57 -110	105 -61	154 -13	203 35	251 84
100	160.00	bu	-165 -333	-111 -279	-57 -225	-3 -171	50 -117	104 -63	158 -9	212 44	266 98	320 152	374 206
110	176.00	bu	-96 -264	-37 -204	22 -145	81 -85	141 -26	200 32	259 92	319 151	378 211	438 270	497 329
120	192.00	bu	-27 -195	37 -130	101 -65	166 -0	231 63	296 128	361 193	425 258	490 323	555 387	620 452
130	208.00	bu	41 -126	111 -56	181 13	251 84	322 154	392 224	462 294	532 364	602 435	673 505	743 575
140	224.00	bu	110 -57	185 18	261 93	336 169	412 244	488 320	563 396	639 471	714 547	790 622	866 698
150	240.00	bu	178 11	259 92	340 173	421 254	502 335	583 416	664 497	745 578	826 659	907 740	988 821

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 31.A Estimated costs per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	5.5000	41.80	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
<b>FUNGICIDES</b>					
Ameristar Top	oz	2.41	10.0000	24.10	_____
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e.	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Regiment	oz	45.96	0.5000	22.98	_____
Facet L	pt	17.50	2.0000	35.00	_____
Permit	oz	20.07	0.6700	13.45	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
<b>INSECTICIDES</b>					
Tenchu SG	oz	1.13	13.5000	15.26	_____
<b>IRRIGATION SUPPLIES</b>					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
<b>SEED/PLANTS</b>					
Rice Seed Conv.	lb	0.33	75.0000	24.75	_____
Rice Seed Trt/Insect	lbseed	0.29	88.6000	25.69	_____
Rice Seed Cv(Levees)	lb	0.33	13.6000	4.49	_____
<b>ADJUVANTS</b>					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	1.34	1.5000	2.01	_____
Dyne-A-Pak	pt	6.01	0.5000	3.01	_____
Crop Oil Conc.(Pet.)	pt	2.86	0.5000	1.43	_____
Surfactant	pt	3.30	0.1000	0.33	_____
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
<b>HAULING</b>					
Haul Rice	bu	0.35	160.0000	56.00	_____
<b>DRYING</b>					
Dry Rice	bu	0.40	160.0000	64.00	_____
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5281	8.72	_____
Harvesters	hour	16.54	0.1100	1.82	_____
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	_____
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93	_____	
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.4504	33.39	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	18.7364	83.95	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.73	1.0000	9.73	_____
Tractors	acre	4.64	1.0000	4.64	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	22.62	1.0000	22.62	_____
			-----	955.68	_____
<b>TOTAL DIRECT EXPENSES</b>					
<b>FIXED EXPENSES</b>					
Implements	acre	25.35	1.0000	25.35	_____
Tractors	acre	32.74	1.0000	32.74	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.51	1.0000	80.51	_____
			-----	164.76	_____
<b>TOTAL FIXED EXPENSES</b>					
<b>TOTAL SPECIFIED EXPENSES</b>					
			-----	1120.44	_____

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 31.B Summary of estimated costs and returns per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
				-----	
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	51.40	1.0000	51.40	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	54.93	1.0000	54.93	_____
ADJUVANTS	acre	9.16	1.0000	9.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	22.62	1.0000	22.62	_____
				-----	
TOTAL DIRECT EXPENSES				955.68	_____
RETURNS ABOVE DIRECT EXPENSES				124.32	_____
				-----	
TOTAL FIXED EXPENSES				164.76	_____
				-----	
TOTAL SPECIFIED EXPENSES				1120.44	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-40.44	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 31.C Estimated resource use for field operations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	TIMES RATE	OVER MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00 Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00 Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00 Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00 Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00 Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00 Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.3000				
Sharpen	oz					3.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Cv(Levees)	lb					13.6000				
Rice Seed Trt/Insect	lbseed					13.6000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.0000				
Permit	oz					0.6700				
Crop Oil Conc.(Pet.)	pt					0.5000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.20	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.20	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Tenchu SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20 Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00 Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00 Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.63	0.63	2.82	0.47

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 31.D Estimated costs for field operations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Conv.	lb	24.75					0.79	25.54	25.54
Rice Seed Trt/Insect	lbseed	21.75					0.70	22.45	22.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
Class Act NG	pt	2.38					0.08	2.46	2.46
MSO	pt	0.67					0.02	0.69	0.69
Seed Levees									
Rice Seed Cv(Levees)	lb	4.49					0.14	4.63	4.63
Rice Seed Trt/Insect	lbseed	3.94					0.13	4.07	4.07
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.43					0.04	1.47	1.47
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour			1.81			0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			1.81			0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage						2.27			
HAND LABOR	hour					2.27		2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	10.17	88.08	14.80	12.26		3.08	128.39	86.36
TOTALS		732.35	128.12	34.28	38.31	0.00	22.62	955.68	164.76
									1120.44

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

Fertilization decisions should be based on soil tests.

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

Table 31.E Estimated monthly income and expense flows per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	54.93	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.44	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	5.63	8.78	2.60	1.35	1.60	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	182.17	338.63	124.36	85.86	152.06	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-182.17	-338.63	-124.36	-85.86	927.94	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-234.86	-573.49	-697.85	-783.71	144.23	124.32

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

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

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

\* Lease costs are based on hourly usage costs

Table 31.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice  
 Multi inlet flood irrigated, 23 ac-in., Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice													
<b>PERCENT</b>													
<b>YIELD</b>													
<b>UNIT</b>													
<b>dollars</b>													
50	80.00	bu	-490	-463	-436	-409	-382	-355	-328	-301	-274	-247	-220
			-654	-627	-600	-573	-546	-519	-492	-465	-438	-411	-384
60	96.00	bu	-421	-388	-356	-323	-291	-259	-226	-194	-161	-129	-97
			-585	-553	-521	-488	-456	-423	-391	-359	-326	-294	-261
70	112.00	bu	-352	-314	-276	-238	-201	-163	-125	-87	-49	-12	25
			-517	-479	-441	-403	-365	-328	-290	-252	-214	-176	-139
80	128.00	bu	-283	-240	-197	-153	-110	-67	-24	18	62	105	148
			-448	-404	-361	-318	-275	-232	-188	-145	-102	-59	-16
90	144.00	bu	-214	-165	-117	-68	-20	28	77	125	174	222	271
			-379	-330	-282	-233	-184	-136	-87	-39	9	58	106
100	160.00	bu	-145	-91	-37	16	70	124	178	232	286	340	394
			-310	-256	-202	-148	-94	-40	13	67	121	175	229
110	176.00	bu	-76	-17	41	101	160	220	279	338	398	457	517
			-241	-182	-122	-63	-3	55	114	174	233	293	352
120	192.00	bu	-7	56	121	186	251	316	380	445	510	575	640
			-172	-107	-43	21	86	151	216	280	345	410	475
130	208.00	bu	60	131	201	271	341	411	482	552	622	692	762
			-103	-33	36	106	176	247	317	387	457	527	598
140	224.00	bu	129	205	281	356	432	507	583	659	734	810	885
			-34	40	116	191	267	343	418	494	569	645	721
150	240.00	bu	198	279	360	441	522	603	684	765	846	927	1008
			33	114	195	276	357	438	519	600	681	762	843

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 32.A Estimated costs per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	dollars
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	5.5000	41.80	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e.	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Regiment	oz	45.96	0.5000	22.98	_____
Facet L	pt	17.50	2.0000	35.00	_____
Permit	oz	20.07	0.6700	13.45	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Conv.	lb	0.33	75.0000	24.75	_____
Rice Seed Trt/Insect	lbseed	0.29	75.0000	21.75	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	1.34	1.5000	2.01	_____
Dyne-A-Pak	pt	6.01	0.5000	3.01	_____
Crop Oil Conc.(Pet.)	pt	2.86	0.5000	1.43	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4228	6.98	_____
Harvesters	hour	16.54	0.1100	1.82	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93	_____	
DIESEL FUEL					
Tractors	gal	4.48	6.5294	29.26	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	15.4779	69.35	_____
REPAIR & MAINTENANCE					
Implements	acre	9.51	1.0000	9.51	_____
Tractors	acre	4.02	1.0000	4.02	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	21.44	1.0000	21.44	_____
TOTAL DIRECT EXPENSES				911.44	_____
FIXED EXPENSES					
Implements	acre	23.83	1.0000	23.83	_____
Tractors	acre	28.41	1.0000	28.41	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.17	1.0000	80.17	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1070.01	_____

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

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

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

Table 32.B Summary of estimated costs and returns per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	51.40	1.0000	51.40	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	46.50	1.0000	46.50	_____
ADJUVANTS	acre	9.16	1.0000	9.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	21.44	1.0000	21.44	_____
TOTAL DIRECT EXPENSES				911.44	_____
RETURNS ABOVE DIRECT EXPENSES				168.56	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1070.01	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				9.99	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 32.C Estimated resource use for field operations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e.	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Conv.	lb					75.0000				
Rice Seed Trt/Insect	lbseed					75.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e.	oz					32.0000				
Command 3ME	pt					1.3000				
Sharpen	oz					3.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Regiment	oz					0.5000				
Dyne-A-Pak	pt					0.5000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			1.00	May	1.0000				
Facet L	pt					2.0000				
Permit	oz					0.6700				
Crop Oil Conc.(Pet.)	pt					0.5000				
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour							0.20		
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour							0.20		
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Tenchi SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour							0.20		
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour							0.25		
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000			1.05	
TOTALS							0.53	0.53	2.61	0.47

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 32.D Estimated costs for field operations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94
Grain Drill	24'			5.44	2.78	3.18	0.36	11.76
Rice Seed Conv.	lb	24.75					0.79	25.54
Rice Seed Trt/Insect	lbseed	21.75					0.70	22.45
Roller/Cultipacker	30'			3.44	0.71	1.56	0.18	5.89
App by Air ( 5 gal)	appl	7.60					0.24	7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23
Command 3ME	pt	23.40					0.75	24.15
Sharpen	oz	20.16					0.65	20.81
Class Act NG	pt	2.38					0.08	2.46
MSO	pt	0.67					0.02	0.69
Rice Consultant	acre	8.00					0.21	8.21
App Fert by Air	cwt	8.00					0.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67
DAP	cwt	27.70					0.74	28.44
App by Air ( 5 gal)	appl	7.60					0.20	7.80
Regiment	oz	22.98					0.61	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09
App Fert by Air	cwt	20.00					0.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72
NBPT	pt	13.50					0.36	13.86
Rice Management								
RICE MGT. LABOR	hour				0.91		0.02	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80
Facet L	pt	35.00					0.93	35.93
Permit	oz	13.45					0.36	13.81
Crop Oil Conc.(Pet.)	pt	1.43					0.04	1.47
App by Air ( 5 gal)	appl	3.80					0.08	3.88
Clincher SF	oz	14.63					0.31	14.94
MSO	pt	1.34					0.03	1.37
Rice Management								
RICE MGT. LABOR	hour				1.81		0.04	1.85
App Fert by Air	cwt	12.00					0.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70
Rice Management								
RICE MGT. LABOR	hour				1.81		0.03	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Ameristar Top	oz	24.10					0.39	24.49
Surfactant	pt	0.33					0.01	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75
Tenchi SG	oz	15.26					0.24	15.50
Rice Management								
RICE MGT. LABOR	hour				1.81		0.02	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36
Handling & Storage								
HAND LABOR	hour				2.27		0.02	2.29
Haul Rice	bu	56.00					0.60	56.60
Dry Rice	bu	64.00					0.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91
Flood Irr.	acre		69.35	11.80	9.53		2.17	92.85
TOTALS		713.75	109.39	31.28	35.58	0.00	21.44	911.44
								158.57
								1070.01

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 32.E Estimated monthly income and expense flows per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	46.50	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.44	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	4.71	8.68	2.52	1.30	1.57	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	151.97	334.79	120.54	82.07	149.47	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-151.97	-334.79	-120.54	-82.07	930.53	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-204.66	-539.45	-659.99	-742.06	188.47	168.56

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 32.F Estimated returns for various price/yield combinations, per acre  
 Straight levee rice - zero grade  
 Flood irrigated, 19 ac-in., Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-445 -604	-418 -577	-391 -550	-364 -523	-337 -496	-310 -469	-283 -442	-256 -415	-229 -388	-202 -361	-175 -334
60	96.00	bu	-376 -535	-344 -503	-312 -470	-279 -438	-247 -405	-214 -373	-182 -341	-150 -308	-117 -276	-85 -243	-52 -211
70	112.00	bu	-308 -466	-270 -428	-232 -391	-194 -353	-156 -315	-119 -277	-81 -239	-43 -202	-5 -164	32 -126	69 -88
80	128.00	bu	-239 -397	-195 -354	-152 -311	-109 -268	-66 -224	-23 -181	20 -138	63 -95	106 -52	149 -8	192 34
90	144.00	bu	-170 -328	-121 -280	-73 -231	-24 -183	24 -134	72 -85	121 -37	169 11	218 59	267 108	315 157
100	160.00	bu	-101 -260	-47 -206	6 -152	60 -98	114 -44	168 9	222 63	276 117	330 171	384 225	438 279
110	176.00	bu	-32 -191	26 -131	86 -72	145 -12	205 46	264 105	323 165	383 224	442 284	502 343	561 402
120	192.00	bu	36 -122	101 -57	165 7	230 72	295 136	360 201	425 266	489 331	554 396	619 460	684 525
130	208.00	bu	105 -53	175 16	245 87	315 157	385 227	456 297	526 367	596 438	666 508	736 578	807 648
140	224.00	bu	174 15	249 91	325 166	400 242	476 317	552 393	627 469	703 544	778 620	854 695	930 771
150	240.00	bu	242 84	323 165	404 246	485 327	566 408	647 489	728 570	809 651	890 732	971 813	1052 894

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 33.A Estimated costs per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Regiment	oz	45.96	0.5000	22.98	
Facet L	pt	17.50	2.0000	35.00	
Permit	oz	20.07	0.6700	13.45	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.31	23.0000	145.13	
Rice Seed CvH(Levee)	lb	1.93	4.2500	8.20	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Dyne-A-Pak	pt	6.01	0.5000	3.01	
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	4.3220	34.58	
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.5475	9.05	
Harvesters	hour	16.54	0.1100	1.82	
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	7.6209	34.15	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	26.8827	120.45	
REPAIR & MAINTENANCE					
Implements	acre	9.69	1.0000	9.69	
Tractors	acre	4.74	1.0000	4.74	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	25.98	1.0000	25.98	
TOTAL DIRECT EXPENSES				-----	1062.41
FIXED EXPENSES					
Implements	acre	24.90	1.0000	24.90	
Tractors	acre	33.53	1.0000	33.53	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	52.19	1.0000	52.19	
TOTAL FIXED EXPENSES				-----	136.78
TOTAL SPECIFIED EXPENSES				-----	1199.19

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 33.B Summary of estimated costs and returns per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	180.0000	1215.00	_____
TOTAL INCOME				1215.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.80	1.0000	43.80	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	154.56	1.0000	154.56	_____
ADJUVANTS	acre	8.54	1.0000	8.54	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	16.54	0.6575	10.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	36.9100	165.38	_____
REPAIR & MAINTENANCE	acre	34.69	1.0000	34.69	_____
INTEREST ON OP. CAP.	acre	25.98	1.0000	25.98	_____
TOTAL DIRECT EXPENSES				1062.41	_____
RETURNS ABOVE DIRECT EXPENSES				152.59	_____
TOTAL FIXED EXPENSES				136.78	_____
TOTAL SPECIFIED EXPENSES				1199.19	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				15.81	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 33.C Estimated resource use for field operations, per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct			0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb		1.0000				
Glyphosate 3lbs a.e.	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb						23.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr			0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr		1.0000				
Glyphosate 3lbs a.e.	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees				1.00	Apr						
Rice Seed CvH(Levee)	lb						4.2500				
Rice Seed Trt/Insect	lbseed						4.2500				
App Fert by Air	cwt			1.00	May		1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre			1.00	May		1.0000				
App by Air ( 5 gal)	appl			1.00	May		1.0000				
Regiment	oz						0.5000				
Dyne-A-Pak	pt						0.5000				
App Fert by Air	cwt			1.00	May		2.6700				
Urea, Solid (46% N)	cwt						2.6700				
NBPT	pt						0.8000				
Rice Management				1.00	May						
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl			1.00	May		1.0000				
Facet L	pt						2.0000				
Permit	oz						0.6700				
Crop Oil Conc.(Pet.)	pt						0.4000				
App by Air ( 5 gal)	appl			0.50	Jun		0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management				1.00	Jun						
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt			1.00	Jun		0.6520				
Urea, Solid (46% N)	cwt						0.6520				
Rice Management				1.00	Jul						
RICE MGT. LABOR	hour									0.20	
App by Air ( 3 gal)	appl			1.50	Jul		1.5000				
Tenchu SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug			0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug						
HAND LABOR	hour									0.25	
Haul Rice	bu			1.00	Aug	180.0000					
Dry Rice	bu			1.00	Aug	180.0000					
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000		0.12	0.12	3.64	
TOTALS							0.65	0.65	5.21	0.47	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 33.D Estimated costs for field operations, per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Conv Hyb Trt	lb	145.13					4.64	149.77	149.77
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CvH(Levee)	lb	8.20					0.26	8.46	8.46
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27	1.27
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	21.36					0.57	21.93	21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98	113.98
NBPT	pt	14.40					0.38	14.78	14.78
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	5.22					0.11	5.33	5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69	27.69
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	63.00					0.67	63.67	63.67
Dry Rice	bu	72.00					0.77	72.77	72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	4.50	125.34	15.21	34.03		4.28	183.36	58.38
TOTALS		776.28	165.38	34.69	60.08	0.00	25.98	1062.41	136.78
									1199.19

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 33.E Estimated monthly income and expense flows per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	154.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	16.70	7.71	8.61	8.61	9.55	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	13.34	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	8.82	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.96	9.45	2.05	1.09	1.77	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	289.26	364.47	97.90	69.70	168.48	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-289.26	-364.47	-97.90	-69.70	1046.52	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-341.95	-706.42	-804.32	-874.02	172.50	152.59

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs

Table 33.F Estimated returns for various price/yield combinations, per acre  
 Conventional hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

PRODUCT		PERCENT										
		75	80	85	90	95	100	105	110	115	120	
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	
PERCENT YIELD UNIT dollars												
50	90.00	bu	-538 -675	-508 -644	-477 -614	-447 -584	-417 -553	-386 -523	-356 -493	-325 -462	-295 -432	
60	108.00	bu	-461 -597	-424 -561	-388 -524	-351 -488	-315 -452	-278 -415	-242 -379	-205 -342	-169 -306	
70	126.00	bu	-383 -520	-341 -477	-298 -435	-256 -392	-213 -350	-170 -307	-128 -265	-85 -222	-43 -180	
80	144.00	bu	-306 -442	-257 -394	-208 -345	-160 -297	-111 -248	-63 -199	-14 -151	34 -102	82 -54	
90	162.00	bu	-228 -365	-173 -310	-119 -256	-64 -201	-9 -146	44 -92	99 -37	154 17	208 71	
100	180.00	bu	-151 -287	-90 -227	-29 -166	31 -105	91 -44	152 15	213 76	274 137	334 198	
110	198.00	bu	-73 -210	-6 -143	59 -76	126 -9	193 56	260 123	327 190	394 257	460 324	
120	216.00	bu	3 -132	76 -60	149 12	222 85	295 158	368 231	441 304	514 377	587 450	
130	234.00	bu	81 -55	160 23	239 102	318 181	397 260	476 339	555 418	634 497	713 576	
140	252.00	bu	158 21	243 107	328 192	413 277	498 362	584 447	669 532	754 617	839 702	
150	270.00	bu	236 99	327 190	418 281	509 372	600 463	691 555	782 646	874 737	965 828	

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 34.A Estimated costs per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Regiment	oz	45.96	0.5000	22.98	
Facet L	pt	17.50	2.0000	35.00	
Permit	oz	20.07	0.6700	13.45	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.31	23.0000	145.13	
Rice Seed CvH(Levee)	lb	1.93	4.2500	8.20	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Dyne-A-Pak	pt	6.01	0.5000	3.01	
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	4.3220	34.58	
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.4999	8.25	
Harvesters	hour	16.54	0.1100	1.82	
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	21.9949	98.55	
REPAIR & MAINTENANCE					
Implements	acre	9.63	1.0000	9.63	
Tractors	acre	4.48	1.0000	4.48	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	25.09	1.0000	25.09	
TOTAL DIRECT EXPENSES				1023.94	
FIXED EXPENSES					
Implements	acre	24.42	1.0000	24.42	
Tractors	acre	31.58	1.0000	31.58	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.85	1.0000	80.85	
TOTAL FIXED EXPENSES				163.01	
TOTAL SPECIFIED EXPENSES				1186.95	

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 34.B Summary of estimated costs and returns per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
<b>TOTAL INCOME</b>				<b>1215.00</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	43.80	1.0000	43.80	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	154.56	1.0000	154.56	_____
ADJUVANTS	acre	8.54	1.0000	8.54	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	16.54	0.6099	10.07	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	31.6056	141.61	_____
REPAIR & MAINTENANCE	acre	34.37	1.0000	34.37	_____
INTEREST ON OP. CAP.	acre	25.09	1.0000	25.09	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>1023.94</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>191.06</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>163.01</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1186.95</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>28.05</b>	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 34.C Estimated resource use for field operations, per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e.	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb						23.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e.	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed CvH(Levee)	lb						4.2500				
Rice Seed Trt/Insect	lbseed						4.2500				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre				1.00	May	1.0000				
App by Air ( 5 gal)	appl				1.00	May	1.0000				
Regiment	oz						0.5000				
Dyne-A-Pak	pt						0.5000				
App Fert by Air	cwt				1.00	May	2.6700				
Urea, Solid (46% N)	cwt						2.6700				
NBPT	pt						0.8000				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				1.00	May	1.0000				
Facet L	pt						2.0000				
Permit	oz						0.6700				
Crop Oil Conc.(Pet.)	pt						0.4000				
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management					1.00	Jun					
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt				1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt						0.6520				
Rice Management					1.00	Jul					
RICE MGT. LABOR	hour									0.20	
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenchi SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp		0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	180.0000				
Dry Rice	bu				1.00	Aug	180.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.60	0.60	4.01	0.47	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 34.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Conv Hyb Trt	lb	145.13					4.64	149.77	149.77
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CvH(Levee)	lb	8.20					0.26	8.46	8.46
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27	1.27
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	21.36					0.57	21.93	21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98	113.98
NBPT	pt	14.40					0.38	14.78	14.78
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	5.22					0.11	5.33	5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69	27.69
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	63.00					0.67	63.67	63.67
Dry Rice	bu	72.00					0.77	72.77	72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	2.25	101.57	14.89	22.79		3.39	144.89	84.61
TOTALS		774.03	141.61	34.37	48.84	0.00	25.09	1023.94	163.01
									1186.95

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 34.E Estimated monthly income and expense flows per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	154.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.20	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	12.52	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	8.68	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.71	9.19	1.84	0.93	1.76	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	281.78	354.53	88.01	59.86	167.16	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-281.78	-354.53	-88.01	-59.86	1047.84	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-334.47	-689.00	-777.01	-836.87	210.97	191.06

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 34.F Estimated returns for various price/yield combinations, per acre  
 Conventional hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-500 -663	-469 -632	-439 -602	-408 -571	-378 -541	-348 -511	-317 -480	-287 -450	-257 -420	-226 -389	-196 -359
60	108.00	bu	-422 -585	-386 -549	-349 -512	-313 -476	-276 -439	-240 -403	-203 -366	-167 -330	-131 -294	-94 -257	-58 -221
70	126.00	bu	-345 -508	-302 -465	-260 -423	-217 -380	-175 -338	-132 -295	-89 -252	-47 -210	-4 -167	37 -125	80 -82
80	144.00	bu	-267 -430	-219 -382	-170 -333	-121 -284	-73 -236	-24 -187	23 -139	72 -90	121 -41	169 6	218 55
90	162.00	bu	-190 -353	-135 -298	-80 -243	-26 -189	28 -134	83 -79	137 -25	192 29	247 84	301 138	356 193
100	180.00	bu	-112 -275	-51 -214	8 -154	69 -93	130 -32	191 28	251 88	312 149	373 210	434 271	494 331
110	198.00	bu	-35 -198	31 -131	98 -64	165 2	232 69	298 135	365 202	432 269	499 336	566 403	633 470
120	216.00	bu	42 -120	115 -47	188 25	260 97	333 170	406 243	479 316	552 389	625 462	698 535	771 608
130	234.00	bu	119 -43	198 35	277 114	356 193	435 272	514 351	593 430	672 509	751 588	830 667	909 746
140	252.00	bu	197 34	282 119	367 204	452 289	537 374	622 459	707 544	792 629	877 714	962 799	1047 884
150	270.00	bu	274 111	365 202	456 293	548 385	639 476	730 567	821 658	912 749	1003 840	1094 931	1185 1022

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 35.A Estimated costs per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	_____
NBPT	pt	18.00	0.8000	14.40	_____
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Regiment	oz	45.96	0.5000	22.98	_____
Facet L	pt	17.50	2.0000	35.00	_____
Permit	oz	20.07	0.6700	13.45	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
<b>INSECTICIDES</b>					
Tenhu SG	oz	1.13	13.5000	15.26	_____
<b>IRRIGATION SUPPLIES</b>					
Roll-Out Pipe	ft	0.24	33.0000	7.92	_____
<b>SEED/PLANTS</b>					
Rice Conv Hyb Trt	lb	6.31	23.0000	145.13	_____
Rice Seed CvH(Levee)	lb	1.93	4.2500	8.20	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
<b>ADJUVANTS</b>					
MSO	pt	1.34	1.5000	2.01	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Dyne-A-Pak	pt	6.01	0.5000	3.01	_____
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	_____
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	4.3220	34.58	_____
<b>HAULING</b>					
Haul Rice	bu	0.35	180.0000	63.00	_____
<b>DRYING</b>					
Dry Rice	bu	0.40	180.0000	72.00	_____
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	_____
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	_____
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5281	8.72	_____
Harvesters	hour	16.54	0.1100	1.82	_____
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	1.1250	10.18	_____
Implements	hour	9.06	0.0375	0.34	_____
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	_____
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93	_____	
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.4504	33.39	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	18.7364	83.95	_____
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.73	1.0000	9.73	_____
Tractors	acre	4.64	1.0000	4.64	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	13.96	1.0000	13.96	_____
INTEREST ON OP. CAP.	acre	24.78	1.0000	24.78	_____
<b>TOTAL DIRECT EXPENSES</b>					
				1007.44	_____
<b>FIXED EXPENSES</b>					
Implements	acre	25.35	1.0000	25.35	_____
Tractors	acre	32.74	1.0000	32.74	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.51	1.0000	80.51	_____
<b>TOTAL FIXED EXPENSES</b>					
				164.76	_____
<b>TOTAL SPECIFIED EXPENSES</b>					
				1172.20	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 35.B Summary of estimated costs and returns per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	180.0000	1215.00	_____
TOTAL INCOME				1215.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.80	1.0000	43.80	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	154.56	1.0000	154.56	_____
ADJUVANTS	acre	8.54	1.0000	8.54	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	24.78	1.0000	24.78	_____
TOTAL DIRECT EXPENSES				1007.44	_____
RETURNS ABOVE DIRECT EXPENSES				207.56	_____
TOTAL FIXED EXPENSES				164.76	_____
TOTAL SPECIFIED EXPENSES				1172.20	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				42.80	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 35.C Estimated resource use for field operations, per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ INPUT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct			0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb		1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb						23.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr			0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr		1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees				1.00	Apr						
Rice Seed CvH(Levee)	lb						4.2500				
Rice Seed Trt/Insect	lbseed						4.2500				
App Fert by Air	cwt			1.00	May		1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre			1.00	May		1.0000				
App by Air ( 5 gal)	appl			1.00	May		1.0000				
Regiment	oz						0.5000				
Dyne-A-Pak	pt						0.5000				
App Fert by Air	cwt			1.00	May		2.6700				
Urea, Solid (46% N)	cwt						2.6700				
NBPT	pt						0.8000				
Rice Management				1.00	May						
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl			1.00	May		1.0000				
Facet L	pt						2.0000				
Permit	oz						0.6700				
Crop Oil Conc.(Pet.)	pt						0.4000				
App by Air ( 5 gal)	appl			0.50	Jun		0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management				1.00	Jun						
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt			1.00	Jun		0.6520				
Urea, Solid (46% N)	cwt						0.6520				
Rice Management				1.00	Jul						
RICE MGT. LABOR	hour									0.20	
App by Air ( 3 gal)	appl			1.50	Jul		1.5000				
Tenchi SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug			0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug						
HAND LABOR	hour									0.25	
Haul Rice	bu			1.00	Aug		180.0000				
Dry Rice	bu			1.00	Aug		180.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre						1.0000	0.10	0.10	1.26	
TOTALS								0.63	0.63	2.82	0.47

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 35.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL TOTAL COST	FIXED COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			
-----dollars-----										
Soil Test	acre	3.33					0.21	3.54	3.54	
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88	25.29
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11	7.97
App by Air ( 5 gal)	appl	7.60					0.32	7.92		7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02		17.02
2,4-D Amine 4	pt	6.66					0.28	6.94		6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71	21.47
Rice Conv Hyb Trt	lb	145.13					4.64	149.77		149.77
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72	9.61
App by Air ( 5 gal)	appl	7.60					0.24	7.84		7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23		11.23
Command 3ME	pt	23.40					0.75	24.15		24.15
Sharpen	oz	20.16					0.65	20.81		20.81
MSO	pt	0.67					0.02	0.69		0.69
Class Act NG	pt	2.38					0.08	2.46		2.46
Seed Levees										
Rice Seed CvH(Levee)	lb	8.20					0.26	8.46		8.46
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27		1.27
App Fert by Air	cwt	8.00					0.21	8.21		8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67		25.67
DAP	cwt	27.70					0.74	28.44		28.44
Rice Consultant	acre	8.00					0.21	8.21		8.21
App by Air ( 5 gal)	appl	7.60					0.20	7.80		7.80
Regiment	oz	22.98					0.61	23.59		23.59
Dyne-A-Pak	pt	3.01					0.08	3.09		3.09
App Fert by Air	cwt	21.36					0.57	21.93		21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98		113.98
NBPT	pt	14.40					0.38	14.78		14.78
Rice Management										
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80		7.80
Facet L	pt	35.00					0.93	35.93		35.93
Permit	oz	13.45					0.36	13.81		13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17		1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88		3.88
Clincher SF	oz	14.63					0.31	14.94		14.94
MSO	pt	1.34					0.03	1.37		1.37
Rice Management						1.81				
RICE MGT. LABOR	hour						0.04	1.85		1.85
App Fert by Air	cwt	5.22					0.11	5.33		5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69		27.69
Rice Management										
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75		9.75
Tenchu SG	oz	15.26					0.24	15.50		15.50
Rice Management										
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23	52.94
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05	2.41
Handling & Storage						2.27				
HAND LABOR	hour						0.02	2.29		2.29
Haul Rice	bu	63.00					0.67	63.67		63.67
Dry Rice	bu	72.00					0.77	72.77		72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70	37.61
Flood Irr.	acre	10.17	88.08	14.80	12.26		3.08	128.39	86.36	214.75
TOTALS		781.95	128.12	34.28	38.31	0.00	24.78	1007.44	164.76	1172.20

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 35.E Estimated monthly income and expense flows per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	154.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.81	9.02	1.70	0.83	1.76	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	284.98	347.91	81.42	53.31	167.22	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-284.98	-347.91	-81.42	-53.31	1047.78	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-337.67	-685.58	-767.00	-820.31	227.47	207.56

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 35.F Estimated returns for various price/yield combinations, per acre  
 Conventional hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT			dollars										
50	90.00	bu	-483 -648	-453 -617	-422 -587	-392 -557	-362 -526	-331 -496	-301 -466	-270 -435	-240 -405	-210 -374	-179 -344
60	108.00	bu	-406 -570	-369 -534	-333 -497	-296 -461	-260 -425	-223 -388	-187 -352	-150 -315	-114 -279	-78 -242	-41 -206
70	126.00	bu	-328 -493	-286 -450	-243 -408	-201 -365	-158 -323	-116 -280	-73 -238	-30 -195	11 -153	54 -110	96 -68
80	144.00	bu	-251 -415	-202 -367	-153 -318	-105 -270	-56 -221	-8 -172	40 -124	89 -75	137 -27	186 21	234 70
90	162.00	bu	-173 -338	-118 -283	-64 -229	-9 -174	45 -119	99 -65	154 -10	209 44	263 98	318 153	373 208
100	180.00	bu	-96 -260	-35 -200	25 -139	86 -78	146 -17	207 42	268 103	329 164	389 225	450 285	511 346
110	198.00	bu	-18 -183	48 -116	114 -49	181 17	248 83	315 150	382 217	449 284	515 351	582 417	649 484
120	216.00	bu	58 -105	131 -33	204 39	277 112	350 185	423 258	496 331	569 404	641 477	714 550	787 623
130	234.00	bu	136 -28	215 50	294 129	373 208	452 287	531 366	610 445	689 524	768 603	847 682	926 761
140	252.00	bu	213 48	298 134	383 219	468 304	553 389	638 474	724 559	809 644	894 729	979 814	1064 899
150	270.00	bu	291 126	382 217	473 308	564 399	655 490	746 582	837 673	929 764	1020 855	1111 946	1202 1037

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 36.A Estimated costs per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Regiment	oz	45.96	0.5000	22.98	
Facet L	pt	17.50	2.0000	35.00	
Permit	oz	20.07	0.6700	13.45	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Conv Hyb Trt	lb	6.31	23.0000	145.13	
Rice Seed CvH(Levee)	lb	1.93	4.2500	8.20	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Dyne-A-Pak	pt	6.01	0.5000	3.01	
Crop Oil Conc.(Pet.)	pt	2.86	0.4000	1.14	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	4.3220	34.58	
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.4228	6.98	
Harvesters	hour	16.54	0.1100	1.82	
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	6.5294	29.26	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	15.4779	69.35	
REPAIR & MAINTENANCE					
Implements	acre	9.51	1.0000	9.51	
Tractors	acre	4.02	1.0000	4.02	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.					
	acre	23.87	1.0000	23.87	
TOTAL DIRECT EXPENSES				971.90	
FIXED EXPENSES					
Implements	acre	23.83	1.0000	23.83	
Tractors	acre	28.41	1.0000	28.41	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.17	1.0000	80.17	
TOTAL FIXED EXPENSES				158.57	
TOTAL SPECIFIED EXPENSES				1130.47	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 36.B Summary of estimated costs and returns per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	6.75	180.0000	1215.00	_____
TOTAL INCOME				1215.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	43.80	1.0000	43.80	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	163.48	1.0000	163.48	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	154.56	1.0000	154.56	_____
ADJUVANTS	acre	8.54	1.0000	8.54	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	23.87	1.0000	23.87	_____
TOTAL DIRECT EXPENSES				971.90	_____
RETURNS ABOVE DIRECT EXPENSES				243.10	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1130.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				84.53	_____

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 36.C Estimated resource use for field operations, per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct			0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb		1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Conv Hyb Trt	lb						23.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr			0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr		1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees				1.00	Apr						
Rice Seed CvH(Levee)	lb						4.2500				
Rice Seed Trt/Insect	lbseed						4.2500				
App Fert by Air	cwt			1.00	May		1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre			1.00	May		1.0000				
App by Air ( 5 gal)	appl			1.00	May		1.0000				
Regiment	oz						0.5000				
Dyne-A-Pak	pt						0.5000				
App Fert by Air	cwt			1.00	May		2.6700				
Urea, Solid (46% N)	cwt						2.6700				
NBPT	pt						0.8000				
Rice Management				1.00	May						
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl			1.00	May		1.0000				
Facet L	pt						2.0000				
Permit	oz						0.6700				
Crop Oil Conc.(Pet.)	pt						0.4000				
App by Air ( 5 gal)	appl			0.50	Jun		0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management				1.00	Jun						
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt			1.00	Jun		0.6520				
Urea, Solid (46% N)	cwt						0.6520				
Rice Management				1.00	Jul						
RICE MGT. LABOR	hour									0.20	
App by Air ( 3 gal)	appl			1.50	Jul		1.5000				
Tenchi SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug			0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug						
HAND LABOR	hour									0.25	
Haul Rice	bu			1.00	Aug		180.0000				
Dry Rice	bu			1.00	Aug		180.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000			1.05	
TOTALS								0.53	0.53	2.61	0.47

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 36.D Estimated costs for field operations, per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Conv Hyb Trt	lb	145.13					4.64	149.77	149.77
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CvH(Levee)	lb	8.20					0.26	8.46	8.46
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27	1.27
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Regiment	oz	22.98					0.61	23.59	23.59
Dyne-A-Pak	pt	3.01					0.08	3.09	3.09
App Fert by Air	cwt	21.36					0.57	21.93	21.93
Urea, Solid (46% N)	cwt	111.02					2.96	113.98	113.98
NBPT	pt	14.40					0.38	14.78	14.78
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	7.60					0.20	7.80	7.80
Facet L	pt	35.00					0.93	35.93	35.93
Permit	oz	13.45					0.36	13.81	13.81
Crop Oil Conc.(Pet.)	pt	1.14					0.03	1.17	1.17
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	5.22					0.11	5.33	5.33
Urea, Solid (46% N)	cwt	27.11					0.58	27.69	27.69
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	63.00					0.67	63.67	63.67
Dry Rice	bu	72.00					0.77	72.77	72.77
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre		69.35	11.80	9.53		2.17	92.85	80.17
TOTALS		771.78	109.39	31.28	35.58	0.00	23.87	971.90	158.57
									1130.47

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

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

Table 36.E Estimated monthly income and expense flows per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	7.60	15.20	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	54.44	71.43	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	154.56	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	3.05	4.15	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.16	8.92	1.62	0.78	1.73	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	263.48	344.07	77.60	49.52	164.63	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-263.48	-344.07	-77.60	-49.52	1050.37	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-316.17	-660.24	-737.84	-787.36	263.01	243.10

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 36.F Estimated returns for various price/yield combinations, per acre  
 Conventional hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	90.00	bu	-448 -606	-417 -576	-387 -545	-356 -515	-326 -485	-296 -454	-265 -424	-235 -394	-205 -363	-174 -333	-144 -302
60	108.00	bu	-370 -529	-334 -492	-297 -456	-261 -419	-224 -383	-188 -346	-151 -310	-115 -273	-78 -237	-42 -201	-6 -164
70	126.00	bu	-293 -451	-250 -409	-208 -366	-165 -324	-122 -281	-80 -239	-37 -196	4 -153	47 -111	89 -68	132 -26
80	144.00	bu	-215 -374	-167 -325	-118 -276	-69 -228	-21 -179	27 -131	75 -82	124 -33	173 14	221 63	270 111
90	162.00	bu	-138 -296	-83 -242	-28 -187	25 -132	80 -78	135 -23	189 31	244 86	299 140	353 195	408 250
100	180.00	bu	-60 -219	0 -158	60 -97	121 -36	182 23	243 84	303 145	364 206	425 266	486 327	546 388
110	198.00	bu	16 -141	83 -74	150 -8	217 58	284 125	350 192	417 259	484 326	551 392	618 459	685 526
120	216.00	bu	94 -64	167 8	240 81	313 154	385 227	458 300	531 373	604 446	677 518	750 591	823 664
130	234.00	bu	171 13	250 92	329 171	408 250	487 329	566 408	645 487	724 566	803 645	882 723	961 802
140	252.00	bu	249 90	334 175	419 260	504 345	589 430	674 515	759 601	844 686	929 771	1014 856	1099 941
150	270.00	bu	326 168	417 259	509 350	600 441	691 532	782 623	873 714	964 806	1055 897	1146 988	1238 1079

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 37.A Estimated costs per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	
CUSTOM SPRAY				dollars	
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Clearpath	oz	4.24	9.6000	40.70	_____
Newpath	oz	4.15	6.0000	24.90	_____
Aim	oz	4.90	1.5000	7.35	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenhu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.14	65.0000	74.10	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.14	12.0000	13.68	_____
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	_____
MSO	pt	1.34	1.5000	2.01	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.5475	9.05	_____
Harvesters	hour	16.54	0.1269	2.10	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR					
hour	16.53	0.4947	8.18	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.6209	34.15	_____
Harvesters	gal	4.48	2.7765	12.44	_____
Flood Irr.	gal	4.48	26.8827	120.45	_____
REPAIR & MAINTENANCE					
Implements	acre	10.04	1.0000	10.04	_____
Tractors	acre	4.74	1.0000	4.74	_____
Harvesters	acre	6.86	1.0000	6.86	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	26.34	1.0000	26.34	_____
TOTAL DIRECT EXPENSES				1089.67	_____
FIXED EXPENSES					
Implements	acre	25.53	1.0000	25.53	_____
Tractors	acre	33.53	1.0000	33.53	_____
Harvesters	acre	30.19	1.0000	30.19	_____
Flood Irr.	acre	52.19	1.0000	52.19	_____
TOTAL FIXED EXPENSES				141.44	_____
TOTAL SPECIFIED EXPENSES				1231.11	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 37.B Summary of estimated costs and returns per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	-----
TOTAL INCOME				1080.00	-----
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	-----
FERTILIZERS	acre	232.52	1.0000	232.52	-----
FUNGICIDES	acre	24.10	1.0000	24.10	-----
HERBICIDES	acre	165.00	1.0000	165.00	-----
INSECTICIDES	acre	15.26	1.0000	15.26	-----
SEED/PLANTS	acre	110.11	1.0000	110.11	-----
ADJUVANTS	acre	16.16	1.0000	16.16	-----
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	-----
HAULING	acre	56.00	1.0000	56.00	-----
DRYING	acre	64.00	1.0000	64.00	-----
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	-----
CROP CONSULTANT	acre	8.00	1.0000	8.00	-----
SOIL TEST	acre	3.33	1.0000	3.33	-----
HAND LABOR	hour	9.06	0.3285	2.98	-----
IRRIGATE LABOR	hour	9.06	3.5250	31.96	-----
OPERATOR LABOR	hour	16.54	0.6745	11.15	-----
RICE MGT. LABOR	hour	9.06	1.5000	13.59	-----
UNALLOCATED LABOR	hour	16.53	0.4947	8.18	-----
DIESEL FUEL	gal	4.48	37.2802	167.04	-----
REPAIR & MAINTENANCE	acre	35.95	1.0000	35.95	-----
INTEREST ON OP. CAP.	acre	26.34	1.0000	26.34	-----
TOTAL DIRECT EXPENSES				1089.67	-----
RETURNS ABOVE DIRECT EXPENSES				-9.67	-----
TOTAL FIXED EXPENSES				141.44	-----
TOTAL SPECIFIED EXPENSES				1231.11	-----
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-151.11	-----

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 37.C Estimated resource use for field operations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e.	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Clearfield	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e.	oz					32.0000				
Command 3ME	pt					1.3000				
Sharpen	oz					3.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed CF(Levees)	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Clearpath	oz					9.6000				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Newpath	oz					6.0000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Aim	oz					1.5000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Clincher SF	oz					7.5000				
MSO	pt					1.0000				
Rice Management				1.00	Jun					0.50
RICE MGT. LABOR	hour									
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					0.50
RICE MGT. LABOR	hour									
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Tenchi SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	40' Rigid	425 hp	0.126	1.00	Aug		0.12	0.12	0.12	0.11
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	160.0000				
Dry Rice	bu			1.00	Aug	160.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.67	0.67	6.02	0.49

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 37.D Estimated costs for field operations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Soil Test	acre	3.33					0.21	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86
App by Air ( 5 gal)	appl	7.60					0.32	7.92
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76
Rice Seed Clearfield	lb	74.10					2.37	76.47
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89
App by Air ( 5 gal)	appl	7.60					0.24	7.84
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23
Command 3ME	pt	23.40					0.75	24.15
Sharpen	oz	20.16					0.65	20.81
Class Act NG	pt	2.38					0.08	2.46
MSO	pt	0.67					0.02	0.69
Seed Levees								
Rice Seed CF(Levees)	lb	13.68					0.44	14.12
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84
Clearpath	oz	40.70					1.30	42.00
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90
App Fert by Air	cwt	8.00					0.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67
DAP	cwt	27.70					0.74	28.44
Rice Consultant	acre	8.00					0.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72
NBPT	pt	13.50					0.36	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96
Newpath	oz	24.90					0.66	25.56
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87
Aim	oz	7.35					0.20	7.55
Rice Management								
RICE MGT. LABOR	hour				2.72		0.07	2.79
App by Air ( 5 gal)	appl	3.80					0.08	3.88
Clincher SF	oz	14.63					0.31	14.94
MSO	pt	1.34					0.03	1.37
Rice Management								
RICE MGT. LABOR	hour				4.53		0.10	4.63
App Fert by Air	cwt	12.00					0.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70
Rice Management								
RICE MGT. LABOR	hour				4.53		0.07	4.60
App by Air ( 5 gal)	appl	7.60					0.12	7.72
Ameristar Top	oz	24.10					0.39	24.49
Surfactant	pt	0.33					0.01	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75
Tenchi SG	oz	15.26					0.24	15.50
Rice Management								
RICE MGT. LABOR	hour				1.81		0.02	1.83
Header - Draper (CL)	40' Rigid		12.44	9.49	3.99		0.28	26.20
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36
Handling & Storage								
HAND LABOR	hour				2.27		0.02	2.29
Haul Rice	bu	56.00					0.60	56.60
Dry Rice	bu	64.00					0.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91
Flood Irr.	acre	4.50	125.34	15.21	34.03		4.28	183.36
TOTALS		792.48	167.04	35.95	67.86	0.00	26.34	1089.67
								141.44
								1231.11

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 37.E Estimated monthly income and expense flows per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00
<b>DIRECT EXPENSES</b>												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	95.14	32.25	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	110.11	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	16.70	9.52	11.33	11.33	10.08	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	15.00	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	10.08	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.26	8.11	3.01	1.65	1.65	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	299.13	312.50	143.62	105.01	156.81	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-299.13	-312.50	-143.62	-105.01	923.19	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-351.82	-664.32	-807.94	-912.95	10.24	-9.67

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 37.F Estimated returns for various price/yield combinations, per acre  
 Clearfield contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-624 -765	-597 -738	-570 -711	-543 -684	-516 -657	-489 -630	-462 -603	-435 -576	-408 -549	-381 -522	-354 -495
60	96.00	bu	-555 -696	-522 -664	-490 -631	-457 -599	-425 -566	-393 -534	-360 -502	-328 -469	-295 -437	-263 -404	-231 -372
70	112.00	bu	-486 -627	-448 -589	-410 -552	-372 -514	-335 -476	-297 -438	-259 -400	-221 -363	-183 -325	-146 -287	-108 -249
80	128.00	bu	-417 -558	-374 -515	-331 -472	-287 -429	-244 -386	-201 -342	-158 -299	-115 -256	-71 -213	-28 -170	14 -126
90	144.00	bu	-348 -489	-299 -441	-251 -392	-202 -344	-154 -295	-105 -246	-56 -198	-8 -149	40 -101	88 -52	137 -3
100	160.00	bu	-279 -421	-225 -367	-171 -313	-117 -259	-63 -205	-9 -151	44 -97	98 -43	152 10	206 64	260 118
110	176.00	bu	-210 -352	-151 -292	-91 -233	-32 -174	26 -114	86 -55	145 4	205 63	264 122	323 182	383 241
120	192.00	bu	-141 -283	-77 -218	-12 -153	52 -88	117 -24	182 40	246 105	311 170	376 235	441 299	506 364
130	208.00	bu	-73 -214	-2 -144	67 -74	137 -3	207 66	277 136	348 206	418 276	488 347	558 417	628 487
140	224.00	bu	-4 -145	71 -70	147 5	222 81	298 156	373 232	449 307	525 383	600 459	676 534	751 610
150	240.00	bu	64 -76	145 4	226 85	307 166	388 247	469 328	550 409	631 490	712 571	793 652	874 733

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 38.A Estimated costs per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Clearpath	oz	4.24	9.6000	40.70	_____
Newpath	oz	4.15	6.0000	24.90	_____
Aim	oz	4.90	1.5000	7.35	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.14	65.0000	74.10	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.14	12.0000	13.68	_____
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4999	8.25	_____
Harvesters	hour	16.54	0.1100	1.82	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	21.9949	98.55	_____
REPAIR & MAINTENANCE					
Implements	acre	9.63	1.0000	9.63	_____
Tractors	acre	4.48	1.0000	4.48	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.					
TOTAL DIRECT EXPENSES				-----	1040.31
FIXED EXPENSES					
Implements	acre	24.42	1.0000	24.42	_____
Tractors	acre	31.58	1.0000	31.58	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.85	1.0000	80.85	_____
TOTAL FIXED EXPENSES				-----	163.01
TOTAL SPECIFIED EXPENSES				-----	1203.32

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 38.B Summary of estimated costs and returns per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	165.00	1.0000	165.00	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	110.11	1.0000	110.11	_____
ADJUVANTS	acre	16.16	1.0000	16.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	16.54	0.6099	10.07	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	31.6056	141.61	_____
REPAIR & MAINTENANCE	acre	34.37	1.0000	34.37	_____
INTEREST ON OP. CAP.	acre	25.26	1.0000	25.26	_____
TOTAL DIRECT EXPENSES				1040.31	_____
RETURNS ABOVE DIRECT EXPENSES				39.69	_____
TOTAL FIXED EXPENSES				163.01	_____
TOTAL SPECIFIED EXPENSES				1203.32	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-123.32	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 38.C Estimated resource use for field operations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Clearfield	lb						65.0000				
Rice Seed Trt/Insect	lbseed						65.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed CF(Levees)	lb						12.0000				
Rice Seed Trt/Insect	lbseed						12.0000				
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Clearpath	oz						9.6000				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre				1.00	May	1.0000				
App Fert by Air	cwt				1.00	May	2.5000				
Urea, Solid (46% N)	cwt						2.5000				
NBPT	pt						0.7500				
App by Air (10 gal)	appl				1.00	May	1.0000				
Newpath	oz						6.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Aim	oz						1.5000				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management					1.00	Jun					0.20
RICE MGT. LABOR	hour										
App Fert by Air	cwt				1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management					1.00	Jul					0.20
RICE MGT. LABOR	hour										
App by Air ( 5 gal)	appl				1.00	Jul	1.0000				
Ameristar Top	oz						10.0000				
Surfactant	pt						0.1000				
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					0.20
RICE MGT. LABOR	hour										
Header - Draper (SL)	40' Rigid	425 hp		0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	160.0000				
Dry Rice	bu				1.00	Aug	160.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.60	0.60	4.01	0.47	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 38.D Estimated costs for field operations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Clearfield	lb	74.10					2.37	76.47	76.47
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CF(Levees)	lb	13.68					0.44	14.12	14.12
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Clearpath	oz	40.70					1.30	42.00	42.00
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Newpath	oz	24.90					0.66	25.56	25.56
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Aim	oz	7.35					0.20	7.55	7.55
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	2.25	101.57	14.89	22.79		3.39	144.89	84.61
TOTALS		790.23	141.61	34.37	48.84	0.00	25.26	1040.31	163.01
									1203.32

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 38.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	95.14	32.25	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	110.11	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.20	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	12.52	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	8.68	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.01	7.80	2.74	1.45	1.60	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	291.65	300.70	130.95	92.41	152.00	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-291.65	-300.70	-130.95	-92.41	928.00	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-344.34	-645.04	-775.99	-868.40	59.60	39.69

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs

Table 38.F Estimated returns for various price/yield combinations, per acre  
 Clearfield straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice													
<b>PERCENT</b>													
<b>YIELD</b>													
<b>UNIT</b>													
dollars													
50	80.00	bu	-574 -737	-547 -710	-520 -683	-493 -656	-466 -629	-439 -602	-412 -575	-385 -548	-358 -521	-331 -494	-304 -467
60	96.00	bu	-505 -668	-473 -636	-440 -604	-408 -571	-376 -539	-343 -506	-311 -474	-278 -442	-246 -409	-214 -377	-181 -344
70	112.00	bu	-436 -599	-399 -562	-361 -524	-323 -486	-285 -448	-247 -410	-210 -373	-172 -335	-134 -297	-96 -259	-58 -221
80	128.00	bu	-368 -531	-324 -487	-281 -444	-238 -401	-195 -358	-152 -315	-108 -271	-65 -228	-22 -185	20 -142	63 -99
90	144.00	bu	-299 -462	-250 -413	-201 -364	-153 -316	-104 -267	-56 -219	-7 -170	41 -121	89 -73	138 -24	186 23
100	160.00	bu	-230 -393	-176 -339	-122 -285	-68 -231	-14 -177	39 -123	93 -69	147 -15	201 38	255 92	309 146
110	176.00	bu	-161 -324	-102 -265	-42 -205	16 -146	76 -86	135 -27	194 31	254 91	313 150	373 210	432 269
120	192.00	bu	-92 -255	-27 -190	37 -125	101 -61	166 3	231 68	296 133	361 198	425 262	490 327	555 392
130	208.00	bu	-23 -186	46 -116	116 -46	186 23	257 94	327 164	397 234	467 304	537 374	608 445	678 515
140	224.00	bu	45 -117	120 -42	196 33	271 108	347 184	423 260	498 335	574 411	649 486	725 562	801 638
150	240.00	bu	114 -48	195 32	276 113	357 194	438 275	519 356	600 437	681 518	762 599	843 680	924 761

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 39.A Estimated costs per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Clearpath	oz	4.24	9.6000	40.70	
Newpath	oz	4.15	6.0000	24.90	
Aim	oz	4.90	1.5000	7.35	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Seed Clearfield	lb	1.14	65.0000	74.10	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
Rice Seed CF(Levees)	lb	1.14	12.0000	13.68	
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.5281	8.72	
Harvesters	hour	16.54	0.1100	1.82	
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	
Implements	hour	9.06	0.0375	0.34	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	7.4504	33.39	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	18.7364	83.95	
REPAIR & MAINTENANCE					
Implements	acre	9.73	1.0000	9.73	
Tractors	acre	4.64	1.0000	4.64	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	24.95	1.0000	24.95	
TOTAL DIRECT EXPENSES				1023.81	
FIXED EXPENSES					
Implements	acre	25.35	1.0000	25.35	
Tractors	acre	32.74	1.0000	32.74	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.51	1.0000	80.51	
TOTAL FIXED EXPENSES				164.76	
TOTAL SPECIFIED EXPENSES				1188.57	

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 39.B Summary of estimated costs and returns per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	160.0000	1080.00	_____
<b>TOTAL INCOME</b>				1080.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	165.00	1.0000	165.00	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	110.11	1.0000	110.11	_____
ADJUVANTS	acre	16.16	1.0000	16.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	24.95	1.0000	24.95	_____
<b>TOTAL DIRECT EXPENSES</b>				1023.81	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				56.19	_____
<b>TOTAL FIXED EXPENSES</b>				164.76	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1188.57	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-108.57	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 39.C Estimated resource use for field operations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Clearfield	lb						65.0000				
Rice Seed Trt/Insect	lbseed						65.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed CF(Levees)	lb						12.0000				
Rice Seed Trt/Insect	lbseed						12.0000				
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Clearpath	oz						9.6000				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre				1.00	May	1.0000				
App Fert by Air	cwt				1.00	May	2.5000				
Urea, Solid (46% N)	cwt						2.5000				
NBPT	pt						0.7500				
App by Air (10 gal)	appl				1.00	May	1.0000				
Newpath	oz						6.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Aim	oz						1.5000				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management					1.00	Jun					0.20
RICE MGT. LABOR	hour										
App Fert by Air	cwt				1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management					1.00	Jul					0.20
RICE MGT. LABOR	hour										
App by Air ( 5 gal)	appl				1.00	Jul	1.0000				
Ameristar Top	oz						10.0000				
Surfactant	pt						0.1000				
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					0.20
RICE MGT. LABOR	hour										
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	160.0000				
Dry Rice	bu				1.00	Aug	160.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.63	0.63	2.82	0.47	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 39.D Estimated costs for field operations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Clearfield	lb	74.10					2.37	76.47	76.47
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CF(Levees)	lb	13.68					0.44	14.12	14.12
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Clearpath	oz	40.70					1.30	42.00	42.00
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Newpath	oz	24.90					0.66	25.56	25.56
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Aim	oz	7.35					0.20	7.55	7.55
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	10.17	88.08	14.80	12.26		3.08	128.39	86.36
TOTALS		798.15	128.12	34.28	38.31	0.00	24.95	1023.81	164.76
									1188.57

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 39.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	95.14	32.25	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	110.11	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.11	7.63	2.60	1.35	1.60	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	294.85	294.08	124.36	85.86	152.06	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-294.85	-294.08	-124.36	-85.86	927.94	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-347.54	-641.62	-765.98	-851.84	76.10	56.19

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

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

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

\* Lease costs are based on hourly usage costs.

Table 39.F Estimated returns for various price/yield combinations, per acre  
 Clearfield straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120		
		PRODUCT PRICE											
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT	dollars										
50	80.00	bu	-558 -722	-531 -695	-504 -668	-477 -641	-450 -614	-423 -587	-396 -560	-369 -533	-342 -506	-315 -479	-288 -452
60	96.00	bu	-489 -654	-456 -621	-424 -589	-392 -556	-359 -524	-327 -492	-294 -459	-262 -427	-230 -394	-197 -362	-165 -330
70	112.00	bu	-420 -585	-382 -547	-344 -509	-307 -471	-269 -433	-231 -396	-193 -358	-155 -320	-118 -282	-80 -244	-42 -207
80	128.00	bu	-351 -516	-308 -473	-265 -429	-221 -386	-178 -343	-135 -300	-92 -257	-49 -213	-5 -170	37 -127	80 -84
90	144.00	bu	-282 -447	-234 -398	-185 -350	-136 -301	-88 -253	-39 -204	8 -155	57 -107	106 -58	154 -10	203 38
100	160.00	bu	-213 -378	-159 -324	-105 -270	-51 -216	2 -162	56 -108	110 -54	164 -0	218 53	272 107	326 161
110	176.00	bu	-144 -309	-85 -250	-26 -190	33 -131	92 -72	152 -12	211 46	270 106	330 165	389 224	449 284
120	192.00	bu	-76 -240	-11 -176	53 -111	118 -46	183 18	247 83	312 147	377 212	442 277	507 342	571 407
130	208.00	bu	-7 -171	63 -101	133 -31	203 38	273 108	343 179	414 249	484 319	554 389	624 459	694 530
140	224.00	bu	61 -103	137 -27	212 48	288 123	364 199	439 274	515 350	590 426	666 501	742 577	817 652
150	240.00	bu	130 -34	211 46	292 127	373 208	454 289	535 370	616 451	697 532	778 613	859 694	940 775

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 40.A Estimated costs per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Clearpath	oz	4.24	9.6000	40.70	_____
Newpath	oz	4.15	6.0000	24.90	_____
Aim	oz	4.90	1.5000	7.35	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Clearfield	lb	1.14	65.0000	74.10	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
Rice Seed CF(Levees)	lb	1.14	12.0000	13.68	_____
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	160.0000	56.00	_____
DRYING					
Dry Rice	bu	0.40	160.0000	64.00	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4228	6.98	_____
Harvesters	hour	16.54	0.1100	1.82	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93	_____	
DIESEL FUEL					
Tractors	gal	4.48	6.5294	29.26	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	15.4779	69.35	_____
REPAIR & MAINTENANCE					
Implements	acre	9.51	1.0000	9.51	_____
Tractors	acre	4.02	1.0000	4.02	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	11.80	1.0000	11.80	_____
INTEREST ON OP. CAP.	acre	24.04	1.0000	24.04	_____
TOTAL DIRECT EXPENSES				988.27	_____
FIXED EXPENSES					
Implements	acre	23.83	1.0000	23.83	_____
Tractors	acre	28.41	1.0000	28.41	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.17	1.0000	80.17	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1146.84	_____

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 40.B Summary of estimated costs and returns per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	160.0000	1080.00	_____
TOTAL INCOME				1080.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	165.00	1.0000	165.00	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	110.11	1.0000	110.11	_____
ADJUVANTS	acre	16.16	1.0000	16.16	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	56.00	1.0000	56.00	_____
DRYING	acre	64.00	1.0000	64.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	24.04	1.0000	24.04	_____
TOTAL DIRECT EXPENSES				988.27	_____
RETURNS ABOVE DIRECT EXPENSES				91.73	_____
TOTAL FIXED EXPENSES				158.57	_____
TOTAL SPECIFIED EXPENSES				1146.84	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-66.84	_____

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 40.C Estimated resource use for field operations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Clearfield	lb						65.0000				
Rice Seed Trt/Insect	lbseed						65.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed CF(Levees)	lb						12.0000				
Rice Seed Trt/Insect	lbseed						12.0000				
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Clearpath	oz						9.6000				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre				1.00	May	1.0000				
App Fert by Air	cwt				1.00	May	2.5000				
Urea, Solid (46% N)	cwt						2.5000				
NBPT	pt						0.7500				
App by Air (10 gal)	appl				1.00	May	1.0000				
Newpath	oz						6.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Aim	oz						1.5000				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management					1.00	Jun					0.20
RICE MGT. LABOR	hour										
App Fert by Air	cwt				1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management					1.00	Jul					0.20
RICE MGT. LABOR	hour										
App by Air ( 5 gal)	appl				1.00	Jul	1.0000				
Ameristar Top	oz						10.0000				
Surfactant	pt						0.1000				
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenchu SG	oz						13.5000				
Rice Management					1.00	Aug					0.20
RICE MGT. LABOR	hour										
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	160.0000				
Dry Rice	bu				1.00	Aug	160.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000			1.05	
TOTALS							0.53	0.53	2.61	0.47	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 40.D Estimated costs for field operations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Clearfield	lb	74.10					2.37	76.47	76.47
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed CF(Levees)	lb	13.68					0.44	14.12	14.12
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Clearpath	oz	40.70					1.30	42.00	42.00
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Newpath	oz	24.90					0.66	25.56	25.56
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Aim	oz	7.35					0.20	7.55	7.55
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Clincher SF	oz	14.63					0.31	14.94	14.94
MSO	pt	1.34					0.03	1.37	1.37
Rice Management									
RICE MGT. LABOR	hour				1.81		0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour				1.81		0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour				1.81		0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour				2.27		0.02	2.29	2.29
Haul Rice	bu	56.00					0.60	56.60	56.60
Dry Rice	bu	64.00					0.68	64.68	64.68
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre		69.35	11.80	9.53		2.17	92.85	80.17
TOTALS		787.98	109.39	31.28	35.58	0.00	24.04	988.27	158.57
									1146.84

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 40.E Estimated monthly income and expense flows per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1080.00	0.00
<b>DIRECT EXPENSES</b>												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	95.14	32.25	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	110.11	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	56.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.46	7.53	2.52	1.30	1.57	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	273.35	290.24	120.54	82.07	149.47	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-273.35	-290.24	-120.54	-82.07	930.53	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-326.04	-616.28	-736.82	-818.89	111.64	91.73

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs

Table 40.F Estimated returns for various price/yield combinations, per acre  
 Clearfield straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

PRODUCT		75	80	85	90	95	100	PERCENT				
								PRODUCT	PRICE			
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT						dollars				
50	80.00	bu	-522 -681	-495 -654	-468 -627	-441 -600	-414 -573	-387 -546	-360 -519	-333 -492	-306 -465	-279 -438
60	96.00	bu	-453 -612	-421 -579	-388 -547	-356 -515	-324 -482	-291 -450	-259 -417	-226 -385	-194 -353	-162 -320
70	112.00	bu	-384 -543	-347 -505	-309 -467	-271 -430	-233 -392	-195 -354	-158 -316	-120 -278	-82 -241	-44 -203
80	128.00	bu	-316 -474	-272 -431	-229 -388	-186 -344	-143 -301	-100 -258	-56 -215	-13 -172	29 -128	72 -85
90	144.00	bu	-247 -405	-198 -357	-149 -308	-101 -259	-52 -211	-4 -162	44 -114	93 -65	141 -16	190 31
100	160.00	bu	-178 -336	-124 -282	-70 -228	-16 -174	37 -120	91 -66	145 -12	199 41	253 95	307 149
110	176.00	bu	-109 -267	-49 -208	9 -149	68 -89	128 -30	187 29	247 88	306 147	365 207	425 266
120	192.00	bu	-40 -199	24 -134	89 -69	153 -4	218 60	283 124	348 189	413 254	477 319	542 384
130	208.00	bu	28 -130	98 -60	168 10	238 80	309 150	379 220	449 290	519 361	589 431	660 501
140	224.00	bu	97 -61	172 14	248 89	324 165	399 241	475 316	550 392	626 467	702 543	777 619
150	240.00	bu	166 7	247 88	328 169	409 250	490 331	571 412	652 493	733 574	814 655	895 736
												976 817

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 41.A Estimated costs per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	3.5000	26.60	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Preface	oz	4.99	11.0000	54.89	
Facet L	pt	17.50	2.0000	35.00	
Aim	oz	4.90	1.5000	7.35	
Clincher SF	oz	1.95	7.5000	14.63	
<b>INSECTICIDES</b>					
Tenhu SG	oz	1.13	13.5000	15.26	
<b>SEED/PLANTS</b>					
Rice Fullpage Hyb Tr	lb	7.68	23.0000	176.64	
Rice Seed FPH(Levee)	lb	7.68	4.2500	32.64	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
<b>ADJUVANTS</b>					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	4.3220	34.58	
<b>HAULING</b>					
Haul Rice	bu	0.35	180.0000	63.00	
<b>DRYING</b>					
Dry Rice	bu	0.40	180.0000	72.00	
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5475	9.05	
Harvesters	hour	16.54	0.1100	1.82	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	3.5250	31.96	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.6209	34.15	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	26.8827	120.45	
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.69	1.0000	9.69	
Tractors	acre	4.74	1.0000	4.74	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	29.11	1.0000	29.11	
<b>TOTAL DIRECT EXPENSES</b>					
			-----	1156.69	
<b>FIXED EXPENSES</b>					
Implements	acre	24.90	1.0000	24.90	
Tractors	acre	33.53	1.0000	33.53	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	52.19	1.0000	52.19	
<b>TOTAL FIXED EXPENSES</b>					
			-----	136.78	
<b>TOTAL SPECIFIED EXPENSES</b>					
			-----	1293.47	

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 41.B Summary of estimated costs and returns per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Rice	bu	6.75	180.0000	1215.00	_____
TOTAL INCOME				1215.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	45.90	1.0000	45.90	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	189.29	1.0000	189.29	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	210.51	1.0000	210.51	_____
ADJUVANTS	acre	15.83	1.0000	15.83	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	16.54	0.6575	10.87	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	36.9100	165.38	_____
REPAIR & MAINTENANCE	acre	34.69	1.0000	34.69	_____
INTEREST ON OP. CAP.	acre	29.11	1.0000	29.11	_____
TOTAL DIRECT EXPENSES				1156.69	_____
RETURNS ABOVE DIRECT EXPENSES				58.31	_____
TOTAL FIXED EXPENSES				136.78	_____
TOTAL SPECIFIED EXPENSES				1293.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-78.47	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 41.C Estimated resource use for field operations, per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ INPUT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb						23.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed FPH(Levee)	lb						4.2500				
Rice Seed Trt/Insect	lbseed						4.2500				
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Preface	oz						5.0000				
Facet L	pt						2.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre				1.00	May	1.0000				
App Fert by Air	cwt				1.00	May	2.6700				
Urea, Solid (46% N)	cwt						2.6700				
NBPT	pt						0.8000				
App by Air (10 gal)	appl				1.00	May	1.0000				
Preface	oz						6.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Aim	oz						1.5000				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management					1.00	Jun					
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt				1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt						0.6520				
Rice Management					1.00	Jul					
RICE MGT. LABOR	hour									0.20	
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenhu SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	180.0000				
Dry Rice	bu				1.00	Aug	180.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.65	0.65	5.21	0.47	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 41.D Estimated costs for field operations, per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33				0.21	3.54		3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93	0.75	12.41	12.88	25.29		
Harrow - Folding	40'		2.69	0.66	1.22	0.29	4.86	3.11	7.97		
App by Air ( 5 gal)	appl	7.60				0.32	7.92		7.92		
Glyphosate 3lbs a.e	oz	16.32				0.70	17.02		17.02		
2,4-D Amine 4	pt	6.66				0.28	6.94		6.94		
Grain Drill	24'		5.44	2.78	3.18	0.36	11.76	9.71	21.47		
Rice Fullpage Hyb Tr	lb	176.64				5.65	182.29		182.29		
Roller/Cultipacker	30'		3.44	0.71	1.56	0.18	5.89	3.72	9.61		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23		11.23		
Command 3ME	pt	23.40				0.75	24.15		24.15		
Sharpen	oz	20.16				0.65	20.81		20.81		
MSO	pt	0.67				0.02	0.69		0.69		
Class Act NG	pt	2.38				0.08	2.46		2.46		
Seed Levees											
Rice Seed FPH(Levee)	lb	32.64				1.04	33.68		33.68		
Rice Seed Trt/Insect	lbseed	1.23				0.04	1.27		1.27		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Preface	oz	24.95				0.80	25.75		25.75		
Facet L	pt	35.00				1.12	36.12		36.12		
Crop Oil Conc.(Pet.)	pt	5.72				0.18	5.90		5.90		
App Fert by Air	cwt	8.00				0.21	8.21		8.21		
Amm Sulfate (21% N)	cwt	25.00				0.67	25.67		25.67		
DAP	cwt	27.70				0.74	28.44		28.44		
Rice Consultant	acre	8.00				0.21	8.21		8.21		
App Fert by Air	cwt	21.36				0.57	21.93		21.93		
Urea, Solid (46% N)	cwt	111.02				2.96	113.98		113.98		
NBPT	pt	14.40				0.38	14.78		14.78		
App by Air (10 gal)	appl	9.70				0.26	9.96		9.96		
Preface	oz	29.94				0.80	30.74		30.74		
Crop Oil Conc.(Pet.)	pt	5.72				0.15	5.87		5.87		
Aim	oz	7.35				0.20	7.55		7.55		
Rice Management											
RICE MGT. LABOR	hour				0.91		0.93		0.93		
App by Air ( 5 gal)	appl	3.80				0.08	3.88		3.88		
Clincher SF	oz	14.63				0.31	14.94		14.94		
MSO	pt	1.34				0.03	1.37		1.37		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.85		1.85		
App Fert by Air	cwt	5.22				0.11	5.33		5.33		
Urea, Solid (46% N)	cwt	27.11				0.58	27.69		27.69		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.84		1.84		
App by Air ( 3 gal)	appl	9.60				0.15	9.75		9.75		
Tenchu SG	oz	15.26				0.24	15.50		15.50		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.83		1.83		
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46	0.24	22.71	30.23	52.94		
Grain Cart Rice	700 bu		0.76	0.25	0.34	0.01	1.36	1.05	2.41		
Handling & Storage											
HAND LABOR	hour				2.27		2.29		2.29		
Haul Rice	bu	63.00				0.67	63.67		63.67		
Dry Rice	bu	72.00				0.77	72.77		72.77		
Disk Heavy	28'		10.47	4.58	4.75	0.11	19.91	17.70	37.61		
Flood Irr.	acre	4.50	125.34	15.21	34.03	4.28	183.36	58.38	241.74		
TOTALS		867.43	165.38	34.69	60.08	0.00	29.11	1156.69	136.78	1293.47	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 41.E Estimated monthly income and expense flows per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	114.39	37.29	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	210.51	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	16.70	7.71	8.61	8.61	9.55	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	13.34	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	8.82	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	13.09	8.45	2.05	1.09	1.77	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	422.61	325.40	97.90	69.70	168.48	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-422.61	-325.40	-97.90	-69.70	1046.52	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-475.30	-800.70	-898.60	-968.30	78.22	58.31

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 41.F Estimated returns for various price/yield combinations, per acre  
 Fullpage hybrid contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT			dollars										
50	90.00	bu	-632 -769	-602 -739	-572 -708	-541 -678	-511 -648	-480 -617	-450 -587	-420 -557	-389 -526	-359 -496	-329 -465
60	108.00	bu	-555 -692	-518 -655	-482 -619	-446 -582	-409 -546	-373 -509	-336 -473	-300 -436	-263 -400	-227 -364	-190 -327
70	126.00	bu	-477 -614	-435 -572	-392 -529	-350 -487	-307 -444	-265 -402	-222 -359	-180 -316	-137 -274	-95 -231	-52 -189
80	144.00	bu	-400 -537	-351 -488	-303 -439	-254 -391	-206 -342	-157 -294	-108 -245	-60 -196	-11 -148	36 -99	85 -51
90	162.00	bu	-322 -459	-268 -405	-213 -350	-158 -295	-104 -241	-49 -186	5 -131	59 -76	114 -22	169 32	223 87
100	180.00	bu	-245 -382	-184 -321	-123 -260	-63 -199	-2 -139	58 -78	119 -17	179 43	240 103	301 164	362 225
110	198.00	bu	-167 -304	-101 -237	-34 -171	32 -104	99 -37	166 29	232 96	299 163	366 229	433 296	500 363
120	216.00	bu	-90 -227	-17 -154	55 -81	128 -8	201 64	274 137	346 210	419 283	492 355	565 428	638 501
130	234.00	bu	-12 -149	65 -70	144 8	223 87	302 166	381 245	460 324	539 403	618 482	697 560	776 639
140	252.00	bu	64 -72	149 12	234 97	319 182	404 267	489 352	574 438	659 523	744 608	829 693	914 778
150	270.00	bu	141 5	233 96	324 187	415 278	506 369	597 460	688 551	779 643	870 734	962 825	1053 916

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 42.A Estimated costs per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	3.5000	26.60	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	_____
NBPT	pt	18.00	0.8000	14.40	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Preface	oz	4.99	11.0000	54.89	_____
Facet L	pt	17.50	2.0000	35.00	_____
Aim	oz	4.90	1.5000	7.35	_____
Clincher SF	oz	1.95	7.5000	14.63	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.68	23.0000	176.64	_____
Rice Seed FPH(Levee)	lb	7.68	4.2500	32.64	_____
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	_____
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	4.3220	34.58	_____
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	_____
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4999	8.25	_____
Harvesters	hour	16.54	0.1100	1.82	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implements	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	21.9949	98.55	_____
REPAIR & MAINTENANCE					
Implements	acre	9.63	1.0000	9.63	_____
Tractors	acre	4.48	1.0000	4.48	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	28.22	1.0000	28.22	_____
TOTAL DIRECT EXPENSES				1118.22	_____
FIXED EXPENSES					
Implements	acre	24.42	1.0000	24.42	_____
Tractors	acre	31.58	1.0000	31.58	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.85	1.0000	80.85	_____
TOTAL FIXED EXPENSES				163.01	_____
TOTAL SPECIFIED EXPENSES				1281.23	_____

Note: Cost of production estimates are based on 2022 input prices.  
 Fertilization decisions should be based on soil tests.  
 Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 42.B Summary of estimated costs and returns per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
<b>TOTAL INCOME</b>				1215.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	45.90	1.0000	45.90	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	189.29	1.0000	189.29	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	210.51	1.0000	210.51	_____
ADJUVANTS	acre	15.83	1.0000	15.83	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	16.54	0.6099	10.07	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	31.6056	141.61	_____
REPAIR & MAINTENANCE	acre	34.37	1.0000	34.37	_____
INTEREST ON OP. CAP.	acre	28.22	1.0000	28.22	_____
<b>TOTAL DIRECT EXPENSES</b>				1118.22	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				96.78	_____
<b>TOTAL FIXED EXPENSES</b>				163.01	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1281.23	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-66.23	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 42.C Estimated resource use for field operations, per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct	0.3330					
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb						23.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed FPH(Levee)	lb						4.2500				
Rice Seed Trt/Insect	lbseed						4.2500				
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Preface	oz						5.0000				
Facet L	pt						2.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre				1.00	May	1.0000				
App Fert by Air	cwt				1.00	May	2.6700				
Urea, Solid (46% N)	cwt						2.6700				
NBPT	pt						0.8000				
App by Air (10 gal)	appl				1.00	May	1.0000				
Preface	oz						6.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Aim	oz						1.5000				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management					1.00	Jun					
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt				1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt						0.6520				
Rice Management					1.00	Jul					
RICE MGT. LABOR	hour									0.20	
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenchi SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	180.0000				
Dry Rice	bu				1.00	Aug	180.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.07	0.07	2.45	
TOTALS							0.60	0.60	4.01	0.47	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 42.D Estimated costs for field operations, per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST			
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.33					0.21	3.54	3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88	25.29	
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11	7.97	
App by Air ( 5 gal)	appl	7.60					0.32	7.92		7.92	
Glyphosate 3lbs a.e	oz	16.32					0.70	17.02		17.02	
2,4-D Amine 4	pt	6.66					0.28	6.94		6.94	
Grain Drill	24'			5.44	2.78	3.18		0.36	11.76	9.71	21.47
Rice Fullpage Hyb Tr	lb	176.64					5.65	182.29		182.29	
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72	9.61	
App by Air ( 5 gal)	appl	7.60					0.24	7.84		7.84	
Glyphosate 3lbs a.e	oz	10.88					0.35	11.23		11.23	
Command 3ME	pt	23.40					0.75	24.15		24.15	
Sharpen	oz	20.16					0.65	20.81		20.81	
MSO	pt	0.67					0.02	0.69		0.69	
Class Act NG	pt	2.38					0.08	2.46		2.46	
Seed Levees											
Rice Seed FPH(Levee)	lb	32.64					1.04	33.68		33.68	
Rice Seed Trt/Insect	lbseed	1.23					0.04	1.27		1.27	
App by Air ( 5 gal)	appl	7.60					0.24	7.84		7.84	
Preface	oz	24.95					0.80	25.75		25.75	
Facet L	pt	35.00					1.12	36.12		36.12	
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90		5.90	
App Fert by Air	cwt	8.00					0.21	8.21		8.21	
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67		25.67	
DAP	cwt	27.70					0.74	28.44		28.44	
Rice Consultant	acre	8.00					0.21	8.21		8.21	
App Fert by Air	cwt	21.36					0.57	21.93		21.93	
Urea, Solid (46% N)	cwt	111.02					2.96	113.98		113.98	
NBPT	pt	14.40					0.38	14.78		14.78	
App by Air (10 gal)	appl	9.70					0.26	9.96		9.96	
Preface	oz	29.94					0.80	30.74		30.74	
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87		5.87	
Aim	oz	7.35					0.20	7.55		7.55	
Rice Management											
RICE MGT. LABOR	hour				0.91		0.02	0.93		0.93	
App by Air ( 5 gal)	appl	3.80					0.08	3.88		3.88	
Clincher SF	oz	14.63					0.31	14.94		14.94	
MSO	pt	1.34					0.03	1.37		1.37	
Rice Management											
RICE MGT. LABOR	hour				1.81		0.04	1.85		1.85	
App Fert by Air	cwt	5.22					0.11	5.33		5.33	
Urea, Solid (46% N)	cwt	27.11					0.58	27.69		27.69	
Rice Management											
RICE MGT. LABOR	hour				1.81		0.03	1.84		1.84	
App by Air ( 3 gal)	appl	9.60					0.15	9.75		9.75	
Tenchi SG	oz	15.26					0.24	15.50		15.50	
Rice Management											
RICE MGT. LABOR	hour				1.81		0.02	1.83		1.83	
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23	52.94	
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05	2.41	
Handling & Storage											
HAND LABOR	hour				2.27		0.02	2.29		2.29	
Haul Rice	bu	63.00					0.67	63.67		63.67	
Dry Rice	bu	72.00					0.77	72.77		72.77	
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70	37.61	
Flood Irr.	acre	2.25	101.57	14.89	22.79		3.39	144.89	84.61	229.50	
TOTALS		865.18	141.61	34.37	48.84	0.00	28.22	1118.22	163.01	1281.23	

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

Fertilization decisions should be based on soil tests.

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

Table 42.E Estimated monthly income and expense flows per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	114.39	37.29	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	210.51	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.20	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	12.52	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	8.68	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	12.84	8.19	1.84	0.93	1.76	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	415.13	315.46	88.01	59.86	167.16	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-415.13	-315.46	-88.01	-59.86	1047.84	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-467.82	-783.28	-871.29	-931.15	116.69	96.78

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 42.F Estimated returns for various price/yield combinations, per acre  
 Fullpage hybrid straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

PRODUCT		75	80	85	90	95	100	PERCENT					
								PRODUCT	PRICE				
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT						dollars					
50	90.00	bu	-594 -757	-564 -727	-533 -696	-503 -666	-472 -635	-442 -605	-412 -575	-381 -544	-351 -514	-321 -484	-290 -453
60	108.00	bu	-516 -679	-480 -643	-443 -607	-407 -570	-371 -534	-334 -497	-298 -461	-261 -424	-225 -388	-188 -351	-152 -315
70	126.00	bu	-439 -602	-396 -559	-354 -517	-311 -474	-269 -432	-226 -389	-184 -347	-141 -304	-99 -262	-56 -219	-14 -177
80	144.00	bu	-361 -524	-313 -476	-264 -427	-216 -379	-167 -330	-118 -281	-70 -233	-21 -184	26 -136	75 -87	124 -38
90	162.00	bu	-284 -447	-229 -392	-175 -338	-120 -283	-65 -228	-11 -174	43 -119	98 -64	152 -10	207 44	262 99
100	180.00	bu	-206 -369	-146 -309	-85 -248	-24 -187	36 -126	96 -66	157 -5	218 55	279 116	339 176	400 237
110	198.00	bu	-129 -292	-62 -225	4 -158	70 -92	137 -25	204 41	271 108	338 175	405 242	471 308	538 375
120	216.00	bu	-52 -215	20 -142	93 -69	166 3	239 76	312 149	385 222	458 295	531 368	604 441	676 513
130	234.00	bu	25 -137	104 -58	183 20	262 99	341 178	420 257	499 336	578 415	657 494	736 573	815 652
140	252.00	bu	102 -60	188 24	273 110	358 195	443 280	528 365	613 450	698 535	783 620	868 705	953 790
150	270.00	bu	180 17	271 108	362 199	453 290	544 381	636 473	727 564	818 655	909 746	1000 837	1091 928

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 43.A Estimated costs per acre  
 Fullpage hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	3.5000	26.60	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Preface	oz	4.99	11.0000	54.89	
Facet L	pt	17.50	2.0000	35.00	
Aim	oz	4.90	1.5000	7.35	
Clincher SF	oz	1.95	7.5000	14.63	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Rice Fullpage Hyb Tr	lb	7.68	23.0000	176.64	
Rice Seed FPH(Levee)	lb	7.68	4.2500	32.64	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
ADJUVANTS					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	4.3220	34.58	
HAULING					
Haul Rice	bu	0.35	180.0000	63.00	
DRYING					
Dry Rice	bu	0.40	180.0000	72.00	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.5281	8.72	
Harvesters	hour	16.54	0.1100	1.82	
IRRIGATE LABOR					
Special Labor	hour	9.06	1.1250	10.18	
Implements	hour	9.06	0.0375	0.34	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	7.4504	33.39	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	18.7364	83.95	
REPAIR & MAINTENANCE					
Implements	acre	9.73	1.0000	9.73	
Tractors	acre	4.64	1.0000	4.64	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	27.91	1.0000	27.91	
TOTAL DIRECT EXPENSES				1101.72	
FIXED EXPENSES					
Implements	acre	25.35	1.0000	25.35	
Tractors	acre	32.74	1.0000	32.74	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.51	1.0000	80.51	
TOTAL FIXED EXPENSES				164.76	
TOTAL SPECIFIED EXPENSES				1266.48	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 43.B Summary of estimated costs and returns per acre  
 Fullpage hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
				-----	
<b>TOTAL INCOME</b>				1215.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	45.90	1.0000	45.90	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	189.29	1.0000	189.29	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	210.51	1.0000	210.51	_____
ADJUVANTS	acre	15.83	1.0000	15.83	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	27.91	1.0000	27.91	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				1101.72	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				113.28	_____
<b>TOTAL FIXED EXPENSES</b>				164.76	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				1266.48	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-51.48	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 43.C Estimated resource use for field operations, per acre  
 Fullpage hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ INPUT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb						23.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed FPH(Levee)	lb						4.2500				
Rice Seed Trt/Insect	lbseed						4.2500				
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Preface	oz						5.0000				
Facet L	pt						2.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre				1.00	May	1.0000				
App Fert by Air	cwt				1.00	May	2.6700				
Urea, Solid (46% N)	cwt						2.6700				
NBPT	pt						0.8000				
App by Air (10 gal)	appl				1.00	May	1.0000				
Preface	oz						6.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Aim	oz						1.5000				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management					1.00	Jun					
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt				1.00	Jun	0.6520				
Urea, Solid (46% N)	cwt						0.6520				
Rice Management					1.00	Jul					
RICE MGT. LABOR	hour									0.20	
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenhu SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	180.0000				
Dry Rice	bu				1.00	Aug	180.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.10	0.10	1.26	
TOTALS							0.63	0.63	2.82	0.47	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 43.D Estimated costs for field operations, per acre  
 Fullpage hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33				0.21	3.54		3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93	0.75	12.41	12.88	25.29		
Harrow - Folding	40'		2.69	0.66	1.22	0.29	4.86	3.11	7.97		
App by Air ( 5 gal)	appl	7.60				0.32	7.92		7.92		
Glyphosate 3lbs a.e	oz	16.32				0.70	17.02		17.02		
2,4-D Amine 4	pt	6.66				0.28	6.94		6.94		
Grain Drill	24'		5.44	2.78	3.18	0.36	11.76	9.71	21.47		
Rice Fullpage Hyb Tr	lb	176.64				5.65	182.29		182.29		
Roller/Cultipacker	30'		3.44	0.71	1.56	0.18	5.89	3.72	9.61		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23		11.23		
Command 3ME	pt	23.40				0.75	24.15		24.15		
Sharpen	oz	20.16				0.65	20.81		20.81		
MSO	pt	0.67				0.02	0.69		0.69		
Class Act NG	pt	2.38				0.08	2.46		2.46		
Seed Levees											
Rice Seed FPH(Levee)	lb	32.64				1.04	33.68		33.68		
Rice Seed Trt/Insect	lbseed	1.23				0.04	1.27		1.27		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Preface	oz	24.95				0.80	25.75		25.75		
Facet L	pt	35.00				1.12	36.12		36.12		
Crop Oil Conc.(Pet.)	pt	5.72				0.18	5.90		5.90		
App Fert by Air	cwt	8.00				0.21	8.21		8.21		
Amm Sulfate (21% N)	cwt	25.00				0.67	25.67		25.67		
DAP	cwt	27.70				0.74	28.44		28.44		
Rice Consultant	acre	8.00				0.21	8.21		8.21		
App Fert by Air	cwt	21.36				0.57	21.93		21.93		
Urea, Solid (46% N)	cwt	111.02				2.96	113.98		113.98		
NBPT	pt	14.40				0.38	14.78		14.78		
App by Air (10 gal)	appl	9.70				0.26	9.96		9.96		
Preface	oz	29.94				0.80	30.74		30.74		
Crop Oil Conc.(Pet.)	pt	5.72				0.15	5.87		5.87		
Aim	oz	7.35				0.20	7.55		7.55		
Rice Management											
RICE MGT. LABOR	hour				0.91		0.93		0.93		
App by Air ( 5 gal)	appl	3.80				0.08	3.88		3.88		
Clincher SF	oz	14.63				0.31	14.94		14.94		
MSO	pt	1.34				0.03	1.37		1.37		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.85		1.85		
App Fert by Air	cwt	5.22				0.11	5.33		5.33		
Urea, Solid (46% N)	cwt	27.11				0.58	27.69		27.69		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.84		1.84		
App by Air ( 3 gal)	appl	9.60				0.15	9.75		9.75		
Tenchu SG	oz	15.26				0.24	15.50		15.50		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.83		1.83		
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46	0.24	22.71	30.23	52.94		
Grain Cart Rice	700 bu		0.76	0.25	0.34	0.01	1.36	1.05	2.41		
Handling & Storage											
HAND LABOR	hour				2.27		2.29		2.29		
Haul Rice	bu	63.00				0.67	63.67		63.67		
Dry Rice	bu	72.00				0.77	72.77		72.77		
Disk Heavy	28'		10.47	4.58	4.75	0.11	19.91	17.70	37.61		
Flood Irr.	acre	10.17	88.08	14.80	12.26	3.08	128.39	86.36	214.75		
TOTALS		873.10	128.12	34.28	38.31	0.00	27.91	1101.72	164.76	1266.48	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 43.E Estimated monthly income and expense flows per acre  
 Fullpage hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	114.39	37.29	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	210.51	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	12.94	8.02	1.70	0.83	1.76	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	418.33	308.84	81.42	53.31	167.22	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-418.33	-308.84	-81.42	-53.31	1047.78	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-471.02	-779.86	-861.28	-914.59	133.19	113.28

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

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

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

\* Lease costs are based on hourly usage costs.

Table 43.F Estimated returns for various price/yield combinations, per acre  
 Fullpage hybrid straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

PRODUCT	PERCENT	75	80	85	90	95	100	105	110	115	120	125	PRODUCT PRICE		
													PRICE	PRICE	PRICE
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43			
<b>PERCENT YIELD UNIT</b>															<b>dollars</b>
50	90.00	bu	-577 -742	-547 -712	-517 -681	-486 -651	-456 -621	-426 -590	-395 -560	-365 -530	-334 -499	-304 -469	-274 -438		
60	108.00	bu	-500 -665	-463 -628	-427 -592	-391 -555	-354 -519	-318 -482	-281 -446	-245 -410	-208 -373	-172 -337	-135 -300		
70	126.00	bu	-422 -587	-380 -545	-337 -502	-295 -460	-252 -417	-210 -375	-167 -332	-125 -289	-82 -247	-40 -204	2 -162		
80	144.00	bu	-345 -510	-296 -461	-248 -412	-199 -364	-151 -315	-102 -267	-53 -218	-5 -169	43 -121	91 -72	140 -24		
90	162.00	bu	-267 -432	-213 -378	-158 -323	-103 -268	-49 -214	5 -159	60 -104	114 -49	169 4	224 59	278 114		
100	180.00	bu	-190 -355	-129 -294	-68 -233	-8 -172	52 -112	113 -51	174 9	234 70	295 130	356 191	417 252		
110	198.00	bu	-112 -277	-46 -210	20 -144	87 -77	154 -10	221 56	287 123	354 190	421 256	488 323	555 390		
120	216.00	bu	-35 -200	37 -127	110 -54	183 18	256 91	328 164	401 237	474 310	547 382	620 455	693 528		
130	234.00	bu	41 -122	120 -43	199 35	278 114	357 193	436 272	515 351	594 430	673 509	752 587	831 666		
140	252.00	bu	119 -45	204 39	289 124	374 209	459 294	544 379	629 464	714 550	799 635	884 720	969 805		
150	270.00	bu	196 32	288 123	379 214	470 305	561 396	652 487	743 578	834 670	925 761	1017 852	1108 943		

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 44.A Estimated costs per acre  
 Fullpage hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	3.5000	26.60	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	3.3220	138.13	
NBPT	pt	18.00	0.8000	14.40	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Preface	oz	4.99	11.0000	54.89	
Facet L	pt	17.50	2.0000	35.00	
Aim	oz	4.90	1.5000	7.35	
Clincher SF	oz	1.95	7.5000	14.63	
<b>INSECTICIDES</b>					
Tenhu SG	oz	1.13	13.5000	15.26	
<b>SEED/PLANTS</b>					
Rice Fullpage Hyb Tr	lb	7.68	23.0000	176.64	
Rice Seed FPH(Levee)	lb	7.68	4.2500	32.64	
Rice Seed Trt/Insect	lbseed	0.29	4.2500	1.23	
<b>ADJUVANTS</b>					
MSO	pt	1.34	1.5000	2.01	
Class Act NG	pt	4.75	0.5000	2.38	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	4.3220	34.58	
<b>HAULING</b>					
Haul Rice	bu	0.35	180.0000	63.00	
<b>DRYING</b>					
Dry Rice	bu	0.40	180.0000	72.00	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.4228	6.98	
Harvesters	hour	16.54	0.1100	1.82	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	1.0500	9.53	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	6.5294	29.26	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	15.4779	69.35	
<b>REPAIR &amp; MAINTENANCE</b>					
Implements	acre	9.51	1.0000	9.51	
Tractors	acre	4.02	1.0000	4.02	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	27.00	1.0000	27.00	
<b>TOTAL DIRECT EXPENSES</b>					
				1066.18	
<b>FIXED EXPENSES</b>					
Implements	acre	23.83	1.0000	23.83	
Tractors	acre	28.41	1.0000	28.41	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.17	1.0000	80.17	
<b>TOTAL FIXED EXPENSES</b>					
				158.57	
<b>TOTAL SPECIFIED EXPENSES</b>					
				1224.75	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3rd year.**

Table 44.B Summary of estimated costs and returns per acre  
 Fullpage hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	180.0000	1215.00	_____
				-----	
<b>TOTAL INCOME</b>				1215.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	45.90	1.0000	45.90	_____
FERTILIZERS	acre	205.23	1.0000	205.23	_____
HERBICIDES	acre	189.29	1.0000	189.29	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	210.51	1.0000	210.51	_____
ADJUVANTS	acre	15.83	1.0000	15.83	_____
CUSTOM FERTILIZE	acre	34.58	1.0000	34.58	_____
HAULING	acre	63.00	1.0000	63.00	_____
DRYING	acre	72.00	1.0000	72.00	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	27.00	1.0000	27.00	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				1066.18	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				148.82	_____
<b>TOTAL FIXED EXPENSES</b>				158.57	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				1224.75	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-9.75	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 44.C Estimated resource use for field operations, per acre  
 Fullpage hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct			0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb		1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Fullpage Hyb Tr	lb						23.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr			0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr		1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees				1.00	Apr						
Rice Seed FPH(Levee)	lb						4.2500				
Rice Seed Trt/Insect	lbseed						4.2500				
App by Air ( 5 gal)	appl			1.00	Apr		1.0000				
Preface	oz						5.0000				
Facet L	pt						2.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt			1.00	May		1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre			1.00	May		1.0000				
App Fert by Air	cwt			1.00	May		2.6700				
Urea, Solid (46% N)	cwt						2.6700				
NBPT	pt						0.8000				
App by Air (10 gal)	appl			1.00	May		1.0000				
Preface	oz						6.0000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Aim	oz						1.5000				
Rice Management				1.00	May						
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl			0.50	Jun		0.5000				
Clincher SF	oz						7.5000				
MSO	pt						1.0000				
Rice Management				1.00	Jun						
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt			1.00	Jun		0.6520				
Urea, Solid (46% N)	cwt						0.6520				
Rice Management				1.00	Jul						
RICE MGT. LABOR	hour									0.20	
App by Air ( 3 gal)	appl			1.50	Jul		1.5000				
Tenhu SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug			0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug						
HAND LABOR	hour									0.25	
Haul Rice	bu			1.00	Aug		180.0000				
Dry Rice	bu			1.00	Aug		180.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre						1.0000				1.05
TOTALS								0.53	0.53	2.61	0.47

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 44.D Estimated costs for field operations, per acre  
 Fullpage hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33				0.21	3.54		3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93	0.75	12.41	12.88	25.29		
Harrow - Folding	40'		2.69	0.66	1.22	0.29	4.86	3.11	7.97		
App by Air ( 5 gal)	appl	7.60				0.32	7.92		7.92		
Glyphosate 3lbs a.e	oz	16.32				0.70	17.02		17.02		
2,4-D Amine 4	pt	6.66				0.28	6.94		6.94		
Grain Drill	24'		5.44	2.78	3.18	0.36	11.76	9.71	21.47		
Rice Fullpage Hyb Tr	lb	176.64				5.65	182.29		182.29		
Roller/Cultipacker	30'		3.44	0.71	1.56	0.18	5.89	3.72	9.61		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23		11.23		
Command 3ME	pt	23.40				0.75	24.15		24.15		
Sharpen	oz	20.16				0.65	20.81		20.81		
MSO	pt	0.67				0.02	0.69		0.69		
Class Act NG	pt	2.38				0.08	2.46		2.46		
Seed Levees											
Rice Seed FPH(Levee)	lb	32.64				1.04	33.68		33.68		
Rice Seed Trt/Insect	lbseed	1.23				0.04	1.27		1.27		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Preface	oz	24.95				0.80	25.75		25.75		
Facet L	pt	35.00				1.12	36.12		36.12		
Crop Oil Conc.(Pet.)	pt	5.72				0.18	5.90		5.90		
App Fert by Air	cwt	8.00				0.21	8.21		8.21		
Amm Sulfate (21% N)	cwt	25.00				0.67	25.67		25.67		
DAP	cwt	27.70				0.74	28.44		28.44		
Rice Consultant	acre	8.00				0.21	8.21		8.21		
App Fert by Air	cwt	21.36				0.57	21.93		21.93		
Urea, Solid (46% N)	cwt	111.02				2.96	113.98		113.98		
NBPT	pt	14.40				0.38	14.78		14.78		
App by Air (10 gal)	appl	9.70				0.26	9.96		9.96		
Preface	oz	29.94				0.80	30.74		30.74		
Crop Oil Conc.(Pet.)	pt	5.72				0.15	5.87		5.87		
Aim	oz	7.35				0.20	7.55		7.55		
Rice Management											
RICE MGT. LABOR	hour				0.91		0.93		0.93		
App by Air ( 5 gal)	appl	3.80				0.08	3.88		3.88		
Clincher SF	oz	14.63				0.31	14.94		14.94		
MSO	pt	1.34				0.03	1.37		1.37		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.85		1.85		
App Fert by Air	cwt	5.22				0.11	5.33		5.33		
Urea, Solid (46% N)	cwt	27.11				0.58	27.69		27.69		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.84		1.84		
App by Air ( 3 gal)	appl	9.60				0.15	9.75		9.75		
Tenchu SG	oz	15.26				0.24	15.50		15.50		
Rice Management											
RICE MGT. LABOR	hour				1.81		1.83		1.83		
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46	0.24	22.71	30.23	52.94		
Grain Cart Rice	700 bu		0.76	0.25	0.34	0.01	1.36	1.05	2.41		
Handling & Storage											
HAND LABOR	hour				2.27		2.29		2.29		
Haul Rice	bu	63.00				0.67	63.67		63.67		
Dry Rice	bu	72.00				0.77	72.77		72.77		
Disk Heavy	28'		10.47	4.58	4.75	0.11	19.91	17.70	37.61		
Flood Irr.	acre	69.35	11.80	9.53		2.17	92.85	80.17	173.02		
TOTALS		862.93	109.39	31.28	35.58	0.00	27.00	1066.18	158.57	1224.75	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 44.E Estimated monthly income and expense flows per acre  
 Fullpage hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1215.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	9.60	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.12	27.11	0.00	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	114.39	37.29	14.63	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	210.51	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.34	0.00	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.36	5.22	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	63.00	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	72.00	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	12.29	7.92	1.62	0.78	1.73	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	396.83	305.00	77.60	49.52	164.63	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-396.83	-305.00	-77.60	-49.52	1050.37	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-449.52	-754.52	-832.12	-881.64	168.73	148.82

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 44.F Estimated returns for various price/yield combinations, per acre  
 Fullpage hybrid straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT			dollars										
50	90.00	bu	-542 -700	-511 -670	-481 -640	-451 -609	-420 -579	-390 -549	-360 -518	-329 -488	-299 -457	-268 -427	-238 -397
60	108.00	bu	-464 -623	-428 -586	-391 -550	-355 -514	-319 -477	-282 -441	-246 -404	-209 -368	-173 -331	-136 -295	-100 -258
70	126.00	bu	-387 -545	-344 -503	-302 -460	-259 -418	-217 -375	-174 -333	-132 -290	-89 -248	-47 -205	-4 -163	37 -120
80	144.00	bu	-309 -468	-261 -419	-212 -371	-164 -322	-115 -274	-66 -225	-18 -176	30 -128	78 -79	127 -31	176 17
90	162.00	bu	-232 -390	-177 -336	-123 -281	-68 -226	-13 -172	40 -117	95 -62	150 -8	204 46	259 101	314 155
100	180.00	bu	-154 -313	-94 -252	-33 -192	27 -131	88 -70	148 -9	209 51	270 111	331 172	391 233	452 294
110	198.00	bu	-77 -236	-10 -169	56 -102	123 -35	189 31	256 98	323 164	390 231	457 298	523 365	590 432
120	216.00	bu	0 -158	72 -85	145 -12	218 60	291 133	364 205	437 278	510 351	583 424	656 497	729 570
130	234.00	bu	77 -81	156 -2	235 76	314 155	393 234	472 313	551 392	630 471	709 550	788 629	867 708
140	252.00	bu	154 -3	240 81	325 166	410 251	495 336	580 421	665 506	750 591	835 676	920 761	1005 846
150	270.00	bu	232 73	323 165	414 256	505 347	596 438	688 529	779 620	870 711	961 802	1052 894	1143 985

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 45.A Estimated costs per acre  
 Provia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Provisia	oz	0.82	31.0000	25.42	
Aim	oz	4.90	1.0000	4.90	
Permit	oz	20.07	0.7500	15.05	
Regiment	oz	45.96	0.2500	11.49	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Seed Provisia	lb	1.30	77.0000	100.10	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
ADJUVANTS					
Class Act NG	pt	4.75	0.5000	2.38	
MSO	pt	1.34	0.5000	0.67	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
Dyne-A-Pak	pt	6.01	0.2500	1.50	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	1.0000	4.50	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.5475	9.05	
Harvesters	hour	16.54	0.1269	2.10	
IRRIGATE LABOR					
Special Labor	hour	9.06	3.5250	31.96	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	1.5000	13.59	
UNALLOCATED LABOR					
hour	16.53	0.4947	8.18		
DIESEL FUEL					
Tractors	gal	4.48	7.6209	34.15	
Harvesters	gal	4.48	2.7765	12.44	
Flood Irr.	gal	4.48	26.8827	120.45	
REPAIR & MAINTENANCE					
Implements	acre	10.04	1.0000	10.04	
Tractors	acre	4.74	1.0000	4.74	
Harvesters	acre	6.86	1.0000	6.86	
Flood Irr.	acre	14.31	1.0000	14.31	
INTEREST ON OP. CAP.	acre	25.87	1.0000	25.87	
TOTAL DIRECT EXPENSES				1067.96	
FIXED EXPENSES					
Implements	acre	25.53	1.0000	25.53	
Tractors	acre	33.53	1.0000	33.53	
Harvesters	acre	30.19	1.0000	30.19	
Flood Irr.	acre	52.19	1.0000	52.19	
TOTAL FIXED EXPENSES				141.44	
TOTAL SPECIFIED EXPENSES				1209.40	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 45.B Summary of estimated costs and returns per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Rice	bu	6.75	156.0000	1053.00	_____
TOTAL INCOME				1053.00	_____
DIRECT EXPENSES					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	134.28	1.0000	134.28	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	122.43	1.0000	122.43	_____
ADJUVANTS	acre	16.32	1.0000	16.32	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	4.50	1.0000	4.50	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	3.5250	31.96	_____
OPERATOR LABOR	hour	16.54	0.6745	11.15	_____
RICE MGT. LABOR	hour	9.06	1.5000	13.59	_____
UNALLOCATED LABOR	hour	16.53	0.4947	8.18	_____
DIESEL FUEL	gal	4.48	37.2802	167.04	_____
REPAIR & MAINTENANCE	acre	35.95	1.0000	35.95	_____
INTEREST ON OP. CAP.	acre	25.87	1.0000	25.87	_____
TOTAL DIRECT EXPENSES				1067.96	_____
RETURNS ABOVE DIRECT EXPENSES				-14.96	_____
TOTAL FIXED EXPENSES				141.44	_____
TOTAL SPECIFIED EXPENSES				1209.40	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-156.40	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 45.C Estimated resource use for field operations, per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e.	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e.	oz					32.0000				
Command 3ME	pt					1.3000				
Sharpen	oz					3.0000				
Class Act NG	pt					0.5000				
MSO	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.30	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					
RICE MGT. LABOR	hour								0.50	
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					
RICE MGT. LABOR	hour								0.50	
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Tenhu SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (CL)	40' Rigid	425 hp	0.126	1.00	Aug		0.12	0.12	0.12	0.11
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.12	0.12	3.64	
TOTALS							0.67	0.67	6.02	0.49

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 45.D Estimated costs for field operations, per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Provisia	lb	84.50					2.70	87.20	87.20
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
Class Act NG	pt	2.38					0.08	2.46	2.46
MSO	pt	0.67					0.02	0.69	0.69
Seed Levees									
Rice Seed Provisia	lb	15.60					0.50	16.10	16.10
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Provisia	oz	12.71					0.41	13.12	13.12
Aim	oz	4.90					0.16	5.06	5.06
Permit	oz	15.05					0.48	15.53	15.53
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Provisia	oz	12.71					0.34	13.05	13.05
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Rice Management									
RICE MGT. LABOR	hour				2.72		0.07	2.79	2.79
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Regiment	oz	11.49					0.25	11.74	11.74
Dyne-A-Pak	pt	1.50					0.03	1.53	1.53
Rice Management									
RICE MGT. LABOR	hour			4.53			0.10	4.63	4.63
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			4.53			0.07	4.60	4.60
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (CL)	40' Rigid		12.44	9.49	3.99		0.28	26.20	34.89
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour			2.27			0.02	2.29	2.29
Haul Rice	bu	54.60					0.58	55.18	55.18
Dry Rice	bu	62.40					0.67	63.07	63.07
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	4.50	125.34	15.21	34.03		4.28	183.36	58.38
TOTALS		771.24	167.04	35.95	67.86	0.00	25.87	1067.96	141.44
									1209.40

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 45.E Estimated monthly income and expense flows per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1053.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	87.10	12.71	11.49	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	122.43	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.50	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	4.50	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	16.70	9.52	11.33	11.33	10.08	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	33.87	32.85	32.85	32.85	15.00	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.58	8.20	2.29	2.29	10.08	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.40	7.59	2.95	1.65	1.62	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	303.55	292.44	140.58	105.01	153.78	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-303.55	-292.44	-140.58	-105.01	899.22	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-356.24	-648.68	-789.26	-894.27	4.95	-14.96

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 45.F Estimated returns for various price/yield combinations, per acre  
 Provisia contour levee rice  
 Flood irrigated, 33 ac-in., Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-613 -755	-587 -729	-561 -702	-534 -676	-508 -650	-482 -623	-456 -597	-429 -571	-403 -544	-377 -518	-350 -492
60	93.60	bu	-546 -688	-515 -656	-483 -625	-452 -593	-420 -561	-388 -530	-357 -498	-325 -467	-294 -435	-262 -403	-230 -372
70	109.20	bu	-479 -621	-442 -584	-405 -547	-369 -510	-332 -473	-295 -436	-258 -399	-221 -363	-184 -326	-147 -289	-111 -252
80	124.80	bu	-412 -553	-370 -511	-328 -469	-286 -427	-244 -385	-201 -343	-159 -301	-117 -259	-75 -216	-33 -174	8 -132
90	140.40	bu	-345 -486	-297 -439	-250 -392	-203 -344	-155 -297	-108 -249	-61 -202	-13 -155	33 -107	81 -60	128 -12
100	156.00	bu	-278 -419	-225 -367	-172 -314	-120 -261	-67 -209	-14 -156	37 -103	90 -51	142 1	195 54	248 106
110	171.60	bu	-211 -352	-153 -294	-95 -236	-37 -178	20 -120	78 -62	136 -5	194 52	252 110	310 168	368 226
120	187.20	bu	-143 -285	-80 -222	-17 -158	45 -95	108 -32	171 30	235 93	298 156	361 220	424 283	487 346
130	202.80	bu	-76 -218	-8 -149	60 -81	128 -12	197 55	265 124	333 192	402 260	470 329	539 397	607 466
140	218.40	bu	-9 -151	64 -77	137 -3	211 70	285 143	358 217	432 291	506 364	580 438	653 512	727 586
150	234.00	bu	57 -83	136 -4	215 74	294 153	373 232	452 310	531 389	610 468	689 547	768 626	847 705

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 46.A Estimated costs per acre  
 Provia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	_____
App by Air (10 gal)	appl	9.70	1.0000	9.70	_____
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	_____
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	_____
DAP	cwt	55.40	0.5000	27.70	_____
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	_____
NBPT	pt	18.00	0.7500	13.50	_____
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	_____
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	_____
2,4-D Amine 4	pt	3.33	2.0000	6.66	_____
Command 3ME	pt	18.00	1.3000	23.40	_____
Sharpen	oz	6.72	3.0000	20.16	_____
Provia	oz	0.82	31.0000	25.42	_____
Aim	oz	4.90	1.0000	4.90	_____
Permit	oz	20.07	0.7500	15.05	_____
Regiment	oz	45.96	0.2500	11.49	_____
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	_____
SEED/PLANTS					
Rice Seed Provia	lb	1.30	77.0000	100.10	_____
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	_____
ADJUVANTS					
MSO	pt	1.34	0.5000	0.67	_____
Class Act NG	pt	4.75	0.5000	2.38	_____
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	_____
Dyne-A-Pak	pt	6.01	0.2500	1.50	_____
Surfactant	pt	3.30	0.1000	0.33	_____
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	_____
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	_____
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	_____
SURVEY & MARK LEVEES					
Survey & Mark Levees	acre	4.50	0.5000	2.25	_____
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	0.4999	8.25	_____
Harvesters	hour	16.54	0.1100	1.82	_____
IRRIGATE LABOR					
Special Labor	hour	9.06	2.3750	21.52	_____
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	_____
Implement	hour	9.06	0.0785	0.71	_____
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93	_____	
DIESEL FUEL					
Tractors	gal	4.48	7.2043	32.28	_____
Harvesters	gal	4.48	2.4063	10.78	_____
Flood Irr.	gal	4.48	21.9949	98.55	_____
REPAIR & MAINTENANCE					
Implement	acre	9.63	1.0000	9.63	_____
Tractors	acre	4.48	1.0000	4.48	_____
Harvesters	acre	5.95	1.0000	5.95	_____
Flood Irr.	acre	14.31	1.0000	14.31	_____
INTEREST ON OP. CAP.	acre	24.79	1.0000	24.79	_____
TOTAL DIRECT EXPENSES				1018.60	_____
FIXED EXPENSES					
Implement	acre	24.42	1.0000	24.42	_____
Tractors	acre	31.58	1.0000	31.58	_____
Harvesters	acre	26.16	1.0000	26.16	_____
Flood Irr.	acre	80.85	1.0000	80.85	_____
TOTAL FIXED EXPENSES				163.01	_____
TOTAL SPECIFIED EXPENSES				1181.61	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 46.B Summary of estimated costs and returns per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	156.0000	1053.00	_____
<b>TOTAL INCOME</b>				1053.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	134.28	1.0000	134.28	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	122.43	1.0000	122.43	_____
ADJUVANTS	acre	16.32	1.0000	16.32	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	2.3750	21.52	_____
OPERATOR LABOR	hour	16.54	0.6099	10.07	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	31.6056	141.61	_____
REPAIR & MAINTENANCE	acre	34.37	1.0000	34.37	_____
INTEREST ON OP. CAP.	acre	24.79	1.0000	24.79	_____
<b>TOTAL DIRECT EXPENSES</b>				1018.60	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				34.40	_____
<b>TOTAL FIXED EXPENSES</b>				163.01	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1181.61	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-128.61	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 46.C Estimated resource use for field operations, per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Oct	0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz					48.0000				
2,4-D Amine 4	pt					2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb					65.0000				
Rice Seed Trt/Insect	lbseed					65.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz					32.0000				
Command 3ME	pt					1.3000				
Sharpen	oz					3.0000				
MSO	pt					0.5000				
Class Act NG	pt					0.5000				
Seed Levees				1.00	Apr					
Rice Seed Provisia	lb					12.0000				
Rice Seed Trt/Insect	lbseed					12.0000				
App by Air ( 5 gal)	appl			1.00	Apr	1.0000				
Provisia	oz					15.5000				
Aim	oz					1.0000				
Permit	oz					0.7500				
Crop Oil Conc.(Pet.)	pt					2.0000				
App Fert by Air	cwt			1.00	May	1.0000				
Amm Sulfate (21% N)	cwt					0.5000				
DAP	cwt					0.5000				
Rice Consultant	acre			1.00	May	1.0000				
App Fert by Air	cwt			1.00	May	2.5000				
Urea, Solid (46% N)	cwt					2.5000				
NBPT	pt					0.7500				
App by Air (10 gal)	appl			1.00	May	1.0000				
Provisia	oz					15.5000				
Crop Oil Conc.(Pet.)	pt					2.0000				
Rice Management				1.00	May					
RICE MGT. LABOR	hour								0.10	
App by Air ( 5 gal)	appl			0.50	Jun	0.5000				
Regiment	oz					0.2500				
Dyne-A-Pak	pt					0.2500				
Rice Management				1.00	Jun					0.20
RICE MGT. LABOR	hour									
App Fert by Air	cwt			1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt					1.5000				
Rice Management				1.00	Jul					0.20
RICE MGT. LABOR	hour									
App by Air ( 5 gal)	appl			1.00	Jul	1.0000				
Ameristar Top	oz					10.0000				
Surfactant	pt					0.1000				
App by Air ( 3 gal)	appl			1.50	Jul	1.5000				
Tenchi SG	oz					13.5000				
Rice Management				1.00	Aug					
RICE MGT. LABOR	hour								0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug					
HAND LABOR	hour								0.25	
Haul Rice	bu			1.00	Aug	156.0000				
Dry Rice	bu			1.00	Aug	156.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre				Jan	1.0000	0.07	0.07	2.45	
TOTALS						0.60	0.60	4.01	0.47	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 46.D Estimated costs for field operations, per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST	LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----											
Soil Test	acre	3.33				0.21	3.54		3.54		
Field Cultivate Fld	32'		6.46	2.27	2.93	0.75	12.41	12.88	25.29		
Harrow - Folding	40'		2.69	0.66	1.22	0.29	4.86	3.11	7.97		
App by Air ( 5 gal)	appl	7.60				0.32	7.92		7.92		
Glyphosate 3lbs a.e	oz	16.32				0.70	17.02		17.02		
2,4-D Amine 4	pt	6.66				0.28	6.94		6.94		
Grain Drill	24'		5.44	2.78	3.18	0.36	11.76	9.71	21.47		
Rice Seed Provisia	lb	84.50				2.70	87.20		87.20		
Rice Seed Trt/Insect	lbseed	18.85				0.60	19.45		19.45		
Roller/Cultipacker	30'		3.44	0.71	1.56	0.18	5.89	3.72	9.61		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Glyphosate 3lbs a.e	oz	10.88				0.35	11.23		11.23		
Command 3ME	pt	23.40				0.75	24.15		24.15		
Sharpen	oz	20.16				0.65	20.81		20.81		
MSO	pt	0.67				0.02	0.69		0.69		
Class Act NG	pt	2.38				0.08	2.46		2.46		
Seed Levees											
Rice Seed Provisia	lb	15.60				0.50	16.10		16.10		
Rice Seed Trt/Insect	lbseed	3.48				0.11	3.59		3.59		
App by Air ( 5 gal)	appl	7.60				0.24	7.84		7.84		
Provisia	oz	12.71				0.41	13.12		13.12		
Aim	oz	4.90				0.16	5.06		5.06		
Permit	oz	15.05				0.48	15.53		15.53		
Crop Oil Conc.(Pet.)	pt	5.72				0.18	5.90		5.90		
App Fert by Air	cwt	8.00				0.21	8.21		8.21		
Amm Sulfate (21% N)	cwt	25.00				0.67	25.67		25.67		
DAP	cwt	27.70				0.74	28.44		28.44		
Rice Consultant	acre	8.00				0.21	8.21		8.21		
App Fert by Air	cwt	20.00				0.53	20.53		20.53		
Urea, Solid (46% N)	cwt	103.95				2.77	106.72		106.72		
NBPT	pt	13.50				0.36	13.86		13.86		
App by Air (10 gal)	appl	9.70				0.26	9.96		9.96		
Provisia	oz	12.71				0.34	13.05		13.05		
Crop Oil Conc.(Pet.)	pt	5.72				0.15	5.87		5.87		
Rice Management											
RICE MGT. LABOR	hour				0.91						
App by Air ( 5 gal)	appl	3.80				0.08	3.88		3.88		
Regiment	oz	11.49				0.25	11.74		11.74		
Dyne-A-Pak	pt	1.50				0.03	1.53		1.53		
Rice Management											
RICE MGT. LABOR	hour				1.81						
App Fert by Air	cwt	12.00				0.26	12.26		12.26		
Urea, Solid (46% N)	cwt	62.37				1.33	63.70		63.70		
Rice Management											
RICE MGT. LABOR	hour				1.81						
App by Air ( 5 gal)	appl	7.60				0.12	7.72		7.72		
Ameristar Top	oz	24.10				0.39	24.49		24.49		
Surfactant	pt	0.33				0.01	0.34		0.34		
App by Air ( 3 gal)	appl	9.60				0.15	9.75		9.75		
Tenchi SG	oz	15.26				0.24	15.50		15.50		
Rice Management											
RICE MGT. LABOR	hour				1.81						
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46	0.24	22.71	30.23	52.94		
Grain Cart Rice	700 bu		0.76	0.25	0.34	0.01	1.36	1.05	2.41		
Handling & Storage											
HAND LABOR	hour				2.27						
Haul Rice	bu	54.60				0.58	55.18		55.18		
Dry Rice	bu	62.40				0.67	63.07		63.07		
Disk Heavy	28'		10.47	4.58	4.75	0.11	19.91	17.70	37.61		
Flood Irr.	acre	2.25	101.57	14.89	22.79	3.39	144.89	84.61	229.50		
TOTALS		768.99	141.61	34.37	48.84	0.00	24.79	1018.60	163.01	1181.61	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 46.E Estimated monthly income and expense flows per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1053.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	87.10	12.71	11.49	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	122.43	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.50	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	12.62	5.44	6.34	6.34	9.20	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	32.82	25.55	25.55	25.55	12.52	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.73	8.09	2.18	2.18	8.68	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.15	7.28	2.68	1.45	1.57	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	296.07	280.64	127.91	92.41	148.97	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-296.07	-280.64	-127.91	-92.41	904.03	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-348.76	-629.40	-757.31	-849.72	54.31	34.40

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 46.F Estimated returns for various price/yield combinations, per acre  
 Provisia straight levee rice  
 Flood irrigated, 27 ac-in., Mississippi, 2023

PRODUCT			PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Rice			5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-564 -727	-538 -701	-511 -674	-485 -648	-459 -622	-432 -595	-406 -569	-380 -543	-354 -517	-327 -490	-301 -464
60	93.60	bu	-497 -660	-465 -628	-434 -597	-402 -565	-371 -534	-339 -502	-307 -470	-276 -439	-244 -407	-213 -376	-181 -344
70	109.20	bu	-430 -593	-393 -556	-356 -519	-319 -482	-282 -445	-246 -409	-209 -372	-172 -335	-135 -298	-98 -261	-61 -224
80	124.80	bu	-363 -526	-321 -484	-278 -441	-236 -399	-194 -357	-152 -315	-110 -273	-68 -231	-26 -189	15 -147	58 -104
90	140.40	bu	-296 -459	-248 -411	-201 -364	-153 -316	-106 -269	-59 -222	-11 -174	35 -127	83 -79	130 -32	177 14
100	156.00	bu	-228 -391	-176 -339	-123 -286	-70 -233	-18 -181	34 -128	87 -75	139 -23	192 29	245 81	297 134
110	171.60	bu	-161 -324	-103 -266	-45 -208	12 -150	69 -93	127 -35	185 22	243 80	301 138	359 196	417 254
120	187.20	bu	-94 -257	-31 -194	31 -131	94 -68	158 -4	221 58	284 121	347 184	410 247	474 311	537 374
130	202.80	bu	-27 -190	41 -121	109 -53	177 14	246 83	314 151	383 220	451 288	520 357	588 425	657 494
140	218.40	bu	39 -123	113 -49	187 24	260 97	334 171	408 245	482 319	555 392	629 466	703 540	776 613
150	234.00	bu	106 -56	185 22	264 101	343 180	422 259	501 338	580 417	659 496	738 575	817 654	896 733

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 47.A Estimated costs per acre  
 Provia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
<b>DIRECT EXPENSES</b>					
<b>CUSTOM SPRAY</b>					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
<b>FERTILIZERS</b>					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
<b>FUNGICIDES</b>					
Ameristar Top	oz	2.41	10.0000	24.10	
<b>HERBICIDES</b>					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Provia	oz	0.82	31.0000	25.42	
Aim	oz	4.90	1.0000	4.90	
Permit	oz	20.07	0.7500	15.05	
Regiment	oz	45.96	0.2500	11.49	
<b>INSECTICIDES</b>					
Tenchu SG	oz	1.13	13.5000	15.26	
<b>IRRIGATION SUPPLIES</b>					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
<b>SEED/PLANTS</b>					
Rice Seed Provia	lb	1.30	77.0000	100.10	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
<b>ADJUVANTS</b>					
MSO	pt	1.34	0.5000	0.67	
Class Act NG	pt	4.75	0.5000	2.38	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
Dyne-A-Pak	pt	6.01	0.2500	1.50	
Surfactant	pt	3.30	0.1000	0.33	
<b>CUSTOM FERTILIZE</b>					
App Fert by Air	cwt	8.00	5.0000	40.00	
<b>HAULING</b>					
Haul Rice	bu	0.35	156.0000	54.60	
<b>DRYING</b>					
Dry Rice	bu	0.40	156.0000	62.40	
<b>SURVEY &amp; MARK LEVEES</b>					
Survey & Mark Levees	acre	4.50	0.5000	2.25	
<b>CROP CONSULTANT</b>					
Rice Consultant	acre	8.00	1.0000	8.00	
<b>SOIL TEST</b>					
Soil Test	acre	10.00	0.3330	3.33	
<b>OPERATOR LABOR</b>					
Tractors	hour	16.54	0.5281	8.72	
Harvesters	hour	16.54	0.1100	1.82	
<b>IRRIGATE LABOR</b>					
Special Labor	hour	9.06	1.1250	10.18	
Implement	hour	9.06	0.0375	0.34	
<b>HAND LABOR</b>					
Special Labor	hour	9.06	0.2500	2.27	
Implement	hour	9.06	0.0785	0.71	
<b>RICE MGT. LABOR</b>					
Special Labor	hour	9.06	0.7000	6.34	
<b>UNALLOCATED LABOR</b>					
hour	16.53	0.4795	7.93		
<b>DIESEL FUEL</b>					
Tractors	gal	4.48	7.4504	33.39	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	18.7364	83.95	
<b>REPAIR &amp; MAINTENANCE</b>					
Implement	acre	9.73	1.0000	9.73	
Tractors	acre	4.64	1.0000	4.64	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	13.96	1.0000	13.96	
INTEREST ON OP. CAP.	acre	24.48	1.0000	24.48	
<b>TOTAL DIRECT EXPENSES</b>					
				1002.10	
<b>FIXED EXPENSES</b>					
Implement	acre	25.35	1.0000	25.35	
Tractors	acre	32.74	1.0000	32.74	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.51	1.0000	80.51	
<b>TOTAL FIXED EXPENSES</b>					
				164.76	
<b>TOTAL SPECIFIED EXPENSES</b>					
				1166.86	

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

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

Table 47.B Summary of estimated costs and returns per acre  
 Provisia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	156.0000	1053.00	_____
				-----	
<b>TOTAL INCOME</b>				<b>1053.00</b>	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	134.28	1.0000	134.28	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	122.43	1.0000	122.43	_____
ADJUVANTS	acre	16.32	1.0000	16.32	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
SURVEY & MARK LEVEES	acre	2.25	1.0000	2.25	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.1625	10.52	_____
OPERATOR LABOR	hour	16.54	0.6381	10.54	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	28.5932	128.12	_____
REPAIR & MAINTENANCE	acre	34.28	1.0000	34.28	_____
INTEREST ON OP. CAP.	acre	24.48	1.0000	24.48	_____
				-----	
<b>TOTAL DIRECT EXPENSES</b>				<b>1002.10</b>	_____
RETURNS ABOVE DIRECT EXPENSES				<b>50.90</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>164.76</b>	_____
				-----	
<b>TOTAL SPECIFIED EXPENSES</b>				<b>1166.86</b>	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				<b>-113.86</b>	_____

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 47.C Estimated resource use for field operations, per acre  
 Provisia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING	SIZE/ INPUT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD 300	0.046	2.00	Oct			0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD 300	0.038	1.00	Oct			0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl			1.00	Feb		1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD 300	0.078	1.00	Apr			0.07	0.07	0.15	0.07
Rice Seed Provisia	lb						65.0000				
Rice Seed Trt/Insect	lbseed						65.0000				
Roller/Cultipacker	30'	MFWD 300	0.049	1.00	Apr			0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl			1.00	Apr		1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees				1.00	Apr						
Rice Seed Provisia	lb						12.0000				
Rice Seed Trt/Insect	lbseed						12.0000				
App by Air ( 5 gal)	appl			1.00	Apr		1.0000				
Provisia	oz						15.5000				
Aim	oz						1.0000				
Permit	oz						0.7500				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt			1.00	May		1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre			1.00	May		1.0000				
App Fert by Air	cwt			1.00	May		2.5000				
Urea, Solid (46% N)	cwt						2.5000				
NBPT	pt						0.7500				
App by Air (10 gal)	appl			1.00	May		1.0000				
Provisia	oz						15.5000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Rice Management				1.00	May						
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl			0.50	Jun		0.5000				
Regiment	oz						0.2500				
Dyne-A-Pak	pt						0.2500				
Rice Management				1.00	Jun						
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt			1.00	Jun		1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management				1.00	Jul						
RICE MGT. LABOR	hour									0.20	
App by Air ( 5 gal)	appl			1.00	Jul		1.0000				
Ameristar Top	oz						10.0000				
Surfactant	pt						0.1000				
App by Air ( 3 gal)	appl			1.50	Jul		1.5000				
Tenchu SG	oz						13.5000				
Rice Management				1.00	Aug						
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug			0.11	0.11	0.11	0.09
Grain Cart Rice	700 bu	MFWD 300	0.055	0.20	Aug			0.01	0.01	0.01	0.00
Handling & Storage				1.00	Aug						
HAND LABOR	hour									0.25	
Haul Rice	bu			1.00	Aug		156.0000				
Dry Rice	bu			1.00	Aug		156.0000				
Disk Heavy	28'	MFWD 300	0.075	2.00	Sep			0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000	0.10	0.10	1.26	
<b>TOTALS</b>							0.63	0.63	2.82	0.47	

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 47.D Estimated costs for field operations, per acre  
 Provisia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Provisia	lb	84.50					2.70	87.20	87.20
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed Provisia	lb	15.60					0.50	16.10	16.10
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Provisia	oz	12.71					0.41	13.12	13.12
Aim	oz	4.90					0.16	5.06	5.06
Permit	oz	15.05					0.48	15.53	15.53
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Provisia	oz	12.71					0.34	13.05	13.05
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Regiment	oz	11.49					0.25	11.74	11.74
Dyne-A-Pak	pt	1.50					0.03	1.53	1.53
Rice Management									
RICE MGT. LABOR	hour			1.81			0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			1.81			0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour			2.27			0.02	2.29	2.29
Haul Rice	bu	54.60					0.58	55.18	55.18
Dry Rice	bu	62.40					0.67	63.07	63.07
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre	10.17	88.08	14.80	12.26		3.08	128.39	86.36
TOTALS		776.91	128.12	34.28	38.31	0.00	24.48	1002.10	164.76
									1166.86

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 47.E Estimated monthly income and expense flows per acre  
 Provisia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1053.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	87.10	12.71	11.49	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	122.43	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.50	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
SURVEY & MARK LEVEES	0.00	0.00	0.00	0.00	0.00	0.00	2.25	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	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	10.50	2.72	3.62	3.62	8.95	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	30.03	21.90	21.90	21.90	12.77	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	5.82	8.01	2.10	2.10	8.74	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	9.25	7.11	2.54	1.35	1.57	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	299.27	274.02	121.32	85.86	149.03	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-299.27	-274.02	-121.32	-85.86	903.97	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-351.96	-625.98	-747.30	-833.16	70.81	50.90

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

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

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

\* Lease costs are based on hourly usage costs.

Table 47.F Estimated returns for various price/yield combinations, per acre  
 Provisia straight levee multi inlet rice  
 Flood irrigated, 23 ac-in., Mississippi, 2023

PRODUCT	PERCENT	75	80	85	90	95	100	105	110	115	120	125	PRODUCT PRICE		
													5.06	5.40	5.73
Rice															
PERCENT	YIELD	UNIT	dollars												
50	78.00	bu	-548	-521	-495	-469	-442	-416	-390	-363	-337	-311	-284		
			-712	-686	-660	-633	-607	-581	-554	-528	-502	-475	-449		
60	93.60	bu	-480	-449	-417	-386	-354	-323	-291	-259	-228	-196	-165		
			-645	-614	-582	-550	-519	-487	-456	-424	-392	-361	-329		
70	109.20	bu	-413	-376	-340	-303	-266	-229	-192	-155	-118	-82	-45		
			-578	-541	-504	-467	-431	-394	-357	-320	-283	-246	-210		
80	124.80	bu	-346	-304	-262	-220	-178	-136	-93	-51	-9	32	74		
			-511	-469	-427	-385	-342	-300	-258	-216	-174	-132	-90		
90	140.40	bu	-279	-232	-184	-137	-89	-42	4	52	99	146	194		
			-444	-396	-349	-302	-254	-207	-159	-112	-65	-17	29		
100	156.00	bu	-212	-159	-107	-54	-1	50	103	156	208	261	314		
			-377	-324	-271	-219	-166	-113	-61	-8	44	96	149		
110	171.60	bu	-145	-87	-29	28	86	144	202	260	318	376	433		
			-309	-252	-194	-136	-78	-20	37	95	153	211	269		
120	187.20	bu	-78	-14	48	111	174	237	301	364	427	490	553		
			-242	-179	-116	-53	9	73	136	199	262	325	388		
130	202.80	bu	-10	57	125	194	262	331	399	468	536	605	673		
			-175	-107	-38	29	98	166	235	303	371	440	508		
140	218.40	bu	56	129	203	277	351	424	498	572	645	719	793		
			-108	-34	38	112	186	260	333	407	481	554	628		
150	234.00	bu	123	202	281	360	439	518	597	676	755	834	913		
			-41	37	116	195	274	353	432	511	590	669	748		

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 48.A Estimated costs per acre  
 Provia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM SPRAY					
App by Air ( 5 gal)	appl	7.60	4.5000	34.20	
App by Air (10 gal)	appl	9.70	1.0000	9.70	
App by Air ( 3 gal)	appl	6.40	1.5000	9.60	
FERTILIZERS					
Amm Sulfate (21% N)	cwt	50.00	0.5000	25.00	
DAP	cwt	55.40	0.5000	27.70	
Urea, Solid (46% N)	cwt	41.58	4.0000	166.32	
NBPT	pt	18.00	0.7500	13.50	
FUNGICIDES					
Ameristar Top	oz	2.41	10.0000	24.10	
HERBICIDES					
Glyphosate 3lbs a.e	oz	0.34	80.0000	27.20	
2,4-D Amine 4	pt	3.33	2.0000	6.66	
Command 3ME	pt	18.00	1.3000	23.40	
Sharpen	oz	6.72	3.0000	20.16	
Provia	oz	0.82	31.0000	25.42	
Aim	oz	4.90	1.0000	4.90	
Permit	oz	20.07	0.7500	15.05	
Regiment	oz	45.96	0.2500	11.49	
INSECTICIDES					
Tenchu SG	oz	1.13	13.5000	15.26	
SEED/PLANTS					
Rice Seed Provia	lb	1.30	77.0000	100.10	
Rice Seed Trt/Insect	lbseed	0.29	77.0000	22.33	
ADJUVANTS					
MSO	pt	1.34	0.5000	0.67	
Class Act NG	pt	4.75	0.5000	2.38	
Crop Oil Conc.(Pet.)	pt	2.86	4.0000	11.44	
Dyne-A-Pak	pt	6.01	0.2500	1.50	
Surfactant	pt	3.30	0.1000	0.33	
CUSTOM FERTILIZE					
App Fert by Air	cwt	8.00	5.0000	40.00	
HAULING					
Haul Rice	bu	0.35	156.0000	54.60	
DRYING					
Dry Rice	bu	0.40	156.0000	62.40	
CROP CONSULTANT					
Rice Consultant	acre	8.00	1.0000	8.00	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	0.4228	6.98	
Harvesters	hour	16.54	0.1100	1.82	
IRRIGATE LABOR					
Special Labor	hour	9.06	1.0500	9.53	
HAND LABOR					
Special Labor	hour	9.06	0.2500	2.27	
Implements	hour	9.06	0.0785	0.71	
RICE MGT. LABOR					
Special Labor	hour	9.06	0.7000	6.34	
UNALLOCATED LABOR					
hour	16.53	0.4795	7.93		
DIESEL FUEL					
Tractors	gal	4.48	6.5294	29.26	
Harvesters	gal	4.48	2.4063	10.78	
Flood Irr.	gal	4.48	15.4779	69.35	
REPAIR & MAINTENANCE					
Implements	acre	9.51	1.0000	9.51	
Tractors	acre	4.02	1.0000	4.02	
Harvesters	acre	5.95	1.0000	5.95	
Flood Irr.	acre	11.80	1.0000	11.80	
INTEREST ON OP. CAP.	acre	23.57	1.0000	23.57	
TOTAL DIRECT EXPENSES				966.56	
FIXED EXPENSES					
Implements	acre	23.83	1.0000	23.83	
Tractors	acre	28.41	1.0000	28.41	
Harvesters	acre	26.16	1.0000	26.16	
Flood Irr.	acre	80.17	1.0000	80.17	
TOTAL FIXED EXPENSES				158.57	
TOTAL SPECIFIED EXPENSES				1125.13	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 48.B Summary of estimated costs and returns per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Rice	bu	6.75	156.0000	1053.00	_____
<b>TOTAL INCOME</b>				1053.00	_____
<b>DIRECT EXPENSES</b>					
CUSTOM SPRAY	acre	53.50	1.0000	53.50	_____
FERTILIZERS	acre	232.52	1.0000	232.52	_____
FUNGICIDES	acre	24.10	1.0000	24.10	_____
HERBICIDES	acre	134.28	1.0000	134.28	_____
INSECTICIDES	acre	15.26	1.0000	15.26	_____
SEED/PLANTS	acre	122.43	1.0000	122.43	_____
ADJUVANTS	acre	16.32	1.0000	16.32	_____
CUSTOM FERTILIZE	acre	40.00	1.0000	40.00	_____
HAULING	acre	54.60	1.0000	54.60	_____
DRYING	acre	62.40	1.0000	62.40	_____
CROP CONSULTANT	acre	8.00	1.0000	8.00	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.3285	2.98	_____
IRRIGATE LABOR	hour	9.06	1.0500	9.53	_____
OPERATOR LABOR	hour	16.54	0.5328	8.80	_____
RICE MGT. LABOR	hour	9.06	0.7000	6.34	_____
UNALLOCATED LABOR	hour	16.53	0.4795	7.93	_____
DIESEL FUEL	gal	4.48	24.4137	109.39	_____
REPAIR & MAINTENANCE	acre	31.28	1.0000	31.28	_____
INTEREST ON OP. CAP.	acre	23.57	1.0000	23.57	_____
<b>TOTAL DIRECT EXPENSES</b>				966.56	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				86.44	_____
<b>TOTAL FIXED EXPENSES</b>				158.57	_____
<b>TOTAL SPECIFIED EXPENSES</b>				1125.13	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				-72.13	_____

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 48.C Estimated resource use for field operations, per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT	PERF SIZE	RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33	Oct		0.3330				
Field Cultivate Fld	32'	MFWD	300	0.046	2.00	Oct		0.09	0.09	0.09	0.08
Harrow - Folding	40'	MFWD	300	0.038	1.00	Oct		0.03	0.03	0.03	0.03
App by Air ( 5 gal)	appl				1.00	Feb	1.0000				
Glyphosate 3lbs a.e	oz						48.0000				
2,4-D Amine 4	pt						2.0000				
Grain Drill	24'	MFWD	300	0.078	1.00	Apr		0.07	0.07	0.15	0.07
Rice Seed Provisia	lb						65.0000				
Rice Seed Trt/Insect	lbseed						65.0000				
Roller/Cultipacker	30'	MFWD	300	0.049	1.00	Apr		0.04	0.04	0.04	0.04
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Glyphosate 3lbs a.e	oz						32.0000				
Command 3ME	pt						1.3000				
Sharpen	oz						3.0000				
MSO	pt						0.5000				
Class Act NG	pt						0.5000				
Seed Levees					1.00	Apr					
Rice Seed Provisia	lb						12.0000				
Rice Seed Trt/Insect	lbseed						12.0000				
App by Air ( 5 gal)	appl				1.00	Apr	1.0000				
Provisia	oz						15.5000				
Aim	oz						1.0000				
Permit	oz						0.7500				
Crop Oil Conc.(Pet.)	pt						2.0000				
App Fert by Air	cwt				1.00	May	1.0000				
Amm Sulfate (21% N)	cwt						0.5000				
DAP	cwt						0.5000				
Rice Consultant	acre				1.00	May	1.0000				
App Fert by Air	cwt				1.00	May	2.5000				
Urea, Solid (46% N)	cwt						2.5000				
NBPT	pt						0.7500				
App by Air (10 gal)	appl				1.00	May	1.0000				
Provisia	oz						15.5000				
Crop Oil Conc.(Pet.)	pt						2.0000				
Rice Management					1.00	May					
RICE MGT. LABOR	hour									0.10	
App by Air ( 5 gal)	appl				0.50	Jun	0.5000				
Regiment	oz						0.2500				
Dyne-A-Pak	pt						0.2500				
Rice Management					1.00	Jun					
RICE MGT. LABOR	hour									0.20	
App Fert by Air	cwt				1.00	Jun	1.5000				
Urea, Solid (46% N)	cwt						1.5000				
Rice Management					1.00	Jul					
RICE MGT. LABOR	hour									0.20	
App by Air ( 5 gal)	appl				1.00	Jul	1.0000				
Ameristar Top	oz						10.0000				
Surfactant	pt						0.1000				
App by Air ( 3 gal)	appl				1.50	Jul	1.5000				
Tenchi SG	oz						13.5000				
Rice Management					1.00	Aug					
RICE MGT. LABOR	hour									0.20	
Header - Draper (SL)	40' Rigid	425 hp	0.110	1.00	Aug		0.11	0.11	0.11	0.09	
Grain Cart Rice	700 bu	MFWD	300	0.055	0.20	Aug		0.01	0.01	0.01	0.00
Handling & Storage					1.00	Aug					
HAND LABOR	hour									0.25	
Haul Rice	bu				1.00	Aug	156.0000				
Dry Rice	bu				1.00	Aug	156.0000				
Disk Heavy	28'	MFWD	300	0.075	2.00	Sep		0.15	0.15	0.15	0.13
Flood Irr.	acre					Jan	1.0000			1.05	
TOTALS							0.53	0.53	2.61	0.47	

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

Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Table 48.D Estimated costs for field operations, per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.21	3.54	3.54
Field Cultivate Fld	32'		6.46	2.27	2.93		0.75	12.41	12.88
Harrow - Folding	40'		2.69	0.66	1.22		0.29	4.86	3.11
App by Air ( 5 gal)	appl	7.60					0.32	7.92	7.92
Glyphosate 3lbs a.e.	oz	16.32					0.70	17.02	17.02
2,4-D Amine 4	pt	6.66					0.28	6.94	6.94
Grain Drill	24'		5.44	2.78	3.18		0.36	11.76	9.71
Rice Seed Provisia	lb	84.50					2.70	87.20	87.20
Rice Seed Trt/Insect	lbseed	18.85					0.60	19.45	19.45
Roller/Cultipacker	30'		3.44	0.71	1.56		0.18	5.89	3.72
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Glyphosate 3lbs a.e.	oz	10.88					0.35	11.23	11.23
Command 3ME	pt	23.40					0.75	24.15	24.15
Sharpen	oz	20.16					0.65	20.81	20.81
MSO	pt	0.67					0.02	0.69	0.69
Class Act NG	pt	2.38					0.08	2.46	2.46
Seed Levees									
Rice Seed Provisia	lb	15.60					0.50	16.10	16.10
Rice Seed Trt/Insect	lbseed	3.48					0.11	3.59	3.59
App by Air ( 5 gal)	appl	7.60					0.24	7.84	7.84
Provisia	oz	12.71					0.41	13.12	13.12
Aim	oz	4.90					0.16	5.06	5.06
Permit	oz	15.05					0.48	15.53	15.53
Crop Oil Conc.(Pet.)	pt	5.72					0.18	5.90	5.90
App Fert by Air	cwt	8.00					0.21	8.21	8.21
Amm Sulfate (21% N)	cwt	25.00					0.67	25.67	25.67
DAP	cwt	27.70					0.74	28.44	28.44
Rice Consultant	acre	8.00					0.21	8.21	8.21
App Fert by Air	cwt	20.00					0.53	20.53	20.53
Urea, Solid (46% N)	cwt	103.95					2.77	106.72	106.72
NBPT	pt	13.50					0.36	13.86	13.86
App by Air (10 gal)	appl	9.70					0.26	9.96	9.96
Provisia	oz	12.71					0.34	13.05	13.05
Crop Oil Conc.(Pet.)	pt	5.72					0.15	5.87	5.87
Rice Management									
RICE MGT. LABOR	hour				0.91		0.02	0.93	0.93
App by Air ( 5 gal)	appl	3.80					0.08	3.88	3.88
Regiment	oz	11.49					0.25	11.74	11.74
Dyne-A-Pak	pt	1.50					0.03	1.53	1.53
Rice Management									
RICE MGT. LABOR	hour			1.81			0.04	1.85	1.85
App Fert by Air	cwt	12.00					0.26	12.26	12.26
Urea, Solid (46% N)	cwt	62.37					1.33	63.70	63.70
Rice Management									
RICE MGT. LABOR	hour			1.81			0.03	1.84	1.84
App by Air ( 5 gal)	appl	7.60					0.12	7.72	7.72
Ameristar Top	oz	24.10					0.39	24.49	24.49
Surfactant	pt	0.33					0.01	0.34	0.34
App by Air ( 3 gal)	appl	9.60					0.15	9.75	9.75
Tenchi SG	oz	15.26					0.24	15.50	15.50
Rice Management									
RICE MGT. LABOR	hour			1.81			0.02	1.83	1.83
Header - Draper (SL)	40' Rigid		10.78	8.23	3.46		0.24	22.71	30.23
Grain Cart Rice	700 bu		0.76	0.25	0.34		0.01	1.36	1.05
Handling & Storage									
HAND LABOR	hour			2.27			0.02	2.29	2.29
Haul Rice	bu	54.60					0.58	55.18	55.18
Dry Rice	bu	62.40					0.67	63.07	63.07
Disk Heavy	28'		10.47	4.58	4.75		0.11	19.91	17.70
Flood Irr.	acre		69.35	11.80	9.53		2.17	92.85	80.17
TOTALS		766.74	109.39	31.28	35.58	0.00	23.57	966.56	158.57
									1125.13

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

Table 48.E Estimated monthly income and expense flows per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1053.00	0.00
DIRECT EXPENSES												
CUSTOM SPRAY	0.00	0.00	0.00	0.00	7.60	0.00	15.20	9.70	3.80	17.20	0.00	0.00
FERTILIZERS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	170.15	62.37	0.00	0.00	0.00
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.10	0.00	0.00
HERBICIDES	0.00	0.00	0.00	0.00	22.98	0.00	87.10	12.71	11.49	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	122.43	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	8.77	5.72	1.50	0.33	0.00	0.00
CUSTOM FERTILIZE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.00	12.00	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	54.60	0.00
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.40	0.00
CROP CONSULTANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	0.00
SOIL TEST	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.15	0.00	0.00	0.00	0.00	0.00	7.46	3.18	4.08	4.08	7.88	4.75
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	9.15	0.00	0.00	0.00	0.00	0.00	23.48	18.25	18.25	18.25	11.54	10.47
REPAIR & MAINTENANCE	2.93	0.00	0.00	0.00	0.00	0.00	4.73	7.46	1.55	1.55	8.48	4.58
INTEREST ON OP. CAP.	1.25	0.00	0.00	0.00	1.30	0.00	8.60	7.01	2.46	1.30	1.54	0.11
TOTAL DIRECT EXPENSES	20.81	0.00	0.00	0.00	31.88	0.00	277.77	270.18	117.50	82.07	146.44	19.91
NET INCOME	-20.81	0.00	0.00	0.00	-31.88	0.00	-277.77	-270.18	-117.50	-82.07	906.56	-19.91
NET INCOME TO DATE	-20.81	-20.81	-20.81	-20.81	-52.69	-52.69	-330.46	-600.64	-718.14	-800.21	106.35	86.44

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

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

\* Lease costs are based on hourly usage costs.

Table 48.F Estimated returns for various price/yield combinations, per acre  
 Provisia straight levee-zero grade rice  
 Flood irrigated, 19 ac-in., Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
Rice		5.06	5.40	5.73	6.07	6.41	6.75	7.08	7.42	7.76	8.10	8.43	
PERCENT	YIELD	UNIT	dollars										
50	78.00	bu	-512 -671	-486 -644	-459 -618	-433 -592	-407 -565	-380 -539	-354 -513	-328 -486	-301 -460	-275 -434	-249 -407
60	93.60	bu	-445 -603	-413 -572	-382 -540	-350 -509	-319 -477	-287 -446	-255 -414	-224 -382	-192 -351	-161 -319	-129 -288
70	109.20	bu	-378 -536	-341 -499	-304 -463	-267 -426	-230 -389	-193 -352	-157 -315	-120 -278	-83 -241	-46 -205	-9 -168
80	124.80	bu	-311 -469	-268 -427	-226 -385	-184 -343	-142 -301	-100 -259	-58 -216	-16 -174	25 -132	67 -90	110 -48
90	140.40	bu	-243 -402	-196 -355	-149 -307	-101 -260	-54 -212	-7 -165	40 -118	87 -70	135 -23	182 23	229 71
100	156.00	bu	-176 -335	-124 -282	-71 -230	-18 -177	33 -124	86 -72	139 -19	191 33	244 85	297 138	349 191
110	171.60	bu	-109 -268	-51 -210	6 -152	64 -94	122 -36	179 21	237 79	295 137	353 195	411 253	469 310
120	187.20	bu	-42 -201	20 -137	83 -74	147 -11	210 51	273 114	336 178	399 241	462 304	526 367	589 430
130	202.80	bu	24 -133	93 -65	161 2	229 71	298 139	366 208	435 276	503 345	572 413	640 482	709 550
140	218.40	bu	91 -66	165 6	239 80	312 154	386 228	460 301	534 375	607 449	681 522	755 596	828 670
150	234.00	bu	158 0	237 79	316 158	395 237	474 316	553 395	632 474	711 553	790 632	869 711	948 790

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 49.A Estimated costs per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.88	30.0000	56.40	
Convoy	oz	1.13	24.0000	27.12	
Bravo Weather Stick	pt	6.32	2.2500	14.22	
Tebuconazole 3.6	oz	0.75	7.2000	5.40	
Elatus	oz	3.81	9.2000	35.05	
Provost Silver	oz	1.41	13.0000	18.33	
HERBICIDES					
Glyphosate 3lbs a.e	pt	5.38	4.0000	21.52	
Dual Magnum	pt	11.45	1.0000	11.45	
Valor SX	oz	3.20	3.0000	9.60	
Storm	pt	12.65	1.5000	18.98	
Cadre	oz	1.97	4.0000	7.88	
Butyrac 200 (2,4-DB)	pt	4.06	2.0000	8.12	
Select Max	pt	13.86	1.0000	13.86	
INSECTICIDES					
Admire Pro	oz	1.76	9.0000	15.84	
Acephate 90%	lb	9.30	0.1375	1.28	
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.90	6.0000	17.40	
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	
INOCULANT					
Optimize LIFT	oz	0.15	14.8000	2.22	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	1.2529	20.73	
Self-Propelled	hour	16.54	0.1321	2.14	
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	
Self-Propelled	hour	9.06	0.0660	0.56	
UNALLOCATED LABOR					
hour	16.58	1.1080	18.38		
DIESEL FUEL					
Tractors	gal	4.48	13.5967	60.92	
Self-Propelled	gal	4.48	1.6839	7.54	
REPAIR & MAINTENANCE					
Implements	acre	10.49	1.0000	10.49	
Tractors	acre	9.85	1.0000	9.85	
Self-Propelled	acre	2.25	1.0000	2.25	
INTEREST ON OP. CAP.	acre	11.51	1.0000	11.51	
TOTAL DIRECT EXPENSES				635.29	
FIXED EXPENSES					
Implements	acre	47.57	1.0000	47.57	
Tractors	acre	69.70	1.0000	69.70	
Self-Propelled	acre	16.42	1.0000	16.42	
TOTAL FIXED EXPENSES				133.69	
TOTAL SPECIFIED EXPENSES				768.98	

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 49.B Summary of estimated costs and returns per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
<b>INCOME</b>					
Peanut Runner	ton	575.00	2.0000	1150.00	-----
<b>TOTAL INCOME</b>				<b>1150.00</b>	_____
<b>DIRECT EXPENSES</b>					
FUNGICIDES	acre	156.52	1.0000	156.52	_____
HERBICIDES	acre	91.41	1.0000	91.41	_____
INSECTICIDES	acre	17.12	1.0000	17.12	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
INOCULANT	acre	2.22	1.0000	2.22	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1868	1.65	_____
OPERATOR LABOR	hour	16.54	1.3850	22.87	_____
UNALLOCATED LABOR	hour	16.58	1.1080	18.38	_____
DIESEL FUEL	gal	4.48	15.2806	68.46	_____
REPAIR & MAINTENANCE	acre	22.59	1.0000	22.59	_____
INTEREST ON OP. CAP.	acre	11.51	1.0000	11.51	_____
<b>TOTAL DIRECT EXPENSES</b>				<b>635.29</b>	_____
<b>RETURNS ABOVE DIRECT EXPENSES</b>				<b>514.71</b>	_____
<b>TOTAL FIXED EXPENSES</b>				<b>133.69</b>	_____
<b>TOTAL SPECIFIED EXPENSES</b>				<b>768.98</b>	_____
<b>RETURNS ABOVE TOTAL SPECIFIED EXPENSES</b>				<b>381.02</b>	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 49.C Estimated resource use for field operations, per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Apr			0.01	0.01	0.00
Glyphosate 3lbs a.e.	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	8R-38	MFWD 190	0.073	1.00	May			0.07	0.07	0.07
Peanut Plt&Pre Rigid	8R-38	MFWD 225	0.120	1.00	May			0.12	0.12	0.24
Peanut Seed	lb					150.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Abound	oz					12.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-825gal	90' 250hp		0.011	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Convoy	oz					24.0000				
Bravo Weather Stick	pt					0.7500				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bravo Weather Stick	pt					0.7500				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Elatus	oz					9.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Provost Silver	oz					13.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Aug			0.01	0.01	0.00
Abound	oz					18.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Aug			0.01	0.01	0.00
Bravo Weather Stick	pt					0.7500				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep			0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep			0.62	0.62	0.50
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep			0.31	0.31	0.24
-----										
TOTALS						1.38		1.25	1.57	1.10

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes.

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.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 49.D Estimated costs for field operations, per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.11	3.44	3.44
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Glyphosate 3lbs a.e	pt	21.52					0.69	22.21	22.21
Lime (Spread)	ton	19.31					0.62	19.93	19.93
Bed-Rip/Disk Fold.	8R-38		3.20	0.74	2.18		0.16	6.28	4.95
Peanut Plt&Pre Rigid	8R-38		6.27	3.21	4.69		0.38	14.55	12.12
Peanut Seed	lb	126.00					3.36	129.36	129.36
Optimize LIFT	oz	2.22					0.06	2.28	2.28
Admire Pro	oz	15.84					0.42	16.26	16.26
Abound	oz	22.56					0.60	23.16	23.16
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Dual Magnum	pt	11.45					0.31	11.76	11.76
Valor SX	oz	9.60					0.26	9.86	9.86
Sprayer 600-825gal	90' 250hp		0.17	0.05	0.10		0.01	0.33	0.36
Acephate 90%	lb	1.28					0.03	1.31	1.31
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Convoy	oz	27.12					0.58	27.70	27.70
Bravo Weather Stick	pt	4.74					0.10	4.84	4.84
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Storm	pt	18.98					0.40	19.38	19.38
Cadre	oz	7.88					0.17	8.05	8.05
Butyrac 200 (2,4-DB)	pt	4.06					0.09	4.15	4.15
Crop Oil Conc.(Veg.)	pt	5.80					0.12	5.92	5.92
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Bravo Weather Stick	pt	4.74					0.10	4.84	4.84
Tebuconazole 3.6	oz	5.40					0.12	5.52	5.52
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Elatus	oz	35.05					0.56	35.61	35.61
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Butyrac 200 (2,4-DB)	pt	4.06					0.06	4.12	4.12
Crop Oil Conc.(Veg.)	pt	5.80					0.09	5.89	5.89
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Select Max	pt	13.86					0.22	14.08	14.08
Crop Oil Conc.(Veg.)	pt	5.80					0.09	5.89	5.89
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Provost Silver	oz	18.33					0.29	18.62	18.62
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.01	1.28	1.46
Abound	oz	33.84					0.36	34.20	34.20
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.01	1.28	1.46
Bravo Weather Stick	pt	4.74					0.05	4.79	4.79
Peanut Dig/Invertor	6R-38		5.44	1.95	3.69		0.06	11.14	8.10
Peanut Harvester	6R-38		32.43	11.13	18.61		0.33	62.50	71.29
Dry Peanuts	ton	27.36					0.15	27.51	27.51
Cleaning Peanuts	ton	29.16					0.16	29.32	29.32
Peanut Dump Cart	6-Row		13.58	3.31	9.23		0.14	26.26	20.81
<b>TOTALS</b>		489.83	68.46	22.59	42.90	0.00	11.51	635.29	133.69
									768.98

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 49.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1150.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.56	42.00	53.38	38.58	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	21.52	21.05	30.92	17.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	17.12	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	19.31	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.22	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.40	7.37	1.20	1.60	0.80	31.53
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.67	10.31	2.01	2.68	1.34	51.45
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	4.20	0.60	0.80	0.40	16.39
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	1.46	5.62	1.77	1.39	0.43	0.84
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	46.89	216.45	84.30	89.37	41.55	156.73
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-216.45	-84.30	-89.37	-41.55	993.27
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-263.34	-347.64	-437.01	-478.56	514.71

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**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.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 49.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2023

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Peanut Runner		431.25	460.00	488.75	517.50	546.25	575.00	603.75	632.50	661.25	690.00	718.75	
PERCENT	YIELD	UNIT	dollars										
50	1.00	ton	-175 -309	-146 -280	-118 -251	-89 -223	-60 -194	-31 -165	-3 -136	25 -108	54 -79	83 -50	111 -21
60	1.20	ton	-95 -228	-60 -194	-26 -159	8 -125	42 -90	77 -56	111 -21	146 12	180 47	215 81	249 116
70	1.40	ton	-14 -148	25 -107	66 -67	106 -27	146 12	186 53	227 93	267 133	307 173	347 214	388 254
80	1.60	ton	66 -67	112 -21	158 24	204 70	250 116	296 162	342 208	388 254	434 300	480 346	526 392
90	1.80	ton	146 12	198 64	250 116	301 168	353 219	405 271	457 323	508 375	560 426	612 478	664 530
100	2.00	ton	227 93	284 151	342 208	399 266	457 323	514 381	572 438	629 496	687 553	744 611	802 668
110	2.20	ton	307 174	371 237	434 300	497 363	560 427	624 490	687 553	750 616	813 680	877 743	940 806
120	2.40	ton	388 254	457 323	526 392	595 461	664 530	733 599	802 668	871 737	940 806	1009 875	1078 944
130	2.60	ton	468 335	543 409	618 484	693 559	767 634	842 708	917 783	992 858	1066 933	1141 1007	1216 1082
140	2.80	ton	549 415	629 496	710 576	790 657	871 737	951 818	1032 898	1112 979	1193 1059	1273 1140	1354 1220
150	3.00	ton	630 496	716 582	802 668	888 755	975 841	1061 927	1147 1013	1233 1100	1320 1186	1406 1272	1492 1358

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 50.A Estimated costs per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin  
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.88	30.0000	56.40	_____
Convoy	oz	1.13	24.0000	27.12	_____
Bravo Weather Stick	pt	6.32	2.2500	14.22	_____
Tebuconazole 3.6	oz	0.75	7.2000	5.40	_____
Elatus	oz	3.81	9.2000	35.05	_____
Provost Silver	oz	1.41	13.0000	18.33	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	5.38	4.0000	21.52	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
Valor SX	oz	3.20	3.0000	9.60	_____
Storm	pt	12.65	1.5000	18.98	_____
Cadre	oz	1.97	4.0000	7.88	_____
Butyrac 200 (2,4-DB)	pt	4.06	2.0000	8.12	_____
Select Max	pt	13.86	1.0000	13.86	_____
INSECTICIDES					
Admire Pro	oz	1.76	9.0000	15.84	_____
Acephate 90%	lb	9.30	0.1375	1.28	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	_____
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	2.90	6.0000	17.40	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	_____
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	_____
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	_____
INOCULANT					
Optimize LIFT	oz	0.15	29.6000	4.44	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	1.2529	20.73	_____
Self-Propelled	hour	16.54	0.1321	2.14	_____
HAND LABOR					
implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0660	0.56	_____
UNALLOCATED LABOR					
hour	hour	16.58	1.1080	18.38	_____
DIESEL FUEL					
Tractors	gal	4.48	13.5967	60.92	_____
Self-Propelled	gal	4.48	1.6839	7.54	_____
REPAIR & MAINTENANCE					
implements	acre	14.03	1.0000	14.03	_____
Tractors	acre	9.85	1.0000	9.85	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	11.66	1.0000	11.66	_____
TOTAL DIRECT EXPENSES				641.20	_____
FIXED EXPENSES					
implements	acre	55.11	1.0000	55.11	_____
Tractors	acre	69.70	1.0000	69.70	_____
Self-Propelled	acre	16.42	1.0000	16.42	_____
TOTAL FIXED EXPENSES				141.23	_____
TOTAL SPECIFIED EXPENSES				782.43	_____

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 50.B Summary of estimated costs and returns per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin  
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	575.00	2.0000	1150.00	-----
TOTAL INCOME				1150.00	-----
DIRECT EXPENSES					
FUNGICIDES	acre	156.52	1.0000	156.52	-----
HERBICIDES	acre	91.41	1.0000	91.41	-----
INSECTICIDES	acre	17.12	1.0000	17.12	-----
SEED/PLANTS	acre	126.00	1.0000	126.00	-----
ADJUVANTS	acre	17.40	1.0000	17.40	-----
CLEANING	acre	29.16	1.0000	29.16	-----
DRYING	acre	27.36	1.0000	27.36	-----
CUSTOM LIME	acre	19.31	1.0000	19.31	-----
INOCULANT	acre	4.44	1.0000	4.44	-----
SOIL TEST	acre	3.33	1.0000	3.33	-----
HAND LABOR	hour	9.06	0.1868	1.65	-----
OPERATOR LABOR	hour	16.54	1.3850	22.87	-----
UNALLOCATED LABOR	hour	16.58	1.1080	18.38	-----
DIESEL FUEL	gal	4.48	15.2806	68.46	-----
REPAIR & MAINTENANCE	acre	26.13	1.0000	26.13	-----
INTEREST ON OP. CAP.	acre	11.66	1.0000	11.66	-----
TOTAL DIRECT EXPENSES				641.20	-----
RETURNS ABOVE DIRECT EXPENSES				508.80	-----
TOTAL FIXED EXPENSES				141.23	-----
TOTAL SPECIFIED EXPENSES				782.43	-----
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				367.57	-----

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning

Table 50.C Estimated resource use for field operations, per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin  
 All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Apr			0.01	0.01	0.00
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Rigid	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Ptlt&PreTwin	8R-30/40	MFWD 225	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					150.0000				
Optimize LIFT	oz					29.6000				
Admire Pro	oz					9.0000				
Abound	oz					12.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-825gal	90' 250hp		0.011	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Convoy	oz					24.0000				
Bravo Weather Stick	pt					0.7500				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bravo Weather Stick	pt					0.7500				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Elatus	oz					9.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Provost Silver	oz					13.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Aug			0.01	0.01	0.00
Abound	oz					18.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Aug			0.01	0.01	0.00
Bravo Weather Stick	pt					0.7500				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
-----										
<b>TOTALS</b>						1.38	1.25	1.57	1.10	

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 50.D Estimated costs for field operations, per acre  
Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin  
All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.11	3.44	3.44
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Glyphosate 3lbs a.e.	pt	21.52					0.69	22.21	22.21
Lime (Spread)	ton	19.31					0.62	19.93	19.93
Bed-Rip/Disk Rigid	8R-38		3.20	0.70	2.18		0.16	6.24	4.68
Peanut Ptlt&PreTwin	8R-30/40		6.27	6.79	4.69		0.47	18.22	19.93
Peanut Seed	lb	126.00					3.36	129.36	129.36
Optimize LIFT	oz	4.44					0.12	4.56	4.56
Admire Pro	oz	15.84					0.42	16.26	16.26
Abound	oz	22.56					0.60	23.16	23.16
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Dual Magnum	pt	11.45					0.31	11.76	11.76
Valor SX	oz	9.60					0.26	9.86	9.86
Sprayer 600-825gal	90' 250hp		0.17	0.05	0.10		0.01	0.33	0.36
Acephate 90%	lb	1.28					0.03	1.31	1.31
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Convoy	oz	27.12					0.58	27.70	27.70
Bravo Weather Stick	pt	4.74					0.10	4.84	4.84
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Storm	pt	18.98					0.40	19.38	19.38
Cadre	oz	7.88					0.17	8.05	8.05
Butyrac 200 (2,4-DB)	pt	4.06					0.09	4.15	4.15
Crop Oil Conc.(Veg.)	pt	5.80					0.12	5.92	5.92
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Bravo Weather Stick	pt	4.74					0.10	4.84	4.84
Tebuconazole 3.6	oz	5.40					0.12	5.52	5.52
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Elatus	oz	35.05					0.56	35.61	35.61
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Butyrac 200 (2,4-DB)	pt	4.06					0.06	4.12	4.12
Crop Oil Conc.(Veg.)	pt	5.80					0.09	5.89	5.89
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Select Max	pt	13.86					0.22	14.08	14.08
Crop Oil Conc.(Veg.)	pt	5.80					0.09	5.89	5.89
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Provost Silver	oz	18.33					0.29	18.62	18.62
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.01	1.28	1.46
Abound	oz	33.84					0.36	34.20	34.20
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.01	1.28	1.46
Bravo Weather Stick	pt	4.74					0.05	4.79	4.79
Peanut Dig/Invertor	6R-38		5.44	1.95	3.69		0.06	11.14	8.10
Peanut Harvester	6R-38		32.43	11.13	18.61		0.33	62.50	71.29
Dry Peanuts	ton	27.36					0.15	27.51	27.51
Cleaning Peanuts	ton	29.16					0.16	29.32	29.32
Peanut Dump Cart	6-Row		13.58	3.31	9.23		0.14	26.26	20.81
<b>TOTALS</b>		492.05	68.46	26.13	42.90	0.00	11.66	641.20	141.23
									782.43

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 50.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin  
 All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1150.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.56	42.00	53.38	38.58	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	21.52	21.05	30.92	17.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	17.12	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	19.31	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.44	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.40	7.37	1.20	1.60	0.80	31.53
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.67	10.31	2.01	2.68	1.34	51.45
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	7.74	0.60	0.80	0.40	16.39
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	1.46	5.77	1.77	1.39	0.43	0.84
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	46.89	222.36	84.30	89.37	41.55	156.73
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-222.36	-84.30	-89.37	-41.55	993.27
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-269.25	-353.55	-442.92	-484.47	508.80

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**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.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 50.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin  
 All Areas, Mississippi, 2023

PRODUCT	PERCENT	YIELD	UNIT	PERCENT										
				75	80	85	90	95	100	105	110	115	120	125
				PRODUCT PRICE										
Peanut Runner				431.25	460.00	488.75	517.50	546.25	575.00	603.75	632.50	661.25	690.00	718.75
dollars														
50	1.00	ton		-181	-152	-124	-95	-66	-37	-9	19	48	77	105
				-322	-294	-265	-236	-207	-179	-150	-121	-92	-64	-35
60	1.20	ton		-100	-66	-31	2	37	71	106	140	175	209	244
				-242	-207	-173	-138	-104	-69	-35	-0	33	68	102
70	1.40	ton		-20	19	60	100	140	180	221	261	301	341	382
				-161	-121	-81	-40	-0	39	79	120	160	200	240
80	1.60	ton		60	106	152	198	244	290	336	382	428	474	520
				-81	-35	10	56	102	148	194	240	286	332	378
90	1.80	ton		140	192	244	295	347	399	451	502	554	606	658
				-0	51	103	154	206	258	310	361	413	465	517
100	2.00	ton		221	278	336	393	451	508	566	623	681	738	796
				80	137	195	252	310	367	425	482	540	597	655
110	2.20	ton		301	365	428	491	554	618	681	744	807	871	934
				160	223	287	350	413	476	540	603	666	729	793
120	2.40	ton		382	451	520	589	658	727	796	865	934	1003	1072
				241	310	379	448	517	586	655	724	793	862	931
130	2.60	ton		463	537	612	687	762	836	911	986	1061	1135	1210
				321	396	471	546	620	695	770	845	919	994	1069
140	2.80	ton		543	624	704	785	865	946	1026	1107	1187	1268	1348
				402	482	563	643	724	804	885	965	1046	1126	1207
150	3.00	ton		624	710	796	882	969	1055	1141	1227	1314	1400	1486
				482	569	655	741	827	914	1000	1086	1172	1259	1345

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 51.A Estimated costs per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.88	30.0000	56.40	
Convoy	oz	1.13	24.0000	27.12	
Bravo Weather Stick	pt	6.32	2.2500	14.22	
Tebuconazole 3.6	oz	0.75	7.2000	5.40	
Elatus	oz	3.81	9.2000	35.05	
Provost Silver	oz	1.41	13.0000	18.33	
HERBICIDES					
Glyphosate 3lbs a.e.	pt	5.38	4.0000	21.52	
Dual Magnum	pt	11.45	1.0000	11.45	
Valor SX	oz	3.20	3.0000	9.60	
Storm	pt	12.65	1.5000	18.98	
Cadre	oz	1.97	4.0000	7.88	
Butyrac 200 (2,4-DB)	pt	4.06	2.0000	8.12	
Select Max	pt	13.86	1.0000	13.86	
INSECTICIDES					
Admire Pro	oz	1.76	9.0000	15.84	
Acephate 90%	lb	9.30	0.1375	1.28	
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	2.90	6.0000	17.40	
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	
INOCULANT					
Optimize LIFT	oz	0.15	14.8000	2.22	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	1.1856	19.61	
Self-Propelled	hour	16.54	0.1321	2.14	
HAND LABOR					
implements	hour	9.06	0.0804	0.73	
Self-Propelled	hour	9.06	0.0660	0.56	
UNALLOCATED LABOR					
hour	16.57	1.0543	17.48		
DIESEL FUEL					
Tractors	gal	4.48	12.9499	58.02	
Self-Propelled	gal	4.48	1.6839	7.54	
REPAIR & MAINTENANCE					
implements	acre	11.30	1.0000	11.30	
Tractors	acre	9.41	1.0000	9.41	
Self-Propelled	acre	2.25	1.0000	2.25	
INTEREST ON OP. CAP.	acre	11.38	1.0000	11.38	
TOTAL DIRECT EXPENSES				630.25	
FIXED EXPENSES					
implements	acre	49.22	1.0000	49.22	
Tractors	acre	66.56	1.0000	66.56	
Self-Propelled	acre	16.42	1.0000	16.42	
TOTAL FIXED EXPENSES				132.20	
TOTAL SPECIFIED EXPENSES				762.45	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 51.B Summary of estimated costs and returns per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	575.00	2.0000	1150.00	_____
TOTAL INCOME				1150.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	156.52	1.0000	156.52	_____
HERBICIDES	acre	91.41	1.0000	91.41	_____
INSECTICIDES	acre	17.12	1.0000	17.12	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	29.16	1.0000	29.16	_____
DRYING	acre	27.36	1.0000	27.36	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
INOCULANT	acre	2.22	1.0000	2.22	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1465	1.29	_____
OPERATOR LABOR	hour	16.54	1.3178	21.75	_____
UNALLOCATED LABOR	hour	16.57	1.0543	17.48	_____
DIESEL FUEL	gal	4.48	14.6338	65.56	_____
REPAIR & MAINTENANCE	acre	22.96	1.0000	22.96	_____
INTEREST ON OP. CAP.	acre	11.38	1.0000	11.38	_____
TOTAL DIRECT EXPENSES				630.25	_____
RETURNS ABOVE DIRECT EXPENSES				519.75	_____
TOTAL FIXED EXPENSES				132.20	_____
TOTAL SPECIFIED EXPENSES				762.45	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				387.55	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 51.C Estimated resource use for field operations, per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2023

OPERATION/ OPERATING	SIZE/ UNIT	POWER UNIT	PERF	TIMES	INPUT	POWER	ALLOC	UNALL		
		SIZE	RATE	OVER	MTH	AMOUNT	IMPLEMENT	UNIT	LABOR	LABOR
-----hours-----										
Soil Test	acre		0.33	Apr	0.3330					
Sprayer 600-825gal	90' 250hp		0.011	1.00	Apr			0.01	0.01	0.00
Glyphosate 3lbs a.e.	pt					4.0000				
Lime (Spread)	ton		0.33	Apr	0.3330					
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 225	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					150.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Abound	oz					12.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-825gal	90' 250hp		0.011	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Convoy	oz					24.0000				
Bravo Weather Stick	pt					0.7500				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jun			0.01	0.01	0.00
Bravo Weather Stick	pt					0.7500				
Tebuconazole 3.6	oz					7.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Elatus	oz					9.2000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Jul			0.01	0.01	0.00
Provost Silver	oz					13.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Aug			0.01	0.01	0.00
Abound	oz					18.0000				
Sprayer 600-825gal	90' 250hp		0.011	1.00	Aug			0.01	0.01	0.00
Bravo Weather Stick	pt					0.7500				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton					1.6200				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.31	1.18	1.46	1.05

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 51.D Estimated costs for field operations, per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.11	3.44	3.44
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Glyphosate 3lbs a.e.	pt	21.52					0.69	22.21	22.21
Lime (Spread)	ton	19.31					0.62	19.93	19.93
Bed-Rip/Disk Fold.	12R-38		2.40	0.63	1.37		0.12	4.52	4.13
Peanut Plt&Pre Fold.	12R-38		4.17	3.69	3.12		0.29	11.27	11.45
Peanut Seed	lb	126.00					3.36	129.36	129.36
Optimize LIFT	oz	2.22					0.06	2.28	2.28
Admire Pro	oz	15.84					0.42	16.26	16.26
Abound	oz	22.56					0.60	23.16	23.16
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Dual Magnum	pt	11.45					0.31	11.76	11.76
Valor SX	oz	9.60					0.26	9.86	9.86
Sprayer 600-825gal	90' 250hp		0.17	0.05	0.10		0.01	0.33	0.36
Acephate 90%	lb	1.28					0.03	1.31	1.31
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Convoy	oz	27.12					0.58	27.70	27.70
Bravo Weather Stick	pt	4.74					0.10	4.84	4.84
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Storm	pt	18.98					0.40	19.38	19.38
Cadre	oz	7.88					0.17	8.05	8.05
Butyrac 200 (2,4-DB)	pt	4.06					0.09	4.15	4.15
Crop Oil Conc.(Veg.)	pt	5.80					0.12	5.92	5.92
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Bravo Weather Stick	pt	4.74					0.10	4.84	4.84
Tebuconazole 3.6	oz	5.40					0.12	5.52	5.52
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Elatus	oz	35.05					0.56	35.61	35.61
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Butyrac 200 (2,4-DB)	pt	4.06					0.06	4.12	4.12
Crop Oil Conc.(Veg.)	pt	5.80					0.09	5.89	5.89
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Select Max	pt	13.86					0.22	14.08	14.08
Crop Oil Conc.(Veg.)	pt	5.80					0.09	5.89	5.89
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Provost Silver	oz	18.33					0.29	18.62	18.62
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.01	1.28	1.46
Abound	oz	33.84					0.36	34.20	34.20
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.01	1.28	1.46
Bravo Weather Stick	pt	4.74					0.05	4.79	4.79
Peanut Dig/Invertor	6R-38		5.44	1.95	3.69		0.06	11.14	8.10
Peanut Harvester	6R-38		32.43	11.13	18.61		0.33	62.50	71.29
Dry Peanuts	ton	27.36					0.15	27.51	27.51
Cleaning Peanuts	ton	29.16					0.16	29.32	29.32
Peanut Dump Cart	6-Row		13.58	3.31	9.23		0.14	26.26	20.81
<b>TOTALS</b>		489.83	65.56	22.96	40.52	0.00	11.38	630.25	132.20
									762.45

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 51.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1150.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.56	42.00	53.38	38.58	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	21.52	21.05	30.92	17.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	17.12	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	19.31	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.22	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.40	4.99	1.20	1.60	0.80	31.53
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.67	7.41	2.01	2.68	1.34	51.45
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	4.57	0.60	0.80	0.40	16.39
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	1.46	5.49	1.77	1.39	0.43	0.84
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	46.89	211.41	84.30	89.37	41.55	156.73
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-211.41	-84.30	-89.37	-41.55	993.27
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-258.30	-342.60	-431.97	-473.52	519.75

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**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.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 51.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2023

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
			PRODUCT PRICE										
Peanut Runner		431.25	460.00	488.75	517.50	546.25	575.00	603.75	632.50	661.25	690.00	718.75	
PERCENT	YIELD	UNIT	dollars										
50	1.00	ton	-170	-141	-113	-84	-55	-26	1	30	59	88	116
			-302	-274	-245	-216	-187	-159	-130	-101	-72	-44	-15
60	1.20	ton	-90	-55	-21	13	47	82	116	151	185	220	254
			-222	-187	-153	-118	-84	-49	-15	19	53	88	122
70	1.40	ton	-9	30	71	111	151	191	232	272	312	352	393
			-141	-101	-61	-20	19	59	99	140	180	220	260
80	1.60	ton	71	117	163	209	255	301	347	393	439	485	531
			-61	-15	30	76	122	168	214	260	306	352	398
90	1.80	ton	151	203	255	306	358	410	462	513	565	617	669
			19	71	122	174	226	278	329	381	433	485	536
100	2.00	ton	232	289	347	404	462	519	577	634	692	749	807
			100	157	215	272	330	387	445	502	560	617	675
110	2.20	ton	312	376	439	502	565	629	692	755	818	882	945
			180	243	307	370	433	496	560	623	686	749	813
120	2.40	ton	393	462	531	600	669	738	807	876	945	1014	1083
			261	330	399	468	537	606	675	744	813	882	951
130	2.60	ton	473	548	623	698	772	847	922	997	1071	1146	1221
			341	416	491	566	640	715	790	865	939	1014	1089
140	2.80	ton	554	635	715	796	876	957	1037	1118	1198	1279	1359
			422	502	583	663	744	824	905	985	1066	1146	1227
150	3.00	ton	635	721	807	893	980	1066	1152	1238	1325	1411	1497
			502	589	675	761	847	934	1020	1106	1192	1279	1365

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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

Table 52.A Estimated costs per acre  
 Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.88	30.0000	56.40	
Convoy	oz	1.13	24.0000	27.12	
Bravo Weather Stick	pt	6.32	2.2500	14.22	
Tebuconazole 3.6	oz	0.75	7.2000	5.40	
Elatus	oz	3.81	9.2000	35.05	
Provost Silver	oz	1.41	13.0000	18.33	
HERBICIDES					
Glyphosate 3lbs a.e.	pt	5.38	4.0000	21.52	
Dual Magnum	pt	11.45	1.0000	11.45	
Valor SX	oz	3.20	3.0000	9.60	
Storm	pt	12.65	1.5000	18.98	
Cadre	oz	1.97	4.0000	7.88	
Butyrac 200 (2,4-DB)	pt	4.06	2.0000	8.12	
Select Max	pt	13.86	1.0000	13.86	
INSECTICIDES					
Admire Pro	oz	1.76	9.0000	15.84	
Acephate 90%	lb	9.30	0.1375	1.28	
IRRIGATION SUPPLIES					
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	2.90	6.0000	17.40	
CLEANING					
Cleaning Peanuts	ton	18.00	1.8700	33.66	
DRYING					
Dry Peanuts	ton	24.00	1.3200	31.68	
CUSTOM LIME					
Lime (Spread)	ton	58.00	0.3330	19.31	
INOCULANT					
Optimize LIFT	oz	0.15	14.8000	2.22	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	1.2642	20.92	
Self-Propelled	hour	16.54	0.1321	2.14	
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	0.0804	0.73	
Self-Propelled	hour	9.06	0.0660	0.56	
UNALLOCATED LABOR					
hour	16.57	1.0543	17.48		
DIESEL FUEL					
Tractors	gal	4.48	13.6762	61.28	
Self-Propelled	gal	4.48	1.6839	7.54	
Irrigate Peanuts	gal	4.48	9.7755	43.80	
REPAIR & MAINTENANCE					
Implements	acre	11.55	1.0000	11.55	
Tractors	acre	9.90	1.0000	9.90	
Self-Propelled	acre	2.25	1.0000	2.25	
Irrigate Peanuts	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	12.78	1.0000	12.78	
TOTAL DIRECT EXPENSES				708.19	
FIXED EXPENSES					
Implements	acre	51.04	1.0000	51.04	
Tractors	acre	70.04	1.0000	70.04	
Self-Propelled	acre	16.42	1.0000	16.42	
Irrigate Peanuts	acre	65.01	1.0000	65.01	
TOTAL FIXED EXPENSES				202.51	
TOTAL SPECIFIED EXPENSES				910.70	

Note: Cost of production estimates are based on 2022 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 52.B Summary of estimated costs and returns per acre  
 Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	575.00	2.3000	1322.50	_____
TOTAL INCOME				1322.50	_____
DIRECT EXPENSES					
FUNGICIDES	acre	156.52	1.0000	156.52	_____
HERBICIDES	acre	91.41	1.0000	91.41	_____
INSECTICIDES	acre	17.12	1.0000	17.12	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	33.66	1.0000	33.66	_____
DRYING	acre	31.68	1.0000	31.68	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
INOCULANT	acre	2.22	1.0000	2.22	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1465	1.29	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	16.54	1.3964	23.06	_____
UNALLOCATED LABOR	hour	16.57	1.0543	17.48	_____
DIESEL FUEL	gal	4.48	25.1356	112.62	_____
REPAIR & MAINTENANCE	acre	30.86	1.0000	30.86	_____
INTEREST ON OP. CAP.	acre	12.78	1.0000	12.78	_____
TOTAL DIRECT EXPENSES				708.19	_____
RETURNS ABOVE DIRECT EXPENSES				614.31	_____
TOTAL FIXED EXPENSES				202.51	_____
TOTAL SPECIFIED EXPENSES				910.70	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				411.80	_____

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 52.C Estimated resource use for field operations, per acre  
 Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2023

OPERATION/ OPERATING	SIZE/ INPUT	POWER UNIT	PERF SIZE	TIMES RATE	OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----											
Soil Test	acre			0.33		Apr	0.3330				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Apr			0.01	0.01	0.00
Glyphosate 3lbs a.e.	pt						4.0000				
Lime (Spread)	ton				0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00		May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 225	0.080	1.00		May		0.08	0.08	0.16	0.06
Peanut Seed	lb						150.0000				
Optimize LIFT	oz						14.8000				
Admire Pro	oz						9.0000				
Abound	oz						12.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	May			0.01	0.01	0.00
Dual Magnum	pt						1.0000				
Valor SX	oz						3.0000				
Sprayer 600-825gal	90' 250hp			0.011	0.25	May			0.00	0.00	0.00
Acephate 90%	lb						0.1375				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.00
Convoy	oz						24.0000				
Bravo Weather Stick	pt						0.7500				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.00
Storm	pt						1.5000				
Cadre	oz						4.0000				
Butyrac 200 (2,4-DB)	pt						1.0000				
Crop Oil Conc.(Veg.)	pt						2.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jun			0.01	0.01	0.00
Bravo Weather Stick	pt						0.7500				
Tebuconazole 3.6	oz						7.2000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jul			0.01	0.01	0.00
Elatus	oz						9.2000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jul			0.01	0.01	0.00
Butyrac 200 (2,4-DB)	pt						1.0000				
Crop Oil Conc.(Veg.)	pt						2.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jul			0.01	0.01	0.00
Select Max	pt						1.0000				
Crop Oil Conc.(Veg.)	pt						2.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Jul			0.01	0.01	0.00
Provost Silver	oz						13.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Aug			0.01	0.01	0.00
Abound	oz						18.0000				
Sprayer 600-825gal	90' 250hp			0.011	1.00	Aug			0.01	0.01	0.00
Bravo Weather Stick	pt						0.7500				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00		Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00		Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton						1.3200				
Cleaning Peanuts	ton						1.8700				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00		Sep		0.31	0.31	0.31	0.24
Irrigate Peanuts	acre						1.0000	0.07	0.07	0.46	
-----											
TOTALS							1.39	1.26	1.93	1.05	

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

Fertilizer recommendations are based on the nutrients that the peanut crop removes.

Soil test cost is prorated for a test every 3<sup>rd</sup> year.

Lime cost prorated for application every 3<sup>rd</sup> year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 52.D Estimated costs for field operations, per acre  
 Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Soil Test	acre	3.33					0.11	3.44	3.44
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.04	1.31	1.46
Glyphosate 3lbs a.e.	pt	21.52					0.69	22.21	22.21
Lime (Spread)	ton	19.31					0.62	19.93	19.93
Bed-Rip/Disk Fold.	12R-38		2.40	0.63	1.37		0.12	4.52	4.13
Peanut Plt&Pre Fold.	12R-38		4.17	3.69	3.12		0.29	11.27	11.45
Peanut Seed	lb	126.00					3.36	129.36	129.36
Optimize LIFT	oz	2.22					0.06	2.28	2.28
Admire Pro	oz	15.84					0.42	16.26	16.26
Abound	oz	22.56					0.60	23.16	23.16
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Dual Magnum	pt	11.45					0.31	11.76	11.76
Valor SX	oz	9.60					0.26	9.86	9.86
Sprayer 600-825gal	90' 250hp		0.17	0.05	0.10		0.01	0.33	0.36
Acephate 90%	lb	1.28					0.03	1.31	1.31
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Convoy	oz	27.12					0.58	27.70	27.70
Bravo Weather Stick	pt	4.74					0.10	4.84	4.84
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Storm	pt	18.98					0.40	19.38	19.38
Cadre	oz	7.88					0.17	8.05	8.05
Butyrac 200 (2,4-DB)	pt	4.06					0.09	4.15	4.15
Crop Oil Conc.(Veg.)	pt	5.80					0.12	5.92	5.92
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.03	1.30	1.46
Bravo Weather Stick	pt	4.74					0.10	4.84	4.84
Tebuconazole 3.6	oz	5.40					0.12	5.52	5.52
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Elatus	oz	35.05					0.56	35.61	35.61
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Butyrac 200 (2,4-DB)	pt	4.06					0.06	4.12	4.12
Crop Oil Conc.(Veg.)	pt	5.80					0.09	5.89	5.89
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Select Max	pt	13.86					0.22	14.08	14.08
Crop Oil Conc.(Veg.)	pt	5.80					0.09	5.89	5.89
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.02	1.29	1.46
Provost Silver	oz	18.33					0.29	18.62	18.62
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.01	1.28	1.46
Abound	oz	33.84					0.36	34.20	34.20
Sprayer 600-825gal	90' 250hp		0.67	0.20	0.40		0.01	1.28	1.46
Bravo Weather Stick	pt	4.74					0.05	4.79	4.79
Peanut Dig/Invertor	6R-38		5.44	1.95	3.69		0.06	11.14	8.10
Peanut Harvester	6R-38		32.43	11.13	18.61		0.33	62.50	71.29
Dry Peanuts	ton	31.68					0.17	31.85	31.85
Cleaning Peanuts	ton	33.66					0.18	33.84	33.84
Peanut Dump Cart	6-Row		13.58	3.31	9.23		0.14	26.26	20.81
Irrigate Peanuts	acre	7.92	47.06	7.90	4.84		1.36	69.08	70.31
<b>TOTALS</b>		506.57	112.62	30.86	45.36	0.00	12.78	708.19	202.51
									910.70

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 52.E Estimated monthly income and expense flows per acre  
 Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1322.50
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.56	42.00	53.38	38.58	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	21.52	21.05	30.92	17.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	17.12	0.00	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.66
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.68
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	19.31	0.00	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	2.22	0.00	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.63	0.00	0.00	0.00	0.00	0.00	0.63	7.40	1.43	2.06	1.68	31.53
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.66	0.00	0.00	0.00	0.00	0.00	0.67	8.27	12.96	24.58	13.03	51.45
REPAIR & MAINTENANCE	0.36	0.00	0.00	0.00	0.00	0.00	0.20	7.73	1.65	2.90	1.63	16.39
INTEREST ON OP. CAP.	0.17	0.00	0.00	0.00	0.00	0.00	1.47	5.88	2.03	1.77	0.58	0.88
TOTAL DIRECT EXPENSES	2.82	0.00	0.00	0.00	0.00	0.00	47.13	226.15	96.79	114.21	55.50	165.59
NET INCOME	-2.82	0.00	0.00	0.00	0.00	0.00	-47.13	-226.15	-96.79	-114.21	-55.50	1156.91
NET INCOME TO DATE	-2.82	-2.82	-2.82	-2.82	-2.82	-2.82	-49.95	-276.10	-372.89	-487.10	-542.60	614.31

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

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

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

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 52.F Estimated returns for various price/yield combinations, per acre  
 Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch  
 Furrow irrigated, All Areas, Mississippi, 2023

PRODUCT		PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
		PRODUCT PRICE											
Peanut Runner		431.25	460.00	488.75	517.50	546.25	575.00	603.75	632.50	661.25	690.00	718.75	
PERCENT YIELD UNIT dollars													
50	1.15	ton	-179 -381	-146 -348	-113 -315	-80 -282	-47 -249	-14 -216	18 -183	52 -150	85 -117	118 -84	151 -51
60	1.38	ton	-86 -289	-47 -249	-7 -209	32 -170	71 -130	111 -90	151 -51	190 -11	230 28	270 67	309 107
70	1.61	ton	5 -196	52 -150	98 -104	144 -57	190 -11	237 34	283 81	329 127	376 173	422 219	468 266
80	1.84	ton	98 -104	151 -51	204 1	257 54	310 107	362 160	415 213	468 266	521 319	574 372	627 424
90	2.07	ton	191 -11	250 48	310 107	369 167	429 226	488 286	548 345	607 405	667 464	726 524	786 583
100	2.30	ton	283 81	349 147	415 213	482 279	548 345	614 411	680 477	746 544	812 610	878 676	944 742
110	2.53	ton	376 173	449 246	521 319	594 392	667 464	739 537	812 610	885 682	958 755	1030 828	1103 901
120	2.76	ton	468 266	548 345	627 425	706 504	786 583	865 663	945 742	1024 821	1103 901	1183 980	1262 1059
130	2.99	ton	561 359	647 444	733 530	819 616	905 702	991 788	1077 874	1163 960	1249 1046	1335 1132	1421 1218
140	3.22	ton	654 451	746 544	839 636	931 729	1024 821	1117 914	1209 1007	1302 1099	1394 1192	1487 1284	1579 1377
150	3.45	ton	746 544	845 643	945 742	1044 841	1143 941	1242 1040	1341 1139	1441 1238	1540 1337	1639 1436	1738 1536

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Only the product listed has been varied to calculate net returns.

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



## APPENDIX

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2023

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr				\$/hour		
Combine (250-299 hp)	265 hp	463,000	300	8	13.64	16.54	61.10	48.22	125.87	212.16	338.04
Combine (300-349 hp)	325 hp	468,000	300	8	16.73	16.54	74.95	48.75	140.24	214.45	354.69
Combine (350-399 hp)	355 hp	500,000	300	8	18.27	16.54	81.84	52.08	150.47	229.12	379.59
Combine (400-449 hp)	425 hp	519,000	300	8	21.87	16.54	98.00	54.06	168.60	237.82	406.43
Combine (450-499hp)	475 hp	539,000	300	8	24.44	16.54	109.53	56.14	182.21	246.99	429.21
Tractor( 20-39hp)CB	MFWD 30	34,200	600	8	1.54	16.54	6.91	1.06	24.52	7.27	31.80
Tractor( 20-39hp)RB	MFWD 30	27,100	600	8	1.54	16.54	6.91	0.84	24.30	5.76	30.07
Tractor( 40-59hp)CB	2WD 50	34,600	600	8	2.57	16.54	11.52	1.08	29.15	7.36	36.51
Tractor( 40-59hp)CB	MFWD 50	47,000	600	8	2.57	16.54	11.52	1.46	29.53	10.00	39.54
Tractor( 40-59hp)RB	2WD 50	24,500	600	8	2.57	16.54	11.52	0.76	28.83	5.21	34.04
Tractor( 40-59hp)RB	MFWD 50	31,400	600	8	2.57	16.54	11.52	0.98	29.05	6.68	35.73
Tractor( 60-89hp)CB	2WD 75	64,300	600	8	3.86	16.54	17.29	2.00	35.84	13.68	49.52
Tractor( 60-89hp)CB	MFWD 75	72,000	600	8	3.86	16.54	17.29	2.25	36.08	15.32	51.40
Tractor( 60-89hp)RB	2WD 75	54,100	600	8	3.86	16.54	17.29	1.69	35.52	11.51	47.03
Tractor( 60-89hp)RB	MFWD 75	48,100	600	8	3.86	16.54	17.29	1.50	35.33	10.23	45.57
Tractor( 90-119hp)CB	2WD 105	83,900	600	8	5.40	16.54	24.21	2.62	43.37	17.85	61.23
Tractor( 90-119hp)CB	MFWD 105	104,000	600	8	5.40	16.54	24.21	3.25	44.00	22.13	66.13
Tractor( 90-119hp)RB	2WD 105	73,400	600	8	5.40	16.54	24.21	2.29	43.04	15.62	58.66
Tractor( 90-119hp)RB	MFWD 105	81,100	600	8	5.40	16.54	24.21	2.53	43.28	17.25	60.54
Tractor(120-139hp)CB	2WD 130	117,600	600	8	6.69	16.54	29.97	3.67	50.19	25.02	75.22
Tractor(120-139hp)CB	MFWD 130	133,300	600	8	6.69	16.54	29.97	4.16	50.68	28.36	79.05
Tractor(140-159hp)	2WD 150	131,200	600	8	7.72	16.54	34.58	4.10	55.22	27.92	83.15
Tractor(140-159hp)CB	MFWD 150	158,000	600	8	7.72	16.54	34.58	4.93	56.06	33.62	89.69
Tractor(160-179hp)CB	MFWD 170	186,000	600	8	8.75	16.54	39.20	5.81	61.55	41.10	102.65
Tractor(180-199hp)CB	MFWD 190	216,000	600	8	9.77	16.54	43.81	6.75	67.10	47.72	114.83
Tractor(200-249hp)CB	MFWD 225	276,000	600	8	11.58	16.54	51.88	8.62	77.04	60.98	138.03
Tractor(250-349hp)CB	4WD 300	377,000	600	8	15.44	16.54	69.17	11.78	97.50	83.30	180.80
Tractor(250-349hp)CB	MFWD 300	304,000	600	8	15.44	16.54	69.17	9.50	95.21	67.17	162.39
Tractor(250-349hp)CB	Track 300	329,000	600	8	15.44	16.54	69.17	10.28	96.00	72.69	168.69
Tractor(350-449hp)	Track 400	547,000	600	8	20.58	16.54	92.23	17.09	125.87	120.87	246.74
Tractor(350-449hp)CB	4WD 400	428,000	600	8	20.58	16.54	92.23	13.37	122.15	94.57	216.72
Tractor(450-550hp)CB	4WD 500	426,000	600	8	25.73	16.54	115.29	13.31	145.14	94.13	239.28
Tractor(450-550hp)CB	Track 500	527,000	600	8	25.73	16.54	115.29	16.46	148.30	116.45	264.75
Utility Vehicle	800 CC	12,200	200	8	0.70	16.54	2.23	1.90	20.67	8.38	29.06
Utility Vehicle	900 CC	15,800	200	8	1.00	16.54	3.19	2.46	22.19	10.86	33.05

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2023

Item Name	Size	Purchase	Annual	Useful	Fuel	Perf	Labor	Fuel	R&M	Total	Fixed	Total
		Price	Use	Life	Use	Rate			Direct		Cost	
		dollars	hours	years	gal/hr	hr/ac	\$/acre-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	6.59	14.86	10.79	32.25	47.48	79.74
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.59	20.80	14.13	41.54	62.19	103.73
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	4.41	13.90	9.61	27.92	42.28	70.21
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	5.58	17.86	15.85	39.31	69.75	109.06
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.41	14.10	12.51	31.03	55.07	86.11
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.59	23.77	21.58	51.96	94.97	146.93
Cotton Picker/Module	6R-30 (500)	936,000	200	8	25.73	0.218	5.58	25.16	31.91	62.66	140.41	203.08
Cotton Picker/Module	6R-38 (500)	937,000	200	8	25.73	0.172	4.41	19.86	25.22	49.50	110.97	160.48
Dry Applicator SP	70'300cuft	469,000	350	8	16.98	0.015	0.31	1.14	0.37	1.84	2.78	4.63
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.37	0.71	0.20	1.28	1.49	2.78
Sprayer 600-825gal	80' 175hp	269,000	350	8	11.81	0.013	0.27	0.69	0.19	1.16	1.39	2.56
Sprayer 600-825gal	90' 250hp	316,000	350	8	12.73	0.011	0.24	0.67	0.19	1.11	1.45	2.57
Sprayer 800gal	100' 250hp	353,000	350	8	14.15	0.010	0.22	0.67	0.20	1.09	1.46	2.56
Sprayer 800gal	80' 250hp	292,000	350	8	12.86	0.013	0.27	0.76	0.20	1.24	1.51	2.76
Sprayer 1000-1400gal	90' 275hp	330,000	350	8	14.15	0.010	0.22	0.67	0.18	1.08	1.37	2.45
Sprayer 1000gal	100' 300hp	479,000	350	8	15.44	0.010	0.22	0.73	0.27	1.22	1.99	3.21
Sprayer 1200+gal	120' 300hp	489,000	350	8	15.44	0.008	0.18	0.60	0.23	1.02	1.69	2.71

Notes:

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

Direct: Does not include interest on operating capital.

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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	--Fixed-- Imp.	Total Cost
									Imp.	P.U.	Direct			
			dollars	hours	years	hr/ac			\$/acre					
Bed-Paratill w/ro	4R-30	MFWD 225	27,800	150	12	0.204	3.37	10.60	2.05	1.76	17.79	4.10	12.46	34.35
Bed-Paratill w/ro	4R-38	MFWD 225	27,800	150	12	0.160	2.66	8.34	1.61	1.38	14.01	3.23	9.81	27.05
Bed-Paratill w/ro	6R-38	MFWD 225	38,000	150	12	0.107	1.77	5.57	1.47	0.92	9.76	2.95	6.55	19.27
Bed-Rip/Disk Fold.	8R-38	MFWD 190	69,600	300	20	0.073	1.20	3.20	0.25	0.49	5.15	1.46	3.48	10.10
Bed-Rip/Disk Fold.	12R-30	MFWD 225	98,700	300	20	0.061	1.01	3.19	0.30	0.53	5.05	1.74	3.75	10.55
Bed-Rip/Disk Fold.	12R-38	MFWD 225	98,700	300	20	0.046	0.76	2.39	0.22	0.39	3.78	1.31	2.81	7.91
Bed-Rip/Disk Rigid	4R-30	MFWD 190	30,900	300	20	0.184	3.05	8.09	0.28	1.24	12.69	1.64	8.82	23.15
Bed-Rip/Disk Rigid	4R-38	MFWD 190	30,900	300	20	0.146	2.42	6.42	0.22	0.99	10.07	1.30	7.00	18.37
Bed-Rip/Disk Rigid	6R-30	MFWD 190	42,800	300	20	0.123	2.03	5.40	0.26	0.83	8.53	1.51	5.88	15.93
Bed-Rip/Disk Rigid	6R-38	MFWD 190	42,800	300	20	0.097	1.60	4.26	0.20	0.65	6.73	1.19	4.64	12.57
Bed-Rip/Disk Rigid	8R-30	MFWD 190	56,700	300	20	0.139	2.29	6.09	0.39	0.93	9.72	2.26	6.63	18.62
Bed-Rip/Disk Rigid	8R-38	MFWD 190	56,700	300	20	0.073	1.20	3.20	0.20	0.49	5.11	1.19	3.48	9.78
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	37,000	150	12	0.107	1.77	5.57	1.43	0.92	9.72	2.87	6.55	19.15
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	49,300	150	12	0.080	1.33	4.19	1.43	0.69	7.66	2.87	4.92	15.46
Bed-Subsoil Fold	8R-38	MFWD 225	69,600	150	12	0.080	1.33	4.19	2.02	0.69	8.25	4.06	4.92	17.23
Bed-Subsoil Fold	8R-38 2x1	MFWD 225	98,700	150	12	0.053	0.88	2.78	1.91	0.46	6.05	3.83	3.27	13.17
Bed-Subsoil Fold	12R-38	MFWD 225	98,700	150	12	0.053	0.88	2.78	1.91	0.46	6.05	3.83	3.27	13.17
Bed-Subsoil Rigid	4R-30	MFWD 225	26,100	150	12	0.204	3.37	10.60	1.92	1.76	17.66	3.85	12.46	33.98
Bed-Subsoil Rigid	4R-38	MFWD 225	27,800	150	12	0.160	2.66	8.34	1.61	1.38	14.01	3.23	9.81	27.05
Bed-Subsoil Rigid	6R-30	MFWD 225	36,300	150	12	0.136	2.25	7.06	1.78	1.17	12.28	3.57	8.30	24.16
Bed-Subsoil Rigid	6R-38	MFWD 225	37,700	150	12	0.107	1.77	5.57	1.46	0.92	9.74	2.92	6.55	19.23
Bed-Subsoil Rigid	8R-30	MFWD 225	48,500	150	12	0.102	1.68	5.30	1.78	0.88	9.66	3.57	6.23	19.47
Bed-Subsoil Rigid	8R-38	MFWD 225	50,100	150	12	0.080	1.33	4.19	1.46	0.69	7.68	2.92	4.92	15.53
Bed/Disk (Hipper)	4R-38	MFWD 150	15,700	160	10	0.147	2.44	5.10	0.57	0.72	8.85	1.73	4.96	15.55
Bed/Disk (Hipper)	6R-38	MFWD 170	23,900	160	10	0.098	1.63	3.86	0.58	0.57	6.66	1.76	4.05	12.48
Bed/Disk (Hipper)	8R-30	MFWD 190	30,700	160	10	0.093	1.55	4.10	0.71	0.63	7.01	2.15	4.47	13.64
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	76,700	160	10	0.049	0.81	2.16	0.94	0.33	4.25	2.83	2.35	9.44
Bed/Disk (Hipper)	12R-30	MFWD 225	59,900	160	10	0.062	1.03	3.24	0.93	0.53	5.75	2.80	3.81	12.36
Bed/Disk (Hipper)	12R-38	MFWD 225	76,700	160	10	0.049	0.81	2.55	0.94	0.42	4.74	2.83	3.00	10.59
Bed/Disk (Hipper)	16R40	MFWD 300	90,600	160	10	0.035	0.58	2.44	0.80	0.33	4.17	2.40	2.37	8.94
Bed/Disk (Hipper) Fl	8R-38	MFWD 190	33,400	160	10	0.074	1.22	3.24	0.61	0.50	5.59	1.85	3.53	10.98
Bed/Disk (Hipper) Rd	8R-38	MFWD 190	30,800	160	10	0.074	1.22	3.24	0.57	0.50	5.54	1.71	3.53	10.79
Bed/Disk w/roller	8R-30	MFWD 190	40,100	160	10	0.093	1.55	4.10	0.93	0.63	7.23	2.81	4.47	14.52
Bed/Disk w/roller	8R-38	MFWD 190	45,900	160	10	0.074	1.22	3.24	0.85	0.50	5.82	2.54	3.53	11.90
Bed/Disk w/roller	12R-30/40	MFWD 225	76,000	160	10	0.062	1.03	3.24	1.18	0.53	6.00	3.55	3.81	13.37
Bed/Lister	4R-38	MFWD 150	25,200	160	8	0.228	3.77	7.89	1.34	1.12	14.15	4.76	7.67	26.60
Bed/Lister	6R-38	MFWD 150	28,900	160	8	0.120	1.98	4.15	0.81	0.59	7.55	2.87	4.04	14.47
Bed/Lister	8R-30	MFWD 190	39,800	160	8	0.114	1.88	5.00	1.06	0.77	8.72	3.76	5.45	17.94
Bed/Lister	8R-38	MFWD 190	40,100	160	8	0.090	1.49	3.95	0.84	0.60	6.90	2.99	4.30	14.21
Bed/Lister	8R-38 2x1	MFWD 190	60,700	160	8	0.060	0.99	2.63	0.85	0.40	4.88	3.02	2.86	10.77
Bed/Lister	12R-38	MFWD 225	60,700	160	8	0.060	0.99	3.11	0.85	0.51	5.48	3.02	3.66	12.17
Bed/Lister	16R-30	MFWD 225	67,400	160	8	0.035	0.58	1.82	0.55	0.30	3.26	1.96	2.14	7.36
Bed/Lister	16R40	MFWD 300	80,800	160	8	0.043	0.71	2.98	0.81	0.40	4.91	2.88	2.89	10.69
Bed/Lister-Roll-Fo	8R-38	MFWD 190	29,200	160	10	0.095	1.58	4.20	0.70	0.64	7.13	2.09	4.57	13.81
Bed/Lister-Roll-Fo	12R-30	MFWD 225	56,400	160	10	0.080	1.33	4.19	1.14	0.69	7.37	3.41	4.93	15.72
Bed/Lister-Roll-Fo	12R-38	MFWD 225	37,600	160	10	0.063	1.05	3.31	0.60	0.55	5.51	1.79	3.89	11.21
Bed/Lister-Roll-Fo	16R-30	MFWD 225	39,500	160	10	0.060	1.00	3.14	0.59	0.52	5.27	1.79	3.69	10.76
Bed/Lister-Roll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.58	4.20	0.59	0.64	7.03	1.79	4.57	13.40
Blade-Box	6'-7'	MFWD 105	2,070	200	20	0.020	0.33	0.48	0.01	0.05	0.88	0.01	0.34	1.24
Boll Buggy	4R-38 (250)	MFWD 190	30,500	200	10	0.257	4.26	11.29	1.96	1.74	19.26	4.57	12.30	36.13
Boll Buggy	4R-38 (350)	MFWD 190	30,500	200	10	0.257	4.26	11.29	1.96	1.74	19.26	4.57	12.30	36.13
Boll Buggy	4R2x1 (350)	MFWD 190	30,500	200	10	0.172	2.85	7.54	1.31	1.16	12.87	3.05	8.22	24.15
Boll Buggy	6R-30 (355)	MFWD 190	30,500	200	10	0.218	3.60	9.56	1.66	1.47	16.30	3.86	10.41	30.59
Boll Buggy	6R-38 (355)	MFWD 190	30,500	200	10	0.172	2.85	7.54	1.31	1.16	12.87	3.05	8.22	24.15
Chisel Plow-Folding	24'	MFWD 190	48,500	150	12	0.076	1.26	3.34	1.33	0.51	6.46	2.67	3.64	12.79
Chisel Plow-Folding	32'	MFWD 225	65,000	150	12	0.057	0.95	2.99	1.35	0.49	5.80	2.71	3.52	12.04
Chisel Plow-Folding	42'	MFWD 225	71,900	150	12	0.044	0.72	2.28	1.14	0.37	4.53	2.28	2.68	9.50
Chisel Plow-Folding	50'	MFWD 225	99,100	150	12	0.036	0.61	1.91	1.32	0.31	4.17	2.64	2.25	9.07
Chisel Plow-Folding	61'	MFWD 225	114,800	150	12	0.030	0.50	1.57	1.25	0.26	3.59	2.51	1.84	7.95
Chisel Plow-Rigid	10'	MFWD 170	8,340	150	12	0.184	3.05	7.24	0.55	1.07	11.93	1.11	7.59	20.64
Chisel Plow-Rigid	15'	2WD 130	18,870	150	12	0.123	2.03	3.69	0.83	0.45	7.02	1.68	3.08	11.79
Chisel Plow-Rigid	20'	MFWD 225	13,400	150	12	0.102	1.69	5.32	0.49	0.88	8.41	0.99	6.26	15.66
Cultivate	4R-30	2WD 105	19,000	150	10	0.206	3.41	4.99	1.04	0.54	9.99	3.13	3.68	16.80
Cultivate	4R-38	2WD 105	19,000	150	10	0.162	2.68	3.93	0.82	0.37	7.81	2.46	2.53	12.81
Cultivate	6R-30	MFWD 150	25,200	150	10	0.137	2.27	4.75	0.92	0.67	8.63	2.76	4.62	16.02
Cultivate	6R-38	MFWD 150	26,300	150	10	0.108	1.79	3.75	0.76	0.53	6.84	2.28	3.65	12.77
Cultivate	8R-30	MFWD 190	32,600	150	10	0.103	1.70	4.51	0.89	0.69	7.81	2.68	4.92	15.42
Cultivate	8R-38	MFWD 190	35,800	150	10	0.073	1.21	3.22	0.70	0.49	5.64	2.10	3.51	11.26
Cultivate	8R-38 2x1	MFWD 190	50,700	150	10	0.054	0.89	2.37	0.73	0.36	4.37	2.19	2.59	9.16
Cultivate	12R-30	MFWD 225	50,800	150	10	0.068	1.13	3.56	0.93	0.59	6.22	2.79	4.19	13.21
Cultivate	12R-38	MFWD 225	50,700	150	10	0.054	0.89	2.81	0.73	0.46	4.91	2.19	3.31	10.42
Cultivate	16R-30	MFWD 225	78,900	150	10	0.051	0.85	2.67	1.08	0.44	5.05	3.25	3.14	11.45
Cultivate & Post	4R-30													

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

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---			Total Imp.	--Fixed--		Total Cost
									Imp.	P.U.	Direct		Imp.	P.U.	
				dollars	hours	years	hr/ac		-----\$/acre-----						
Cultivate & Post	12R-30	MFWD 225	56,500	150	10	0.073	1.54	3.80	1.10	0.63	7.08	3.31	4.47	14.87	
Cultivate & Post	12R-38	MFWD 225	56,400	150	10	0.057	1.21	3.00	0.87	0.49	5.59	2.60	3.53	11.73	
Cultivate & Post	16R-30	MFWD 225	84,600	150	10	0.055	1.15	2.85	1.24	0.47	5.72	3.71	3.35	12.80	
Disk & Incorporate	14'	2WD 130	45,200	200	10	0.149	3.15	4.48	2.02	0.55	10.21	4.05	3.74	18.02	
Disk & Incorporate	20'	MFWD 190	89,300	200	10	0.092	1.94	4.05	2.47	0.62	9.09	4.94	4.41	18.45	
Disk & Incorporate	24'	MFWD 190	71,300	200	10	0.087	1.83	3.82	1.86	0.58	8.12	3.73	4.16	16.01	
Disk & Incorporate	28'	MFWD 225	80,400	200	10	0.074	1.57	3.88	1.80	0.64	7.90	3.60	4.56	16.08	
Disk & Incorporate	32'	MFWD 225	87,300	200	10	0.065	1.37	3.39	1.71	0.56	7.05	3.42	3.99	14.47	
Disk Harrow	14'	2WD 130	39,400	180	10	0.140	2.32	4.20	1.53	0.51	8.57	3.68	3.51	15.77	
Disk Harrow	20'	MFWD 190	83,600	180	10	0.098	1.62	4.30	2.28	0.66	8.87	5.46	4.68	19.02	
Disk Harrow	24'	MFWD 190	65,600	180	10	0.081	1.35	3.58	1.49	0.55	6.98	3.57	3.90	14.46	
Disk Harrow	28'	MFWD 225	74,700	180	10	0.070	1.16	3.63	1.45	0.60	6.86	3.49	4.27	14.62	
Disk Harrow	32'	MFWD 225	81,500	180	10	0.061	1.01	3.18	1.38	0.52	6.11	3.33	3.74	13.19	
Disk Harrow	42'	MFWD 225	134,800	180	10	0.046	0.77	2.42	1.75	0.40	5.35	4.19	2.85	12.40	
Disk Harrow 40-100hp	14'	2WD 75	23,100	180	10	0.140	2.32	2.42	0.90	0.23	5.88	2.15	1.61	9.65	
Disk Heavy	14'	MFWD 150	39,400	180	10	0.145	2.41	5.04	1.59	0.72	9.78	3.83	4.90	18.51	
Disk Heavy	20'	MFWD 190	83,600	180	10	0.097	1.60	4.26	2.25	0.65	8.78	5.41	4.64	18.85	
Disk Heavy	28'	MFWD 225	74,700	180	10	0.075	1.25	3.92	1.57	0.65	7.40	3.76	4.61	15.78	
Disk Ripper	15'	MFWD 225	50,800	180	10	0.136	2.25	7.06	1.92	1.17	12.41	4.60	8.30	25.33	
Ditcher	2WD 130		8,760	200	10	0.020	0.33	0.59	0.07	0.07	1.07	0.10	0.50	1.67	
Ditcher (1m/160a)	2WD 130		8,760	200	10	0.009	0.15	0.28	0.03	0.03	0.50	0.04	0.23	0.78	
Fert Appl (Liquid)	4R-38	MFWD 150	25,400	150	8	0.154	3.25	5.34	2.61	0.76	11.99	3.34	5.20	20.53	
Fert Appl (Liquid)	6R-30	MFWD 170	25,300	150	8	0.130	2.75	5.13	2.20	0.76	10.86	2.82	5.38	19.06	
Fert Appl (Liquid)	6R-38	MFWD 170	25,300	150	8	0.103	2.17	4.05	1.74	0.60	8.57	2.22	4.24	15.05	
Fert Appl (Liquid)	8R-30	MFWD 190	26,300	150	8	0.098	2.06	4.30	1.72	0.66	8.75	2.19	4.68	15.64	
Fert Appl (Liquid)	8R-38	MFWD 190	29,500	150	8	0.077	1.63	3.40	1.52	0.52	7.08	1.94	3.70	12.74	
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	32,900	150	8	0.051	1.08	2.26	1.13	0.34	4.83	1.44	2.46	8.75	
Fert Appl (Liquid)	12R-30	MFWD 225	30,600	150	8	0.078	1.65	4.07	1.60	0.67	8.01	2.04	4.79	14.85	
Fert Appl (Liquid)	12R-38	MFWD 225	31,100	150	8	0.051	1.08	2.68	1.07	0.44	5.28	1.36	3.15	9.80	
Field Cult & Inc	42'	MFWD 225	82,900	100	10	0.037	0.79	1.95	0.78	0.32	3.86	3.75	2.30	9.92	
Field Cult & Inc	50'	MFWD 225	92,500	100	10	0.031	0.66	1.64	0.73	0.27	3.32	3.51	1.93	8.77	
Field Cult & Inc Fld	24'	MFWD 170	43,700	100	10	0.066	1.39	2.59	0.72	0.38	5.09	3.46	2.71	11.27	
Field Cult & Inc Fld	32'	MFWD 190	64,800	100	10	0.049	1.04	2.17	0.80	0.33	4.35	3.85	2.36	10.57	
Field Cult & Inc Rdg	12'	2WD 150	22,800	100	10	0.132	2.78	4.57	0.75	0.54	8.65	3.61	3.69	15.96	
Field Cultivate Fld	24'	MFWD 170	38,000	100	10	0.062	1.02	2.43	0.59	0.36	4.42	2.83	2.55	9.81	
Field Cultivate Fld	32'	MFWD 190	59,100	100	10	0.046	0.77	2.04	0.68	0.31	3.82	3.30	2.22	9.35	
Field Cultivate Fld	42'	MFWD 225	73,200	100	10	0.035	0.58	1.84	0.65	0.30	3.38	3.12	2.16	8.67	
Field Cultivate Fld	50'	MFWD 225	82,900	100	10	0.029	0.49	1.54	0.61	0.25	2.91	2.96	1.82	7.70	
Field Cultivate Rdg	12'	2WD 150	17,100	100	10	0.124	2.05	4.30	0.53	0.51	7.40	2.55	3.47	13.42	
Grain Cart Corn	500 bu	MFWD 190	34,100	200	12	0.025	0.41	1.10	0.23	0.17	1.93	0.46	1.20	3.60	
Grain Cart Corn	700 bu	MFWD 190	51,600	200	12	0.025	0.41	1.10	0.35	0.17	2.05	0.70	1.20	3.96	
Grain Cart Corn	1000 bu	MFWD 225	63,600	200	12	0.025	0.41	1.31	0.43	0.21	2.38	0.87	1.54	4.79	
Grain Cart Rice	500 bu	MFWD 190	34,100	200	12	0.062	1.03	2.73	0.57	0.42	4.77	1.15	2.98	8.90	
Grain Cart Rice	700 bu	MFWD 190	51,600	200	12	0.055	0.90	2.40	0.76	0.37	4.45	1.53	2.62	8.62	
Grain Cart Rice	1000 bu	MFWD 190	63,600	200	12	0.045	0.75	2.00	0.78	0.30	3.86	1.57	2.18	7.63	
Grain Cart Soybean	500 bu	MFWD 190	34,100	200	12	0.025	0.42	1.11	0.23	0.17	1.94	0.47	1.21	3.63	
Grain Cart Soybean	700 bu	MFWD 190	51,600	200	12	0.021	0.35	0.93	0.29	0.14	1.72	0.59	1.01	3.33	
Grain Cart Soybean	1000 bu	MFWD 190	63,600	200	12	0.021	0.35	0.93	0.36	0.14	1.79	0.73	1.01	3.53	
Grain Cart Wht/Sor	500 bu	MFWD 190	34,100	200	12	0.025	0.42	1.11	0.23	0.17	1.94	0.47	1.21	3.63	
Grain Cart Wht/Sor	700 bu	MFWD 190	51,600	200	12	0.021	0.35	0.93	0.29	0.14	1.72	0.59	1.01	3.33	
Grain Cart Wht/Sor	1000 bu	MFWD 190	63,600	200	12	0.021	0.35	0.93	0.36	0.14	1.79	0.73	1.01	3.53	
Grain Drill	10'	2WD 130	33,800	150	8	0.188	4.82	5.65	2.39	0.69	13.56	5.21	4.71	23.50	
Grain Drill	12'	2WD 130	40,700	150	8	0.157	4.02	4.71	2.39	0.57	11.70	5.23	3.93	20.87	
Grain Drill	15'	MFWD 150	38,900	150	8	0.125	3.21	4.34	1.83	0.62	10.02	4.00	4.22	18.25	
Grain Drill	20'	MFWD 170	45,400	150	8	0.094	2.41	3.69	1.60	0.54	8.26	3.50	3.87	15.64	
Grain Drill	24'	MFWD 190	68,900	150	8	0.078	2.01	3.44	2.03	0.53	8.01	4.43	3.75	16.19	
Grain Drill	30'	MFWD 225	82,500	150	8	0.062	1.60	3.26	1.94	0.54	7.35	4.24	3.83	15.43	
Grain Drill	35'	MFWD 225	100,200	150	8	0.053	1.37	2.79	2.02	0.46	6.66	4.41	3.28	14.36	
Grain Drill & Pre	10'	2WD 130	39,100	150	8	0.203	5.19	6.08	2.97	0.74	15.01	6.50	5.08	26.59	
Grain Drill & Pre	12'	2WD 130	46,100	150	8	0.169	4.33	5.07	2.92	0.62	12.95	6.38	4.23	23.57	
Grain Drill & Pre	15'	MFWD 150	44,200	150	8	0.135	3.46	4.68	2.24	0.66	11.06	4.89	4.55	20.51	
Grain Drill & Pre	20'	MFWD 170	50,800	150	8	0.101	2.59	3.98	1.93	0.59	9.10	4.22	4.17	17.50	
Grain Drill & Pre	24'	MFWD 190	74,200	150	8	0.084	2.16	3.70	2.35	0.57	8.79	5.14	4.03	17.97	
Grain Drill & Pre	30'	MFWD 225	87,800	150	8	0.067	1.73	3.51	2.22	0.58	8.05	4.86	4.12	17.05	
Grain Drill & Pre	35'	MFWD 225	110,400	150	8	0.058	1.48	3.01	2.40	0.50	7.39	5.24	3.53	16.18	
Grain Drill & Pre T	8R-38	MFWD 225	57,000	150	8	0.062	1.60	3.26	1.34	0.54	6.75	2.93	3.83	13.52	
Harrow - Folding	24'	MFWD 190	13,800	200	10	0.064	1.07	2.83	0.31	0.43	4.65	0.53	3.08	8.27	
Harrow - Folding	30'	MFWD 190	15,300	200	10	0.051	0.85	2.26	0.27	0.34	3.75	0.47	2.47	6.69	
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.64	1.70	0.28	0.26	2.89	0.49	1.85	5.24	
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.53	1.67	0.29	0.27	2.78	0.50	1.97	5.26	
Header - Corn	6R-30	265 hp	64,800	300	8	0.170	2.81	10.40	2.75	8.21	24.19	4.69	36.12	65.01	
Header - Corn	6R-38	265 hp	64,900	300	8	0.134	2.22	8.21	2.18	6.48	19.10	3.71	28.52	51.33	
Header - Corn	8R-30	265 hp	87,400	300	8	0.127	2.11	7.80	2.79	6.15	18.86	4.75	27.09	50.71	
Header - Corn	8R-38	325 hp	80,000	300	8	0.100	1.66	7.56	2.01	4.					

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

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

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

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

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

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

Notes:

Labor: Includes labor from Power unit plus additional labor from the implement.

Total Direct: Does not include interest on operating capital.

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

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

(continued)

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

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

(continued)

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

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

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

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

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

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	16.54
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE		UNALLOCATED LABOR MULTIPLIERS (%)
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2023

Crop	unit	Futures Contract Month	Futures Contract Price <sup>a</sup>	Basis <sup>b</sup>	Forward Contract Price <sup>c</sup>	Loan Rate <sup>d</sup>	Budget Price <sup>e</sup>
Corn	bu	Dec '23	6.20	-0.05	6.15	2.35	6.15
Cotton Lint	lb	Dec '23	0.75	-0.011	0.7389	0.52	0.7389
Cottonseed	lb						0.11f
Grain Sorghum	bu				5.84	4.09	5.84
Peanuts	ton				575.00	354.89	575.00
Soybeans	bu	Nov '23	13.54	0.12	13.66	6.41	13.66
Rice	bu	Nov '23	6.93	-0.18	6.75	3.21	6.75
Wheat	bu	Jul '23	7.44	0.13	8.90	3.60	8.90

<sup>a</sup> Average of the daily closing futures contract prices during the first 5 trading days in October 2022 for the stated contract months.

<sup>b</sup> Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2013 to 2022 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.

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

<sup>d</sup> Average Mississippi County CCC Loan Rate for 2022 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2022 Farm-stored Loan Rate for long grain rough rice. National 2022 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

<sup>e</sup> Price used in MSU Extension Service Planning Budgets.

<sup>f</sup> Cottonseed price is the average marketing year price over the years 2008-2021.

Appendix Table 8      Estimated costs for field operations, per acre  
 Cotton irrigated with roll-out pipe  
 160-acre roll-out pipe system, 10.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL	FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE				
-----dollars-----										
Land Plane	50'x16'		1.66	0.36	0.63		0.01	2.66	2.11	4.77
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)				0.37	0.08	0.16		0.02	0.63	1.07
Roll-Out Pipe	ft		7.92					0.21	8.13	8.13
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.49	0.12	0.44		0.03	1.08	1.10	2.18
IRRIGATE LABOR	hour				1.81		0.05	1.86		1.86
Apply Water										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.74	0.18	0.65		0.02	1.59	1.65	3.24
Land Forming (\$450)	each									38.27
Well & Pump, Furrow	each				2.96			0.08	3.04	13.51
Main Line Pipe	each									5.79
Engine, RPF, 75	each									10.48
June Irrigation	ac-in	12.77		1.40			0.38	14.55		14.55
July Irrigation	ac-in	12.77		1.40			0.30	14.47		14.47
August Irrigation	ac-in	12.77		1.40			0.23	14.40		14.40
TOTALS		7.92	41.57	7.90	4.61	0.00	1.35	63.35	70.31	133.66

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

Appendix Table 9 Estimated costs for field operations, per acre  
Cotton irrigated with center pivot  
135-acre 1/4-mile pivot system, 7.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	OP INPUT	FUEL	R&M	DIRECT COST LABOR	LEASE	INTER	TOTAL	FIXED COST	TOTAL COST
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.27		0.01	0.28		0.28
Maintenance										
IRRIGATE LABOR	hour				1.07		0.03	1.10		1.10
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Apply Water										
IRRIGATE LABOR	hour				0.20			0.20		0.20
Apply Water										
IRRIGATE LABOR	hour				0.15			0.15		0.15
Pivot, 1/4 CP	each				13.48			0.36	13.84	63.13
Well & Pump, 1/4 CP	each				3.50			0.09	3.59	12.41
Engine, 1/4 CP, 65	each								12.42	12.42
June Irr. 3app@ .75"	ac-in				15.05	1.49		0.44	16.98	16.98
July Irr. 4app@ .75"	ac-in				20.07	1.99		0.47	22.53	22.53
Aug Irr. 3app@ .75"	ac-in				15.05	1.49		0.26	16.80	16.80
TOTALS		0.00	50.17	21.95	1.84	0.00	1.66	75.62	87.96	163.58

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

Appendix Table 10. Estimated costs for field operations, per acre  
 Full-season soybeans irrigated with roll-out pipe  
 160-acre system, 9 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			
-----dollars-----										
Land Plane	50'x16'		1.66	0.36	0.63		0.17	2.82	2.11	4.93
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.37	0.08	0.16		0.01	0.62	0.44	1.06
Roll-Out Pipe	ft	7.92					0.17	8.09		8.09
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.49	0.12	0.44		0.02	1.07	1.10	2.17
IRRIGATE LABOR	hour				1.81		0.04	1.85		1.85
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll		0.74	0.18	0.65		0.01	1.58	1.65	3.23
Land Forming (\$450)	each								38.27	38.27
Well & Pump, Furrow	each			2.96			0.06	3.02	10.47	13.49
Main Line Pipe	each								5.79	5.79
Engine, RPF, ESB	each								10.48	10.48
1st June Irrigation	ac-in		10.95	1.40			0.26	12.61		12.61
2nd June Irrigation	ac-in		10.95	1.40			0.26	12.61		12.61
July Irrigation	ac-in		10.95	1.40			0.20	12.55		12.55
TOTALS		7.92	36.11	7.90	4.61	0.00	1.21	57.75	70.31	128.06

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

Appendix Table 11 Estimated costs for field operations, per acre  
 Irrigation with a contour flood system  
 80-acre system, 13.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Set Up Engine								
IRRIGATE LABOR	hour				0.45		0.01	0.46
Build Outside Levee								
Levee Pull (1m/80a)	8 blade	0.63	0.11	0.27		0.03	1.04	0.81
Survey & Mark Levees	acre	2.25				0.06	2.31	2.31
Build Inside Levees								
Levee Pull (1m/80a)	8 blade	0.84	0.15	0.35		0.04	1.38	1.07
Butt Levees								
Blade-Box	6'-7'	0.78	0.14	0.33		0.03	1.28	0.84
IRRIGATE LABOR	hour			0.68		0.02	0.70	0.70
Apply Water								
IRRIGATE LABOR	hour				0.11		0.11	0.11
Tear Down Levees								
Levee Splitter (1/80	32"	0.65	0.13	0.28		0.03	1.09	0.86
Build Inside Levees								
Levee Pull (1m/80a)	8 blade	0.84	0.15	0.35		0.03	1.37	1.07
Butt Levees								
Blade-Box	6'-7'	0.78	0.14	0.33		0.03	1.28	0.84
IRRIGATE LABOR	hour			0.68		0.01	0.69	0.69
Apply Water								
IRRIGATE LABOR	hour				0.11		0.11	0.11
Tear Down Levees								
Levee Splitter (1/80	32"	0.65	0.13	0.28		0.02	1.08	0.86
Build Inside Levees								
Levee Pull (1m/80a)	8 blade	0.84	0.15	0.35		0.02	1.36	1.07
Butt Levees								
Blade-Box	6'-7'	0.78	0.14	0.33		0.02	1.27	0.84
IRRIGATE LABOR	hour			0.68		0.01	0.69	0.69
Apply Water								
IRRIGATE LABOR	hour				0.11		0.11	0.11
Tear Down Levees								
Levee Splitter (1/80	32"	0.65	0.13	0.28		0.02	1.08	0.86
Tear Down Levees								
Levee Splitter (1/80	32"	0.49	0.09	0.21		0.01	0.80	0.65
Land Forming (\$113)	each							9.61
Well & Pump, Flood	each			5.91			6.07	20.94
Engine, CF, 75	each							20.96
June Irrigation	ac-in	16.42	2.80			0.51	19.73	19.73
July Irrigation	ac-in	16.42	2.80			0.41	19.63	19.63
August Irrigation	ac-in	16.42	2.80			0.31	19.53	19.53
TOTALS		2.25	57.19	15.77	6.18	0.00	1.78	83.17
								61.28
								144.45

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

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Appendix Table 12 Estimated costs for field operations, per acre  
 Irrigation with a 1/2-mile center pivot system  
 530-acre system, 7.5 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL
-----dollars-----								
Set Up Engine								
IRRIGATE LABOR	hour				0.07		0.07	0.07
Maintenance								
IRRIGATE LABOR	hour				0.27	0.01	0.28	0.28
Apply Water								
IRRIGATE LABOR	hour				0.04		0.04	0.04
Apply Water								
IRRIGATE LABOR	hour				0.05		0.05	0.05
Apply Water								
IRRIGATE LABOR	hour				0.04		0.04	0.04
Pivot, 1/2 CP	each		8.60			0.23	8.83	40.29
Well & Pump, 1/2 CP	each		1.13			0.03	1.16	4.01
Engine, 1/2 CP, 174	each						5.65	5.65
June Irr. 3app@.75"	ac-in	22.05	0.68			0.61	23.34	23.34
July Irr. 4app@.75"	ac-in	29.40	0.91			0.65	30.96	30.96
Aug Irr. 3app@.75"	ac-in	22.05	0.68			0.36	23.09	23.09
TOTALS		0.00	73.50	12.00	0.47	0.00	1.89	87.86
								49.95
								137.81

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

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

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					TOTAL TOTAL COST	FIXED COST
		OP INPUT	FUEL	R&M	LABOR	LEASE		
-----dollars-----								
Land Plane	50'x16'		1.66	0.36	0.63		0.17	2.82
Set Up Engine							2.11	4.93
IRRIGATE LABOR	hour				0.23	0.01	0.24	0.24
Ditcher (1m/160a)		0.37		0.08	0.16	0.01	0.62	0.44
Roll-Out Pipe	ft	7.92				0.17	8.09	8.09
Lay Roll-out Pipe								
Pipe Spool 160ac	1/4m roll		0.49	0.12	0.44	0.02	1.07	1.10
IRRIGATE LABOR	hour				1.81	0.04	1.85	1.85
Apply Water		hour			0.23		0.23	0.23
IRRIGATE LABOR	hour				0.23		0.23	0.23
Apply Water		hour			0.23		0.23	0.23
IRRIGATE LABOR	hour				0.23		0.23	0.23
Apply Water		hour			0.23		0.23	0.23
IRRIGATE LABOR	hour				0.23		0.23	0.23
Pick Up Pipe								
Pipe Spool 160ac	1/4m roll	0.74	0.18	0.65		0.02	1.59	1.65
Land Forming (\$450)	each							38.27
Well & Pump, Furrow	each		2.96			0.06	3.02	10.47
Main Line Pipe	each							5.79
Engine, RPF, Corn	each							10.48
1st June Irrigation	ac-in	11.86	1.05			0.28	13.19	13.19
2nd June Irrigation	ac-in	11.86	1.05			0.28	13.19	13.19
3rd June Irrigation	ac-in	11.86	1.05			0.28	13.19	13.19
1st July Irrigation	ac-in	11.86	1.05			0.21	13.12	13.12
TOTALS		7.92	50.70	7.90	4.84	0.00	1.55	72.91
								70.31
								143.22

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

Appendix Table 14 Estimated costs for field operations, per acre  
 Contour levee rice flood irrigation system  
 80-acre system, 33 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	
-----dollars-----								
Set Up Engine								
IRRIGATE LABOR	hour				0.45		0.01	0.46
Build Outside Levee								
Levee Pull (1m/80a)	8 blade		0.63	0.11	0.27		0.03	1.04
Survey & Mark Levees	acre	4.50					0.14	4.64
Build Inside Levees								
Levee Pull (1m/80a)	8 blade		1.68	0.31	0.71		0.09	2.79
Butt Levees								
Blade-Box	6'-7"		0.78	0.14	0.33		0.04	1.29
IRRIGATE LABOR	hour				0.68		0.02	0.70
Install Gates								
IRRIGATE LABOR	hour				2.72		0.09	2.81
Apply Water								
IRRIGATE LABOR	hour				6.80		0.22	7.02
Apply Water								
IRRIGATE LABOR	hour				6.80		0.18	6.98
Apply Water								
IRRIGATE LABOR	hour				6.80		0.15	6.95
Apply Water								
IRRIGATE LABOR	hour				6.80		0.11	6.91
Remove Gates								
IRRIGATE LABOR	hour				0.91		0.01	0.92
Tear Down Levees								
Levee Splitter (1/80)	32"		1.31	0.25	0.55		0.02	2.13
Tear Down Levees								
Levee Splitter (1/80)	32"		0.49	0.09	0.21		0.01	0.80
Land Forming (\$113)	each							0.65
Levee Gates	each							9.61
Well & Pump, Flood	each				5.91		0.16	6.07
Engine, Rice CL, 75	each							20.94
May Irrigation	ac-in	21.90	1.53			0.75	24.18	24.18
June Irrigation	ac-in	32.85	2.29			0.94	36.08	36.08
July Irrigation	ac-in	32.85	2.29			0.75	35.89	35.89
August Irrigation	ac-in	32.85	2.29			0.56	35.70	35.70
TOTALS		4.50	125.34	15.21	34.03	0.00	4.28	183.36
								58.38
								241.74

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

Appendix Table 15 Estimated costs for field operations, per acre  
 Straight levee rice flood irrigation system  
 80-acre system, 27 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST			
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER					
-----dollars-----												
<b>Set Up Engine</b>												
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46			
Survey & Mark Levees	acre	2.25					0.07	2.32	2.32			
<b>Build Inside Levees</b>												
Levee Pull (1m/80a)	8 blade		1.26	0.24	0.53		0.06	2.09	1.61			
Butt Levees	Blade-Box	6'-7'	0.78	0.14	0.33		0.04	1.29	0.84			
		hour			0.68		0.02	0.70	0.70			
<b>Install Gates</b>												
IRRIGATE LABOR	hour				1.36		0.04	1.40	1.40			
<b>Apply Water</b>												
IRRIGATE LABOR	hour				4.53		0.14	4.67	4.67			
Apply Water	IRRIGATE LABOR	hour			4.53		0.12	4.65	4.65			
Apply Water	IRRIGATE LABOR	hour			4.53		0.10	4.63	4.63			
Apply Water	IRRIGATE LABOR	hour			4.53		0.07	4.60	4.60			
Remove Gates	IRRIGATE LABOR	hour			0.91		0.01	0.92	0.92			
<b>Tear Down Levees</b>												
Levee Splitter (1/80	32"	0.98	0.20	0.41			0.02	1.61	1.31			
Land Forming (\$450)	each							38.27	38.27			
Levee Gates	each							0.68	0.68			
Well & Pump, Flood	each		5.91				0.16	6.07	20.94			
Engine, Rice SL, 75	each							20.96	20.96			
May Irrigation	ac-in	21.90	1.86			0.76	24.52		24.52			
June Irrigation	ac-in	25.55	2.18			0.74	28.47		28.47			
July Irrigation	ac-in	25.55	2.18			0.59	28.32		28.32			
August Irrigation	ac-in	25.55	2.18			0.44	28.17		28.17			
<b>TOTALS</b>												
		2.25	101.57	14.89	22.79	0.00	3.39	144.89	84.61			
									229.50			

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

Appendix Table 16 Estimated costs for field operations, per acre  
 Straight levee rice multi inlet flood irrigation system  
 80-acre system, 23 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Set Up Engine									
IRRIGATE LABOR	hour				0.45		0.01	0.46	0.46
Survey & Mark Levees	acre	2.25					0.07	2.32	2.32
Build Inside Levees									
Levee Pull (1m/80a)	8 blade		1.26	0.24	0.53		0.06	2.09	1.61
Butt Levees									
Blade-Box	6'-7'		0.78	0.14	0.33		0.04	1.29	0.84
IRRIGATE LABOR	hour				0.68		0.02	0.70	0.70
Ditcher (1m/160a)			0.37	0.08	0.16		0.02	0.63	0.44
Roll-Out Pipe	ft	7.92					0.25	8.17	8.17
Lay Roll-out Pipe									
Pipe Spool 160ac	1/4m roll		0.49	0.12	0.44		0.03	1.08	1.10
Install Gates						1.36		0.04	1.40
IRRIGATE LABOR	hour								1.40
Apply Water						1.81		0.06	1.87
IRRIGATE LABOR	hour								1.87
Apply Water						1.81		0.05	1.86
IRRIGATE LABOR	hour								1.86
Apply Water						1.81		0.04	1.85
IRRIGATE LABOR	hour								1.85
Apply Water						1.81		0.03	1.84
Remove Gates									1.84
IRRIGATE LABOR	hour				0.45			0.45	0.45
Tear Down Levees									
Levee Splitter (1/80	32"		0.98	0.20	0.41		0.02	1.61	1.31
Pick Up Pipe									
Pipe Spool 160ac	1/4m roll		0.25	0.06	0.21		0.01	0.53	0.55
Land Forming (\$450)	each							38.27	38.27
Levee Gates	each							0.34	0.34
Well & Pump, Flood	each				5.91		0.16	6.07	20.94
Engine, Mult In Rice	each								27.01
May Irrigation	ac-in		18.25	1.75			0.64	20.64	20.64
June Irrigation	ac-in		21.90	2.10			0.64	24.64	24.64
July Irrigation	ac-in		21.90	2.10			0.51	24.51	24.51
August Irrigation	ac-in		21.90	2.10			0.38	24.38	24.38
TOTALS		10.17	88.08	14.80	12.26	0.00	3.08	128.39	86.36
									214.75

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

Appendix Table 17 Estimated costs for field operations, per acre  
 Straight levee rice - zero grade flood irrigation  
 80-acre system, 19 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST				FIXED COST	TOTAL COST			
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL		
-----dollars-----										
Set Up Engine										
IRRIGATE LABOR	hour				0.45	0.01	0.46	0.46		
Apply Water										
IRRIGATE LABOR	hour				2.27	0.07	2.34	2.34		
Apply Water										
IRRIGATE LABOR	hour				2.27	0.06	2.33	2.33		
Apply Water										
IRRIGATE LABOR	hour				2.27	0.05	2.32	2.32		
Apply Water										
IRRIGATE LABOR	hour				2.27	0.04	2.31	2.31		
Land Forming (\$450)	each						38.27	38.27		
Well & Pump, Flood	each			5.91		0.16	6.07	20.94		
Engine, Rice SL, 75	each							20.96		
May Irrigation	ac-in	14.60	1.24			0.51	16.35	16.35		
June Irrigation	ac-in	18.25	1.55			0.53	20.33	20.33		
July Irrigation	ac-in	18.25	1.55			0.42	20.22	20.22		
August Irrigation	ac-in	18.25	1.55			0.32	20.12	20.12		
TOTALS		0.00	69.35	11.80	9.53	0.00	2.17	92.85	80.17	173.02

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

Appendix Table 18 Estimated costs for field operations, per acre  
 Peanuts irrigated with roll-out pipe  
 160-acre system, 12 ac-in., Delta Area, Mississippi, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST					FIXED COST	TOTAL COST		
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			
-----dollars-----										
Land Plane	50'x16'		1.66	0.36	0.63		0.17	2.82	2.11	4.93
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.37	0.08	0.16		0.02	0.63	0.44	1.07
Roll-Out Pipe	ft	7.92					0.21	8.13		8.13
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.49	0.12	0.44		0.03	1.08	1.10	2.18
IRRIGATE LABOR	hour				1.81		0.05	1.86		1.86
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m roll	0.74	0.18	0.65		0.02	1.59	1.65	3.24	
Land Forming (\$450)	each							38.27	38.27	
Well & Pump, Furrow	each		2.96				0.08	3.04	10.47	13.51
Main Line Pipe	each							5.79	5.79	
Engine, RPF, PNUT	each							10.48	10.48	
1st July Irrigation	ac-in	10.95	1.05			0.26	12.26		12.26	
1st Aug Irrigation	ac-in	10.95	1.05			0.19	12.19		12.19	
2nd Aug Irrigation	ac-in	10.95	1.05			0.19	12.19		12.19	
1st Sep Irrigation	ac-in	10.95	1.05			0.13	12.13		12.13	
TOTALS		7.92	47.06	7.90	4.84	0.00	1.36	69.08	70.31	139.39

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

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