FORAGE
2025
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2024-08

April 2024

Foreword

This report is designed to provide necessary planning data to farmers, research and extension staff, lending agencies, and others in agriculture. Estimated costs for land, management, and general farm overhead are not included in this report.

Acknowledgments

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

Special appreciation is expressed to farm supply dealers, equipment dealers, custom operators, and chemical companies who provided prices for crop production inputs.

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

2025 Budget Committees

Forage Committee
Josh Maples, MSU-ES, Chairman (Agricultural Economics)
John Byrd, MSU-ES (Weed Science)
Rocky Lemus, MSU-ES (Forages)
Brian Mills, MSU-ES (Agricultural Economics)

Supporting Committees

Equipment
Evan Gregory, MSU-ES

Prices
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Documentation and Data Processing
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Publication Review
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2025 Planning Budgets

Budgets for Agricultural Enterprises

This publication provides economic and technical information in the form of enterprise budgets for forage crops 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 for each enterprise (14). The purpose of this section is to present the methods and procedures used to calculate costs 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 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 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 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 individual and collective judgment of the committee members. Quantities of materials listed in each budget are based on generally accepted recommendations.

Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by the size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2023. (Appendix Tables 1 and 2).

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 costs 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:

$$RPH = \frac{RLC \; x \; RP}{THL}$$

$$RPA = RPH \; x \; PR$$

where:

RPH = R&M cost per hour of use
RLC = Replacement cost of the 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 the 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 short-term 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 and hand labor. Operator labor and hand labor represent estimates of labor required to perform the in-field tasks. Operator labor is the labor required to operate all power-driven equipment

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

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

where:

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

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

where:

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

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

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

$$CRCPA = CRCPH \; x \; PR$$

where:

CRCPH = Capital recovery charge per hour
HAU = Hours of annual use
CRCPA = Capital recovery charge per acre
PR = Performance rate

Enterprise Budgets

Table 1A. Estimated resource use and costs for field operations, per acre
Conventional Alfalfa hay establishment, prepared
seedbed, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Apr							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	May							2.0000	65.00	130.00	130.00
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	2.00	Aug	4.25	3.93	3.07	8.12	0.28	5.03				24.40
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Pursuit	oz											3.0000	3.04	9.12	9.12
Clethodim	oz											8.0000	0.33	2.64	2.64
Surfactant	pt											0.3000	3.30	0.99	0.99
Disk Harrow	14'	2WD 75	0.140	1.00	Sep	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.38	2.20	3.03	7.31	0.31	4.24				19.16
Alfalfa Seed	lb											20.0000	4.84	96.80	96.80
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.3000	36.20	47.06	47.06
Boron Plus	gal											2.0000	40.80	81.60	81.60
Molybdenum	lb											1.0000	24.50	24.50	24.50
TOTALS						13.49	12.47	8.90	22.14	1.07	17.68			442.76	517.44
INTEREST ON OPERATING CAPITAL															17.05
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															534.49

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.

Table 1B. Estimated costs per acre
Conventional Alfalfa hay establishment, prepared seedbed, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.3000	47.06	_____
Boron Plus	gal	40.80	2.0000	81.60	_____
Molybdenum	lb	24.50	1.0000	24.50	_____
HERBICIDE					
Pursuit	oz	3.04	3.0000	9.12	_____
Clethodim	oz	0.33	8.0000	2.64	_____
SEED/PLANTS					
Alfalfa Seed	lb	4.84	20.0000	96.80	_____
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	1.0000	7.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
CUSTOM LIME					
Lime (Spread)	ton	65.00	2.0000	130.00	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.8911	15.98	_____
HAND LABOR					
Implements	hour	9.06	0.1884	1.70	_____
DIESEL FUEL					
Tractors	gal	3.44	3.4402	11.84	_____
REPAIR & MAINTENANCE					
Implements	acre	8.90	1.0000	8.90	_____
Tractors	acre	1.65	1.0000	1.65	_____
INTEREST ON OP. CAP.	acre	17.05	1.0000	17.05	_____

TOTAL DIRECT EXPENSES				499.88	_____
FIXED EXPENSES					
Implements	acre	22.14	1.0000	22.14	_____
Tractors	acre	12.47	1.0000	12.47	_____

TOTAL FIXED EXPENSES				34.61	_____

TOTAL SPECIFIED EXPENSES				534.49	_____

Note: Cost of production estimates are based on 2023 input prices. **Fertilization and lime decisions should be based on soil test recommendations.**

Table 2A. Estimated resource use and costs for field operations, per acre
Conventional Alfalfa hay maintenance,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Nov							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Nov							0.5000	65.00	32.50	32.50
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Nov	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Metribuzin 75	lb											1.0000	10.90	10.90	10.90
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											2.0000	39.25	78.50	78.50
Potash (60% K2O)	cwt											1.5000	36.20	54.30	54.30
Boron Plus	gal											0.5000	40.80	20.40	20.40
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Pursuit	oz											3.0000	3.04	9.12	9.12
Surfactant	pt											0.3000	3.30	0.99	0.99
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Mustang Max	oz											4.0000	1.52	6.08	6.08
Hay Cut-Cond	9'	2WD 75	0.229	1.00	May	3.47	3.21	5.13	6.71	0.22	4.11				22.63
Hay Tedder	17'	2WD 75	0.101	1.00	May	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	2.00	May	3.07	2.83	0.82	1.34	0.20	3.63				11.69
Hay Baler	Square	2WD 75	0.229	1.00	May	3.47	3.21	4.24	6.93	0.22	4.11				21.96
Twine	bun											0.0800	31.66	2.53	2.53
Hay Trailer	20'	2WD 75	0.090	1.00	May	1.37	1.26	0.12	0.25	0.09	1.61				4.61
Hay Haul (Conv)	ton											1.5000	25.00	37.50	37.50
Spray (Broadcast)	27'	2WD 75	0.062	1.00	May	0.96	0.94	0.17	0.26	0.09	1.40				3.73
Gramoxone SL 2.0	oz											12.0000	0.33	3.96	3.96
Surfactant	pt											0.3000	3.30	0.99	0.99
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Jun	0.96	0.94	0.17	0.26	0.09	1.40				3.73
Mustang Max	oz											4.0000	1.52	6.08	6.08
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Jun	3.47	3.21	5.13	6.71	0.22	4.11				22.63
Hay Tedder	17'	2WD 75	0.101	1.00	Jun	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jun	3.07	2.83	0.82	1.34	0.20	3.63				11.69
Hay Baler	Square	2WD 75	0.229	1.00	Jun	3.47	3.21	4.24	6.93	0.22	4.11				21.96
Twine	bun											0.0800	31.66	2.53	2.53
Hay Trailer	20'	2WD 75	0.090	1.00	Jun	1.37	1.26	0.12	0.25	0.09	1.61				4.61
Hay Haul (Conv)	ton											1.5000	25.00	37.50	37.50
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Jun	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Gramoxone SL 2.0	oz											12.0000	0.33	3.96	3.96
Surfactant	pt											0.3000	3.30	0.99	0.99
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Jun	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Poast	pt											1.0000	16.86	16.86	16.86
Crop Oil (veg)	pt											2.0000	2.90	5.80	5.80
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Potash (60% K2O)	cwt											1.5000	36.20	54.30	54.30
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Mustang Max	oz											4.0000	1.52	6.08	6.08
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Aug	3.47	3.21	5.13	6.71	0.22	4.11				22.63
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	2.00	Aug	3.07	2.83	0.82	1.34	0.20	3.63				11.69
Hay Baler	Square	2WD 75	0.229	1.00	Aug	3.47	3.21	4.24	6.93	0.22	4.11				21.96
Twine	bun											0.0500	31.66	1.58	1.58
Hay Trailer	20'	2WD 75	0.090	1.00	Aug	1.37	1.26	0.12	0.25	0.09	1.61				4.61
Hay Haul (Conv)	ton											1.0000	25.00	25.00	25.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.96	0.94	0.17	0.26	0.09	1.40				3.73
Gramoxone SL 2.0	oz											12.0000	0.33	3.96	3.96
Surfactant	pt											0.3000	3.30	0.99	0.99
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.96	0.94	0.17	0.26	0.09	1.40				3.73
Mustang Max	oz											4.0000	1.52	6.08	6.08
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Sep	3.47	3.21	5.13	6.71	0.22	4.11				22.63
Hay Tedder	17'	2WD 75	0.101	1.00	Sep	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	2.00	Sep	3.07	2.83	0.82	1.34	0.20	3.63				11.69
Hay Baler	Square	2WD 75	0.229	1.00	Sep	3.47	3.21	4.24	6.93	0.22	4.11				21.96
Twine	bun											0.0500	31.66	1.58	1.58
Hay Trailer	20'	2WD 75	0.090	1.00	Sep	1.37	1.26	0.12	0.25	0.09	1.61				4.61
Hay Haul (Conv)	ton											1.0000	25.00	25.00	25.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.96	0.94	0.17	0.26	0.09	1.40				3.73
Gramoxone SL 2.0	oz											12.0000	0.33	3.96	3.96
Surfactant	pt											0.3000	3.30	0.99	0.99
Prorated Est Cost	acre				Sep							1.0000			56.48
TOTALS						62.14	57.66	45.59	67.86	4.44	76.48			479.31	845.52
INTEREST ON OPERATING CAPITAL															9.73
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															855.25

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.

Table 2B. Estimated costs per acre
Conventional Alfalfa hay maintenance,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	2.0000	78.50	_____
Potash (60% K2O)	cwt	36.20	3.0000	108.60	_____
Boron Plus	gal	40.80	0.5000	20.40	_____
HERBICIDE					
Metribuzin 75	lb	10.90	1.0000	10.90	_____
Pursuit	oz	3.04	3.0000	9.12	_____
Gramoxone SL 2.0	oz	0.33	48.0000	15.84	_____
Poast	pt	16.86	1.0000	16.86	_____
INSECTICIDE					
Mustang Max	oz	1.52	16.0000	24.32	_____
HAUL					
Hay Haul (Conv)	ton	25.00	5.0000	125.00	_____
OTHER					
Twine	bun	31.66	0.2600	8.23	_____
ADJUVANTS					
Surfactant	pt	3.30	1.5000	4.95	_____
Crop Oil (veg)	pt	2.90	2.0000	5.80	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
CUSTOM LIME					
Lime (Spread)	ton	65.00	0.5000	32.50	_____
OPERATOR LABOR					
Tractors	hour	17.94	4.0960	73.40	_____
HAND LABOR					
Implements	hour	9.06	0.3447	3.08	_____
DIESEL FUEL					
Tractors	gal	3.44	15.8123	54.37	_____
REPAIR & MAINTENANCE					
Implements	acre	45.59	1.0000	45.59	_____
Tractors	acre	7.77	1.0000	7.77	_____
INTEREST ON OP. CAP.	acre	9.73	1.0000	9.73	_____

TOTAL DIRECT EXPENSES				673.25	_____
FIXED EXPENSES					
Implements	acre	67.86	1.0000	67.86	_____
Tractors	acre	57.66	1.0000	57.66	_____
Prorated Est Cost	acre	56.48	1.0000	56.48	_____

TOTAL FIXED EXPENSES				182.00	_____

TOTAL SPECIFIED EXPENSES				855.25	_____

Note: Cost of production estimates are based on 2023 input prices. **Fertilization and lime decisions should be based on soil test recommendations.**

Table 3A. Estimated resource use and costs for field operations, per acre
Bahiagrass establishment, broadcast,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Mar								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.96	0.94	0.17	0.26	0.09	1.40				3.73
Glyphosate 3lbs a.e.	pt											2.0000	4.03	8.06	8.06
Surfactant	pt											1.0000	3.30	3.30	3.30
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Cyclone Spin	750Lb	2WD 105	0.200	1.00	Apr	4.25	3.93	0.28	1.22	0.30	4.50				14.18
Bahiagrass Seed	lb											20.0000	3.40	68.00	68.00
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.88	1.74	0.22	0.38	0.12	2.23				6.45
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						16.60	15.40	6.45	13.79	1.14	19.42			266.76	338.42
INTEREST ON OPERATING CAPITAL															13.29
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															351.71

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 3B. Estimated costs per acre
Bahiagrass establishment, broadcast,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	2.1400	66.51	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.0000	8.06	_____
SEED/PLANTS					
Bahiagrass Seed	lb	3.40	20.0000	68.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	1.0163	18.23	_____
HAND LABOR					
Implements	hour	9.06	0.1313	1.19	_____
DIESEL FUEL					
Tractors	gal	3.44	4.2323	14.55	_____
REPAIR & MAINTENANCE					
Implements	acre	6.45	1.0000	6.45	_____
Tractors	acre	2.05	1.0000	2.05	_____
INTEREST ON OP. CAP.	acre	13.29	1.0000	13.29	_____

TOTAL DIRECT EXPENSES				322.52	_____
FIXED EXPENSES					
Implements	acre	13.79	1.0000	13.79	_____
Tractors	acre	15.40	1.0000	15.40	_____

TOTAL FIXED EXPENSES				29.19	_____

TOTAL SPECIFIED EXPENSES				351.71	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 4A. Estimated resource use and costs for field operations, per acre
Bahiagrass establishment, drilled on prepared seed bed,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			0.33	Mar								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.0000	4.03	8.06	8.06
Surfactant	pt											1.0000	3.30	3.30	3.30
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Grain Drill	12'	2WD 75	0.157	1.00	Apr	2.38	2.20	3.03	7.31	0.31	4.24				19.16
Bahiagrass Seed	lb											20.0000	3.40	68.00	68.00
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						12.84	11.87	8.98	19.50	1.03	16.93			266.76	336.88
INTEREST ON OPERATING CAPITAL															15.18
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															352.06

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 4B. Estimated costs per acre
Bahiagrass establishment, drilled on prepared seed bed,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	2.1400	66.51	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.0000	8.06	_____
SEED/PLANTS					
Bahiagrass Seed	lb	3.40	20.0000	68.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.8490	15.23	_____
HAND LABOR					
Implements	hour	9.06	0.1884	1.70	_____
DIESEL FUEL					
Tractors	gal	3.44	3.2777	11.27	_____
REPAIR & MAINTENANCE					
Implements	acre	8.98	1.0000	8.98	_____
Tractors	acre	1.57	1.0000	1.57	_____
INTEREST ON OP. CAP.	acre	15.18	1.0000	15.18	_____

TOTAL DIRECT EXPENSES				320.69	_____
FIXED EXPENSES					
Implements	acre	19.50	1.0000	19.50	_____
Tractors	acre	11.87	1.0000	11.87	_____

TOTAL FIXED EXPENSES				31.37	_____

TOTAL SPECIFIED EXPENSES				352.06	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 5A. Estimated resource use and costs for field operations, per acre
Bahiagrass establishment, no-till,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			0.33	Mar								65.00		
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.0000	4.03	8.06	8.06
Surfactant	pt											1.0000	3.30	3.30	3.30
NT Grain Drill	12'	2WD 75	0.196	1.00	Apr	2.98	2.75	4.21	10.17	0.39	5.30				25.41
Bahiagrass Seed	lb											20.0000	3.40	68.00	68.00
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						5.41	5.00	5.99	11.85	0.58	8.46			266.76	303.47
INTEREST ON OPERATING CAPITAL															14.11
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															317.58

Note: Cost of production estimates are based on 2023 input prices.
Bahiagrass planted to increase the production of an existing stand.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 5B. Estimated costs per acre
Bahiagrass establishment, no-till,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	2.1400	66.51	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.0000	8.06	_____
SEED/PLANTS					
Bahiagrass Seed	lb	3.40	20.0000	68.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.3573	6.40	_____
HAND LABOR					
Implements	hour	9.06	0.2277	2.06	_____
DIESEL FUEL					
Tractors	gal	3.44	1.3793	4.74	_____
REPAIR & MAINTENANCE					
Implements	acre	5.99	1.0000	5.99	_____
Tractors	acre	0.67	1.0000	0.67	_____
INTEREST ON OP. CAP.	acre	14.11	1.0000	14.11	_____

TOTAL DIRECT EXPENSES				300.73	_____
FIXED EXPENSES					
Implements	acre	11.85	1.0000	11.85	_____
Tractors	acre	5.00	1.0000	5.00	_____

TOTAL FIXED EXPENSES				16.85	_____

TOTAL SPECIFIED EXPENSES				317.58	_____

Note: Cost of production estimates are based on 2023 input prices.
Bahigrass planted to increase the production of an existing stand.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 6A. Estimated resource use and costs for field operations, per acre
Bahiagrass establishment, no-till pasture renovation,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			0.33	Mar								65.00		
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Gramoxone SL 2.0	oz											16.0000	0.33	5.28	5.28
Surfactant	pt											0.3000	3.30	0.99	0.99
NT Grain Drill	12'	2WD 75	0.196	1.00	Apr	2.98	2.75	4.21	10.17	0.39	5.30				25.41
Bahiagrass Seed	lb											20.0000	3.40	68.00	68.00
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						5.41	5.00	5.99	11.85	0.58	8.46			261.67	298.38
INTEREST ON OPERATING CAPITAL															13.83
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															312.21

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate Prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 6B. Estimated costs per acre
Bahiagrass establishment, no-till pasture renovation,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	2.1400	66.51	_____
HERBICIDE					
Gramoxone SL 2.0	oz	0.33	16.0000	5.28	_____
SEED/PLANTS					
Bahiagrass Seed	lb	3.40	20.0000	68.00	_____
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.3573	6.40	_____
HAND LABOR					
Implements	hour	9.06	0.2277	2.06	_____
DIESEL FUEL					
Tractors	gal	3.44	1.3793	4.74	_____
REPAIR & MAINTENANCE					
Implements	acre	5.99	1.0000	5.99	_____
Tractors	acre	0.67	1.0000	0.67	_____
INTEREST ON OP. CAP.	acre	13.83	1.0000	13.83	_____

TOTAL DIRECT EXPENSES				295.36	_____
FIXED EXPENSES					
Implements	acre	11.85	1.0000	11.85	_____
Tractors	acre	5.00	1.0000	5.00	_____

TOTAL FIXED EXPENSES				16.85	_____

TOTAL SPECIFIED EXPENSES				312.21	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle

Table 7A. Estimated resource use and costs for field operations, per acre
Seeded bermudagrass establishment, broadcast seed,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Mar								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.0000	4.03	8.06	8.06
Surfactant	pt											1.0000	3.30	3.30	3.30
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Cyclone Spin	750Lb	2WD 75	0.200	1.00	Apr	3.03	2.80	0.28	1.22	0.30	4.50				11.83
Common Bermuda Seed	lb											10.0000	6.16	61.60	61.60
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.88	1.74	0.22	0.38	0.12	2.23				6.45
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						15.37	14.21	6.45	13.79	1.14	19.42			260.36	329.60
INTEREST ON OPERATING CAPITAL															12.93
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															342.53

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 7B. Estimated costs per acre
Seeded bermudagrass establishment, broadcast seed,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	2.1400	66.51	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.0000	8.06	_____
SEED/PLANTS					
Common Bermuda Seed	lb	6.16	10.0000	61.60	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	1.0163	18.23	_____
HAND LABOR					
Implements	hour	9.06	0.1313	1.19	_____
DIESEL FUEL					
Tractors	gal	3.44	3.9235	13.49	_____
REPAIR & MAINTENANCE					
Implements	acre	6.45	1.0000	6.45	_____
Tractors	acre	1.88	1.0000	1.88	_____
INTEREST ON OP. CAP.	acre	12.93	1.0000	12.93	_____

TOTAL DIRECT EXPENSES				314.53	_____
FIXED EXPENSES					
Implements	acre	13.79	1.0000	13.79	_____
Tractors	acre	14.21	1.0000	14.21	_____

TOTAL FIXED EXPENSES				28.00	_____

TOTAL SPECIFIED EXPENSES				342.53	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 8A. Estimated resource use and costs for field operations, per acre
Seeded bermudagrass establishment, no-till,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			0.33	Mar								65.00		
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.0000	4.03	8.06	8.06
Surfactant	pt											1.0000	3.30	3.30	3.30
NT Grain Drill	12'	2WD 75	0.196	1.00	Apr	2.98	2.75	4.21	10.17	0.39	5.30				25.41
Common Bermuda Seed	lb											10.0000	6.16	61.60	61.60
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						5.41	5.00	5.99	11.85	0.58	8.46			260.36	297.07
INTEREST ON OPERATING CAPITAL															13.76
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															310.83

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 8B. Estimated costs per acre
Seeded bermudagrass establishment, no-till,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	2.1400	66.51	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.0000	8.06	_____
SEED/PLANTS					
Common Bermuda Seed	lb	6.16	10.0000	61.60	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.3573	6.40	_____
HAND LABOR					
Implements	hour	9.06	0.2277	2.06	_____
DIESEL FUEL					
Tractors	gal	3.44	1.3793	4.74	_____
REPAIR & MAINTENANCE					
Implements	acre	5.99	1.0000	5.99	_____
Tractors	acre	0.67	1.0000	0.67	_____
INTEREST ON OP. CAP.	acre	13.76	1.0000	13.76	_____

TOTAL DIRECT EXPENSES				293.98	_____
FIXED EXPENSES					
Implements	acre	11.85	1.0000	11.85	_____
Tractors	acre	5.00	1.0000	5.00	_____

TOTAL FIXED EXPENSES				16.85	_____

TOTAL SPECIFIED EXPENSES				310.83	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 9A. Estimated resource use and costs for field operations, per acre
Seeded bermudagrass establishment, no-till pasture renovation,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			0.33	Mar								65.00		
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Gramoxone SL 2.0	oz											16.0000	0.33	5.28	5.28
Surfactant	pt											0.3000	3.30	0.99	0.99
NT Grain Drill	12'	2WD 75	0.196	1.00	Apr	2.98	2.75	4.21	10.17	0.39	5.30				25.41
Common Bermuda Seed	lb											10.0000	6.16	61.60	61.60
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						5.41	5.00	5.99	11.85	0.58	8.46			255.27	291.98
INTEREST ON OPERATING CAPITAL															13.48
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															305.46

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 9B. Estimated costs per acre
Seeded bermudagrass establishment, no-till pasture renovation, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	
Potash (60% K2O)	cwt	36.20	1.0000	36.20	
Nitrogen	cwt	31.08	2.1400	66.51	
HERBICIDE					
Gramoxone SL 2.0	oz	0.33	16.0000	5.28	
SEED/PLANTS					
Common Bermuda Seed	lb	6.16	10.0000	61.60	
ADJUVANTS					
Surfactant	pt	3.30	0.3000	0.99	
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	
OPERATOR LABOR					
Tractors	hour	17.94	0.3573	6.40	
HAND LABOR					
Implements	hour	9.06	0.2277	2.06	
DIESEL FUEL					
Tractors	gal	3.44	1.3793	4.74	
REPAIR & MAINTENANCE					
Implements	acre	5.99	1.0000	5.99	
Tractors	acre	0.67	1.0000	0.67	
INTEREST ON OP. CAP.	acre	13.48	1.0000	13.48	

TOTAL DIRECT EXPENSES				288.61	
FIXED EXPENSES					
Implements	acre	11.85	1.0000	11.85	
Tractors	acre	5.00	1.0000	5.00	

TOTAL FIXED EXPENSES				16.85	

TOTAL SPECIFIED EXPENSES				305.46	

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle

Table 10A. Estimated resource use and costs for field operations, per acre
Seeded bermudagrass, drill in prepared seed bed,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Mar								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.0000	4.03	8.06	8.06
Surfactant	pt											1.0000	3.30	3.30	3.30
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Grain Drill	12'	2WD 130	0.157	1.00	Apr	4.28	4.98	3.03	7.31	0.31	4.24				23.84
Common Bermuda Seed	lb											10.0000	6.16	61.60	61.60
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						14.74	14.65	8.98	19.50	1.03	16.93			260.36	335.16
INTEREST ON OPERATING CAPITAL															12.90
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															348.06

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 10B. Estimated costs per acre
Seeded bermudagrass, drill in prepared seed bed,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	2.1400	66.51	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.0000	8.06	_____
SEED/PLANTS					
Common Bermuda Seed	lb	6.16	10.0000	61.60	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.8490	15.23	_____
HAND LABOR					
Implements	hour	9.06	0.1884	1.70	_____
DIESEL FUEL					
Tractors	gal	3.44	3.7225	12.80	_____
REPAIR & MAINTENANCE					
Implements	acre	8.98	1.0000	8.98	_____
Tractors	acre	1.94	1.0000	1.94	_____
INTEREST ON OP. CAP.	acre	12.90	1.0000	12.90	_____

TOTAL DIRECT EXPENSES				313.91	_____
FIXED EXPENSES					
Implements	acre	19.50	1.0000	19.50	_____
Tractors	acre	14.65	1.0000	14.65	_____

TOTAL FIXED EXPENSES				34.15	_____

TOTAL SPECIFIED EXPENSES				348.06	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle

Table 11A. Estimated resource use and costs for field operations, per acre
Permanent summer pasture maintenance (i.e. bahiagrass,
bermudagrass, dallisgrass, mixed grasses), Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
GrazonNext	pt											1.5000	8.56	12.84	12.84
Surfactant	pt											1.0000	3.30	3.30	3.30
Custom Spread(Truck)	appl			1.00	May							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Lime (Spread)	ton			1.00	Aug								65.00		
Prorated Est Cost	acre				Aug							1.0000			37.20
TOTALS						2.43	2.25	1.78	1.68	0.19	3.16			176.41	224.91
INTEREST ON OPERATING CAPITAL															8.43
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															233.34

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 11B. Estimated costs per acre
Permanent summer pasture maintenance (i.e. bahiagrass, bermudagrass, dallisgrass, mixed grasses), Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	2.1400	66.51	_____
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
HERBICIDE					
GrazonNext	pt	8.56	1.5000	12.84	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.1608	2.88	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.44	0.6210	2.13	_____
REPAIR & MAINTENANCE					
Implements	acre	1.78	1.0000	1.78	_____
Tractors	acre	0.30	1.0000	0.30	_____
INTEREST ON OP. CAP.	acre	8.43	1.0000	8.43	_____

TOTAL DIRECT EXPENSES				192.21	_____
FIXED EXPENSES					
Implements	acre	1.68	1.0000	1.68	_____
Tractors	acre	2.25	1.0000	2.25	_____
Prorated Est Cost	acre	37.20	1.0000	37.20	_____

TOTAL FIXED EXPENSES				41.13	_____

TOTAL SPECIFIED EXPENSES				233.34	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle

Table 12A. Estimated resource use and costs for field operations, per acre
Permanent summer grass-white clover pasture maintenance,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Custom Spread(Truck)	appl			1.00	May							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.3000	31.08	9.32	9.32
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Lime (Spread)	ton			1.00	Jun								65.00		
Rotary Mower	12'	2WD 75	0.098	1.00	Sep	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Tailgate Seeder		2WD 50	0.200	1.00	Sep	1.95	1.32	0.53	0.69	0.20	3.59				8.08
White Clover Seed	lb											3.0000	5.11	15.33	15.33
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Prorated Est Cost	acre				Oct							1.0000			37.20
TOTALS						4.91	4.06	3.75	3.53	0.39	7.11			118.40	178.96
INTEREST ON OPERATING CAPITAL															3.47
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															182.43

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 12B. Estimated costs per acre
Permanent summer grass-white clover pasture maintenance, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	0.3000	9.32	_____
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
SEED/PLANTS					
White Clover Seed	lb	5.11	3.0000	15.33	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.3964	7.11	_____
DIESEL FUEL					
Tractors	gal	3.44	1.2729	4.37	_____
REPAIR & MAINTENANCE					
Implements	acre	3.75	1.0000	3.75	_____
Tractors	acre	0.54	1.0000	0.54	_____
INTEREST ON OP. CAP.	acre	3.47	1.0000	3.47	_____

TOTAL DIRECT EXPENSES				137.64	_____
FIXED EXPENSES					
Implements	acre	3.53	1.0000	3.53	_____
Tractors	acre	4.06	1.0000	4.06	_____
Prorated Est Cost	acre	37.20	1.0000	37.20	_____

TOTAL FIXED EXPENSES				44.79	_____

TOTAL SPECIFIED EXPENSES				182.43	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices

Table 13A. Estimated resource use and costs for field operations, per acre
Mixed grass hay maintenance,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.95	0.88	0.17	0.26	0.09	1.40				3.66
GrazonNext	pt											1.5000	8.56	12.84	12.84
Surfactant	pt											1.0000	3.30	3.30	3.30
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.3500	31.08	41.96	41.96
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.5000	36.20	54.30	54.30
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jun	3.90	3.61	2.42	3.16	0.25	4.63				17.72
Hay Rake	8.5'	2WD 50	0.202	2.00	Jun	3.94	2.66	1.69	2.76	0.40	7.26				18.31
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jun	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0400	31.66	1.27	1.27
Hay Mower	1B Lift	2WD 50	0.300	1.00	Jun	2.92	1.97	0.05	0.15	0.30	5.38				10.47
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.3500	31.08	41.96	41.96
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jul	3.90	3.61	2.42	3.16	0.25	4.63				17.72
Hay Rake	8.5'	2WD 50	0.202	2.00	Jul	3.94	2.66	1.69	2.76	0.40	7.26				18.31
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0400	31.66	1.27	1.27
Hay Mower	1B Lift	2WD 75	0.300	1.00	Jul	4.54	4.20	0.05	0.15	0.30	5.38				14.32
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.3500	31.08	41.96	41.96
Hay Baler	Lg Round	2WD 75	0.211	1.00	Oct	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0200	31.66	0.63	0.63
Hay Disc Mower	8'	2WD 75	0.257	1.00	Oct	3.90	3.61	2.42	3.16	0.25	4.63				17.72
Hay Rake	8.5'	2WD 50	0.202	2.00	Oct	3.94	2.66	1.69	2.76	0.40	7.26				18.31
Hay Mower	1B Lift	2WD 75	0.300	1.00	Oct	4.54	4.20	0.05	0.15	0.30	5.38				14.32
Soil Testing	acre			0.33	Oct							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Oct								65.00		
Prorated Est Cost	acre				Oct							1.0000			37.17
TOTALS						46.10	38.94	36.29	52.82	3.61	64.61			264.54	540.47
INTEREST ON OPERATING CAPITAL															14.35
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															554.82

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 50 units of nitrogen being applied after emergence and 50 units applied after each cutting of hay.

Table 13B. Estimated costs per acre
Mixed grass hay maintenance,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	4.0500	125.87	_____
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.5000	54.30	_____
HERBICIDE					
GrazonNext	pt	8.56	1.5000	12.84	_____
OTHER					
Twine	bun	31.66	0.1000	3.17	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	3.5839	64.33	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.44	11.8883	40.88	_____
REPAIR & MAINTENANCE					
Implements	acre	36.29	1.0000	36.29	_____
Tractors	acre	5.22	1.0000	5.22	_____
INTEREST ON OP. CAP.	acre	14.35	1.0000	14.35	_____

TOTAL DIRECT EXPENSES				425.89	_____
FIXED EXPENSES					
Implements	acre	52.82	1.0000	52.82	_____
Tractors	acre	38.94	1.0000	38.94	_____
Prorated Est Cost	acre	37.17	1.0000	37.17	_____

TOTAL FIXED EXPENSES				128.93	_____

TOTAL SPECIFIED EXPENSES				554.82	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 50 units of nitrogen being applied after emergence and 50 units applied after each cutting of hay

Table 14A. Estimated resource use and costs for field operations, per acre
Hybrid bermudagrass establishment, 1 cutting of hay,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Mar								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	2.00	Apr	4.25	3.93	3.07	8.12	0.28	5.03				24.40
Custom Sprig	acre			1.00	May							1.0000	100.00	100.00	100.00
Cultipacker	12'	2WD 75	0.124	1.00	May	1.88	1.74	0.22	0.38	0.12	2.23				6.45
Custom Spread(Truck)	appl			1.00	May							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	May	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Diuron 4L	pt											3.0000	4.25	12.75	12.75
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.3500	31.08	41.96	41.96
Hay Disc Mower	8'	2WD 75	0.257	1.00	Aug	3.90	3.61	2.42	3.16	0.25	4.63				17.72
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	1.00	Aug	1.53	1.41	0.41	0.67	0.10	1.81				5.83
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0300	31.66	0.95	0.95
TOTALS						19.23	17.77	15.75	27.20	1.30	23.06			269.04	372.05
INTEREST ON OPERATING CAPITAL															12.47
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															384.52

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 50 units of nitrogen being applied after emergence and 50 units applied after hay cutting.

Table 14B. Estimated costs per acre
Hybrid bermudagrass establishment, 1 cutting of hay,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	1.3500	41.96	_____
HERBICIDE					
Diuron 4L	pt	4.25	3.0000	12.75	_____
OTHER					
Twine	bun	31.66	0.0300	0.95	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
CUSTOM PLANT					
Custom Sprig	acre	100.00	1.0000	100.00	_____
OPERATOR LABOR					
Tractors	hour	17.94	1.2702	22.78	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.44	4.9035	16.86	_____
REPAIR & MAINTENANCE					
Implements	acre	15.75	1.0000	15.75	_____
Tractors	acre	2.37	1.0000	2.37	_____
INTEREST ON OP. CAP.	acre	12.47	1.0000	12.47	_____

TOTAL DIRECT EXPENSES				339.55	_____
FIXED EXPENSES					
Implements	acre	27.20	1.0000	27.20	_____
Tractors	acre	17.77	1.0000	17.77	_____

TOTAL FIXED EXPENSES				44.97	_____

TOTAL SPECIFIED EXPENSES				384.52	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 50 units of nitrogen being applied after emergence and 50 units applied after hay cutting

Table 15A. Estimated resource use and costs for field operations, per acre
Hybrid bermudagrass hay maintenance,
4 cuttings of hay, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
GrazonNext	pt											1.5000	8.56	12.84	12.84
Surfactant	pt											1.0000	3.30	3.30	3.30
Custom Spread(Truck)	appl			1.00	May							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.3500	31.08	41.96	41.96
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											2.0000	36.20	72.40	72.40
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jun	3.90	3.61	2.42	3.16	0.25	4.63				17.72
Hay Tedder	17'	2WD 75	0.101	1.00	Jun	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jun	3.07	2.83	0.82	1.34	0.20	3.63				11.69
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jun	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0600	31.66	1.90	1.90
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jun	4.54	4.20	0.05	0.15	0.30	5.38				14.32
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.3500	31.08	41.96	41.96
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jul	3.90	3.61	2.42	3.16	0.25	4.63				17.72
Hay Tedder	17'	2WD 75	0.101	1.00	Jul	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jul	3.07	2.83	0.82	1.34	0.20	3.63				11.69
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0600	31.66	1.90	1.90
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jul	4.54	4.20	0.05	0.15	0.30	5.38				14.32
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.3500	31.08	41.96	41.96
Soil Testing	acre			1.00	Aug							1.0000	10.00	10.00	10.00
Lime (Spread)	ton			1.00	Aug								65.00		
Hay Disc Mower	8'	2WD 75	0.257	1.00	Aug	3.90	3.61	2.42	3.16	0.25	4.63				17.72
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	2.00	Aug	3.07	2.83	0.82	1.34	0.20	3.63				11.69
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0300	31.66	0.95	0.95
Hay Mover	1B Lift	2WD 75	0.300	1.00	Aug	4.54	4.20	0.05	0.15	0.30	5.38				14.32
Custom Spread(Truck)	appl			1.00	Aug							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.3500	31.08	41.96	41.96
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Hay Disc Mower	8'	2WD 75	0.257	1.00	Sep	3.90	3.61	2.42	3.16	0.25	4.63				17.72
Hay Tedder	17'	2WD 75	0.101	1.00	Sep	1.53	1.41	0.62	1.02	0.10	1.81				6.39
Hay Rake-Double	17'	2WD 75	0.101	2.00	Sep	3.07	2.83	0.82	1.34	0.20	3.63				11.69
Hay Baler	Lg Round	2WD 75	0.211	1.00	Sep	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0300	31.66	0.95	0.95
Hay Mover	1B Lift	2WD 75	0.300	1.00	Sep	4.54	4.20	0.05	0.15	0.30	5.38				14.32
Prorated Est Cost	acre				Sep							1.0000			40.63
TOTALS						65.95	60.92	47.33	68.74	4.38	78.40			397.16	759.13
INTEREST ON OPERATING CAPITAL															18.11
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															777.24

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 50 units of nitrogen being applied after emergence and 50 units applied after each cutting of hay.

Table 15B. Estimated costs per acre
Hybrid bermudagrass hay maintenance,
4 cuttings of hay, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	5.4000	167.83	_____
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	3.0000	108.60	_____
HERBICIDE					
GrazonNext	pt	8.56	1.5000	12.84	_____
OTHER					
Twine	bun	31.66	0.1800	5.70	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	4.0000	30.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	1.0000	10.00	_____
OPERATOR LABOR					
Tractors	hour	17.94	4.3532	78.12	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.44	16.8054	57.79	_____
REPAIR & MAINTENANCE					
Implements	acre	47.33	1.0000	47.33	_____
Tractors	acre	8.16	1.0000	8.16	_____
INTEREST ON OP. CAP.	acre	18.11	1.0000	18.11	_____

TOTAL DIRECT EXPENSES				606.95	_____
FIXED EXPENSES					
Implements	acre	68.74	1.0000	68.74	_____
Tractors	acre	60.92	1.0000	60.92	_____
Prorated Est Cost	acre	40.63	1.0000	40.63	_____

TOTAL FIXED EXPENSES				170.29	_____

TOTAL SPECIFIED EXPENSES				777.24	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 50 units of nitrogen being applied after emergence and 50 units applied after each cutting of hay

Table 16A. Estimated resource use and costs for field operations, per acre
Tall fescue-white clover pasture establishment,
prepared seedbed, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Disk Harrow	14'	2WD 75	0.140	2.00	Sep	4.25	3.93	3.07	8.12	0.28	5.03				24.40
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.38	2.20	3.03	7.31	0.31	4.24				19.16
Fescue Seed	lb											20.0000	2.70	54.00	54.00
White Clover Seed	lb											3.0000	5.11	15.33	15.33
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.3000	31.08	9.32	9.32
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.3000	31.08	9.32	9.32
TOTALS						10.42	9.63	7.19	17.82	0.84	13.76			208.85	267.67
INTEREST ON OPERATING CAPITAL															10.50
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															278.17

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 16B. Estimated costs per acre
Tall fescue-white clover pasture establishment,
prepared seedbed, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	0.6000	18.65	_____
SEED/PLANTS					
Fescue Seed	lb	2.70	20.0000	54.00	_____
White Clover Seed	lb	5.11	3.0000	15.33	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.6881	12.34	_____
HAND LABOR					
Implements	hour	9.06	0.1571	1.42	_____
DIESEL FUEL					
Tractors	gal	3.44	2.6566	9.15	_____
REPAIR & MAINTENANCE					
Implements	acre	7.19	1.0000	7.19	_____
Tractors	acre	1.27	1.0000	1.27	_____
INTEREST ON OP. CAP.	acre	10.50	1.0000	10.50	_____

TOTAL DIRECT EXPENSES				250.72	_____
FIXED EXPENSES					
Implements	acre	17.82	1.0000	17.82	_____
Tractors	acre	9.63	1.0000	9.63	_____

TOTAL FIXED EXPENSES				27.45	_____

TOTAL SPECIFIED EXPENSES				278.17	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 17A. Estimated resource use and costs for field operations, per acre
Tall fescue-white clover pasture establishment,
novel/endophyte-free, no-till, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.5000	4.03	10.08	10.08
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.3000	31.08	9.32	9.32
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.98	2.75	4.21	10.17	0.39	5.30				25.41
Fescue Seed	lb											20.0000	2.70	54.00	54.00
White Clover Seed	lb											3.0000	5.11	15.33	15.33
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.3000	31.08	9.32	9.32
TOTALS						3.93	3.63	4.38	10.43	0.48	6.70			211.43	240.50
INTEREST ON OPERATING CAPITAL															9.93
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															250.43

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 17B. Estimated costs per acre
Tall fescue-white clover pasture establishment,
novel/endophyte-free, no-till, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	0.6000	18.65	_____
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.5000	10.08	_____
SEED/PLANTS					
Fescue Seed	lb	2.70	20.0000	54.00	_____
White Clover Seed	lb	5.11	3.0000	15.33	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.2591	4.64	_____
HAND LABOR					
Implements	hour	9.06	0.2277	2.06	_____
DIESEL FUEL					
Tractors	gal	3.44	1.0002	3.44	_____
REPAIR & MAINTENANCE					
Implements	acre	4.38	1.0000	4.38	_____
Tractors	acre	0.49	1.0000	0.49	_____
INTEREST ON OP. CAP.	acre	9.93	1.0000	9.93	_____

TOTAL DIRECT EXPENSES				236.37	_____
FIXED EXPENSES					
Implements	acre	10.43	1.0000	10.43	_____
Tractors	acre	3.63	1.0000	3.63	_____

TOTAL FIXED EXPENSES				14.06	_____

TOTAL SPECIFIED EXPENSES				250.43	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 18A. Estimated resource use and costs for field operations, per acre
Tall fescue-white clover pasture maintenance,
novel/endophyte free, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Lime (Spread)	ton			1.00	Aug								65.00		
Tailgate Seeder		2WD 50	0.200	1.00	Oct	1.95	1.32	0.53	0.69	0.20	3.59				8.08
White Clover Seed	lb											2.0000	5.11	10.22	10.22
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Nitrogen	cwt											0.3000	31.08	9.32	9.32
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.95	0.88	0.17	0.26	0.09	1.40				3.66
2,4-D amine	pt											1.5000	2.72	4.08	4.08
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.3000	31.08	9.32	9.32
Prorated Est Cost	acre				Oct							1.0000			26.46
TOTALS						4.38	3.57	2.31	2.37	0.39	6.75			146.32	192.16
INTEREST ON OPERATING CAPITAL															5.60
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															197.76

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 18B. Estimated costs per acre
Tall fescue-white clover pasture maintenance,
novel/endophyte free, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	0.6000	18.65	_____
HERBICIDE					
2,4-D amine	pt	2.72	1.5000	4.08	_____
SEED/PLANTS					
White Clover Seed	lb	5.11	2.0000	10.22	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.3608	6.47	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.44	1.1358	3.90	_____
REPAIR & MAINTENANCE					
Implements	acre	2.31	1.0000	2.31	_____
Tractors	acre	0.48	1.0000	0.48	_____
INTEREST ON OP. CAP.	acre	5.60	1.0000	5.60	_____

TOTAL DIRECT EXPENSES				165.36	_____
FIXED EXPENSES					
Implements	acre	2.37	1.0000	2.37	_____
Tractors	acre	3.57	1.0000	3.57	_____
Prorated Est Cost	acre	26.46	1.0000	26.46	_____

TOTAL FIXED EXPENSES				32.40	_____

TOTAL SPECIFIED EXPENSES				197.76	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 19A. Estimated resource use and costs for field operations, per acre
No-till renovation of old K-31 tall fescue pasture with
novel endophyte/endophyte-free tall fescue, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Mar							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Mar								65.00		
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.5000	4.03	10.08	10.08
Surfactant	pt											0.4000	3.30	1.32	1.32
NT Grain Drill	12'	2WD 75	0.196	1.00	May	2.98	2.75	4.21	10.17	0.39	5.30				25.41
SS, PM, FS Seed	lb											25.0000	1.29	32.25	32.25
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.5000	4.03	10.08	10.08
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.98	2.75	4.21	10.17	0.39	5.30				25.41
White Clover Seed	lb											3.0000	5.11	15.33	15.33
Fescue Seed	lb											20.0000	2.70	54.00	54.00
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.5000	31.08	15.54	15.54
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.5000	31.08	15.54	15.54
TOTALS						7.86	7.26	8.76	20.86	0.97	13.40			267.52	325.66
INTEREST ON OPERATING CAPITAL															5.91
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															331.57

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
Research suggests tall fescue renovation to novel endophyte fescue will
require 2 years glyphosate applications to completely eliminate existing stand.
SS = Sorghum x Sudan Hybrid, PM = Pearl Millet.

Table 19B. Estimated costs per acre
No-till renovation of old K-31 tall fescue pasture with novel endophyte/endophyte-free tall fescue, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	1.0000	31.08	_____
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	5.0000	20.15	_____
SEED/PLANTS					
SS, PM, FS Seed	lb	1.29	25.0000	32.25	_____
White Clover Seed	lb	5.11	3.0000	15.33	_____
Fescue Seed	lb	2.70	20.0000	54.00	_____
ADJUVANTS					
Surfactant	pt	3.30	0.4000	1.32	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.5182	9.28	_____
HAND LABOR					
Implements	hour	9.06	0.4555	4.12	_____
DIESEL FUEL					
Tractors	gal	3.44	2.0005	6.88	_____
REPAIR & MAINTENANCE					
Implements	acre	8.76	1.0000	8.76	_____
Tractors	acre	0.98	1.0000	0.98	_____
INTEREST ON OP. CAP.	acre	5.91	1.0000	5.91	_____

TOTAL DIRECT EXPENSES				303.45	_____
FIXED EXPENSES					
Implements	acre	20.86	1.0000	20.86	_____
Tractors	acre	7.26	1.0000	7.26	_____

TOTAL FIXED EXPENSES				28.12	_____

TOTAL SPECIFIED EXPENSES				331.57	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
Research suggests tall fescue renovation to novel endophyte fescue will require 2 years glyphosate applications to completely eliminate existing stand.

Table 20A. Estimated resource use and costs for field operations, per acre
Tall fescue pasture establishment,
novel endophyte/endophyte-free, prepared seedbed, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Disk Harrow	14'	2WD 75	0.140	1.00	Aug	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.5000	4.03	10.08	10.08
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.38	2.20	3.03	7.31	0.31	4.24				19.16
Fescue Seed	lb											20.0000	2.70	54.00	54.00
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.5000	31.08	15.54	15.54
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.5000	31.08	15.54	15.54
TOTALS						5.45	5.04	4.74	11.63	0.54	8.16			208.54	243.56
INTEREST ON OPERATING CAPITAL															3.18
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															246.74

Note: Cost of production estimates are based on 2023 input prices
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices

Table 20B. Estimated costs per acre
Tall fescue pasture establishment,
novel endophyte/endophyte-free, prepared seedbed, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	1.0000	31.08	_____
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.5000	10.08	_____
SEED/PLANTS					
Fescue Seed	lb	2.70	20.0000	54.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.3601	6.46	_____
HAND LABOR					
Implements	hour	9.06	0.1884	1.70	_____
DIESEL FUEL					
Tractors	gal	3.44	1.3902	4.78	_____
REPAIR & MAINTENANCE					
Implements	acre	4.74	1.0000	4.74	_____
Tractors	acre	0.67	1.0000	0.67	_____
INTEREST ON OP. CAP.	acre	3.18	1.0000	3.18	_____

TOTAL DIRECT EXPENSES				230.07	_____
FIXED EXPENSES					
Implements	acre	11.63	1.0000	11.63	_____
Tractors	acre	5.04	1.0000	5.04	_____

TOTAL FIXED EXPENSES				16.67	_____

TOTAL SPECIFIED EXPENSES				246.74	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices

Table 21A. Estimated resource use and costs for field operations, per acre
Ryegrass annual pasture, prepared seedbed,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	2.00	Aug	4.25	3.93	3.07	8.12	0.28	5.03				24.40
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Ryegrass Seed	lb											25.0000	0.83	20.75	20.75
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Cultipacker	12'	2WD 75	0.124	1.00	Sep	1.88	1.74	0.22	0.38	0.12	2.23				6.45
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0000	31.08	31.08	31.08
Custom Spread(Truck)	appl			1.00	Dec							1.0000	7.50	7.50	7.50
Nitrogen	cwt											2.0000	31.08	62.16	62.16
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Dec	0.95	0.88	0.17	0.26	0.09	1.40				3.66
2,4-D amine	pt											1.0000	2.72	2.72	2.72
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.50	7.50	7.50
Nitrogen	cwt											2.0000	31.08	62.16	62.16
TOTALS						10.87	10.05	4.55	11.15	0.74	13.15			307.25	357.02
INTEREST ON OPERATING CAPITAL															11.44
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															368.46

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 21B. Estimated costs per acre
Ryegrass annual pasture, prepared seedbed,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	5.0000	155.40	_____
HERBICIDE					
2,4-D amine	pt	2.72	1.0000	2.72	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.83	25.0000	20.75	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	4.0000	30.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.7181	12.87	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.44	2.7723	9.54	_____
REPAIR & MAINTENANCE					
Implements	acre	4.55	1.0000	4.55	_____
Tractors	acre	1.33	1.0000	1.33	_____
INTEREST ON OP. CAP.	acre	11.44	1.0000	11.44	_____

TOTAL DIRECT EXPENSES				347.26	_____
FIXED EXPENSES					
Implements	acre	11.15	1.0000	11.15	_____
Tractors	acre	10.05	1.0000	10.05	_____

TOTAL FIXED EXPENSES				21.20	_____

TOTAL SPECIFIED EXPENSES				368.46	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 22A. Estimated resource use and costs for field operations, per acre
No-till ryegrass into volunteer summer annual grasses,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Glyphosate 3lbs a.e.	pt											2.0000	4.03	8.06	8.06
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.98	2.75	4.21	10.17	0.39	5.30				25.41
Ryegrass Seed	lb											35.0000	0.83	29.05	29.05
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Mustang Max	oz											0.1900	1.52	0.29	0.29
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0000	31.08	31.08	31.08
Custom Spread(Truck)	appl			1.00	Dec							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0000	31.08	31.08	31.08
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Dec	0.95	0.88	0.17	0.26	0.09	1.40				3.66
Gramoxone SL 2.0	oz											1.0000	0.33	0.33	0.33
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.50	7.50	7.50
Nitrogen	cwt											2.0000	31.08	62.16	62.16
TOTALS						5.83	5.39	4.72	10.95	0.67	9.50			270.80	307.19
INTEREST ON OPERATING CAPITAL															9.91
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															317.10

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 22B. Estimated costs per acre
No-till ryegrass into volunteer summer annual grasses,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	4.0000	124.32	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.0000	8.06	_____
Gramoxone SL 2.0	oz	0.33	1.0000	0.33	_____
INSECTICIDE					
Mustang Max	oz	1.52	0.1900	0.29	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.83	35.0000	29.05	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	4.0000	30.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.3844	6.88	_____
HAND LABOR					
Implements	hour	9.06	0.2904	2.62	_____
DIESEL FUEL					
Tractors	gal	3.44	1.4842	5.10	_____
REPAIR & MAINTENANCE					
Implements	acre	4.72	1.0000	4.72	_____
Tractors	acre	0.73	1.0000	0.73	_____
INTEREST ON OP. CAP.	acre	9.91	1.0000	9.91	_____

TOTAL DIRECT EXPENSES				300.76	_____
FIXED EXPENSES					
Implements	acre	10.95	1.0000	10.95	_____
Tractors	acre	5.39	1.0000	5.39	_____

TOTAL FIXED EXPENSES				16.34	_____

TOTAL SPECIFIED EXPENSES				317.10	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 23A. Estimated resource use and costs for field operations, per acre
No-till annual ryegrass perennial (bermuda and bahigrass) pasture maintenance,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Section Harrow	13'	2WD 75	0.119	1.00	Oct	1.81	1.67	0.13	0.25	0.11	2.14				6.00
NT Grain Drill	12'	2WD 75	0.196	1.00	Oct	3.00	2.94	4.21	10.17	0.39	5.30				25.62
Ryegrass Seed	lb											30.0000	0.83	24.90	24.90
Custom Spread(Truck)	appl			1.00	Dec							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.9000	31.08	27.97	27.97
Phosphate (46% P2O5)	cwt											2.0000	39.25	78.50	78.50
Potash (60% K2O)	cwt											1.5000	36.20	54.30	54.30
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.2000	31.08	37.30	37.30
Prorated Est Cost	acre				Jun							1.0000			38.94
TOTALS						6.29	5.98	5.95	11.84	0.61	9.20			241.27	319.47
INTEREST ON OPERATING CAPITAL															6.93
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															326.40

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices

Table 23B. Estimated costs per acre
No-till annual ryegrass perennial (bermuda and bahiagrass) pasture maintenance, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	2.1000	65.27	_____
Phosphate (46% P2O5)	cwt	39.25	2.0000	78.50	_____
Potash (60% K2O)	cwt	36.20	1.5000	54.30	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.83	30.0000	24.90	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.4141	7.42	_____
HAND LABOR					
Implements	hour	9.06	0.1964	1.78	_____
DIESEL FUEL					
Tractors	gal	3.44	1.5985	5.50	_____
REPAIR & MAINTENANCE					
Implements	acre	5.95	1.0000	5.95	_____
Tractors	acre	0.79	1.0000	0.79	_____
INTEREST ON OP. CAP.	acre	6.93	1.0000	6.93	_____

TOTAL DIRECT EXPENSES				269.64	_____
FIXED EXPENSES					
Implements	acre	11.84	1.0000	11.84	_____
Tractors	acre	5.98	1.0000	5.98	_____
Prorated Est Cost	acre	38.94	1.0000	38.94	_____

TOTAL FIXED EXPENSES				56.76	_____

TOTAL SPECIFIED EXPENSES				326.40	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 24A. Estimated resource use and costs for field operations, per acre
Overseeded annual ryegrass perennial (bermuda and bahia grass) pasture maintenance, broadcast, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Section Harrow	13'	2WD 75	0.119	1.00	Oct	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Custom Spread + Seed	appl			1.00	Oct							1.0000	5.00	5.00	5.00
Phosphate (46% P2O5)	cwt											2.0000	39.25	78.50	78.50
Potash (60% K2O)	cwt											1.5000	36.20	54.30	54.30
Ryegrass Seed	lb											30.0000	0.83	24.90	24.90
Custom Spread(Truck)	appl			1.00	Dec							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.9000	31.08	27.97	27.97
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.2000	31.08	37.30	37.30
Prorated Est Cost	acre				Jun							1.0000			38.94
TOTALS						3.29	3.04	1.74	1.67	0.21	3.90			246.27	298.85
INTEREST ON OPERATING CAPITAL															8.45
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															307.30

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 24B. Estimated costs per acre
Overseeded annual ryegrass perennial (bermuda and bahia grass) pasture maintenance, broadcast, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	2.0000	78.50	_____
Potash (60% K2O)	cwt	36.20	1.5000	54.30	_____
Nitrogen	cwt	31.08	2.1000	65.27	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.83	30.0000	24.90	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
CUSTOM PLANT					
Custom Spread + Seed	appl	5.00	1.0000	5.00	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.2176	3.90	_____
DIESEL FUEL					
Tractors	gal	3.44	0.8402	2.89	_____
REPAIR & MAINTENANCE					
Implements	acre	1.74	1.0000	1.74	_____
Tractors	acre	0.40	1.0000	0.40	_____
INTEREST ON OP. CAP.	acre	8.45	1.0000	8.45	_____

TOTAL DIRECT EXPENSES				263.65	_____
FIXED EXPENSES					
Implements	acre	1.67	1.0000	1.67	_____
Tractors	acre	3.04	1.0000	3.04	_____
Prorated Est Cost	acre	38.94	1.0000	38.94	_____

TOTAL FIXED EXPENSES				43.65	_____

TOTAL SPECIFIED EXPENSES				307.30	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 25A. Estimated resource use and costs for field operations, per acre
Sorghum x Sudan (SS), Pearl Millet (PM),
Forage Sorghum (FS) annual hay, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Apr								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Apr	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	2.00	Apr	4.25	3.93	3.07	8.12	0.28	5.03				24.40
Grain Drill	12'	2WD 75	0.157	1.00	May	2.38	2.20	3.03	7.31	0.31	4.24				19.16
SS, PM, FS Seed	lb											30.0000	1.29	38.70	38.70
Custom Spread(Truck)	appl			1.00	May							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	May	0.95	0.88	0.17	0.26	0.09	1.40				3.66
2,4-D amine	pt											1.5000	2.72	4.08	4.08
Custom Spread(Truck)	appl			1.00	May							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.5000	31.08	46.62	46.62
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Jul	3.47	3.21	5.13	6.71	0.22	4.11				22.63
Hay Rake	8.5'	2WD 50	0.202	2.00	Jul	3.94	2.66	1.69	2.76	0.40	7.26				18.31
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0800	31.66	2.53	2.53
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jul	4.54	4.20	0.05	0.15	0.30	5.38				14.32
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.5000	31.08	46.62	46.62
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Aug	3.47	3.21	5.13	6.71	0.22	4.11				22.63
Hay Rake	8.5'	2WD 50	0.202	2.00	Aug	3.94	2.66	1.69	2.76	0.40	7.26				18.31
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.21	2.96	7.88	11.45	0.21	3.80				29.30
Twine	bun											0.0600	31.66	1.90	1.90
Hay Mover	1B Lift	2WD 75	0.300	1.00	Aug	4.54	4.20	0.05	0.15	0.30	5.38				14.32
TOTALS						39.88	34.90	36.73	59.97	3.11	54.12			241.70	467.30
INTEREST ON OPERATING CAPITAL															15.31
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															482.61

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
2,4-D applied when sorghum/sudan is 4 to 6 inches tall.

Table 25B. Estimated costs per acre
Sorghum x Sudan (SS), Pearl Millet (PM),
Forage Sorghum (FS) annual hay, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	3.0000	93.24	_____
HERBICIDE					
2,4-D amine	pt	2.72	1.5000	4.08	_____
SEED/PLANTS					
SS, PM, FS Seed	lb	1.29	30.0000	38.70	_____
OTHER					
Twine	bun	31.66	0.1400	4.43	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	2.9216	52.42	_____
HAND LABOR					
Implements	hour	9.06	0.1884	1.70	_____
DIESEL FUEL					
Tractors	gal	3.44	10.2379	35.21	_____
REPAIR & MAINTENANCE					
Implements	acre	36.73	1.0000	36.73	_____
Tractors	acre	4.67	1.0000	4.67	_____
INTEREST ON OP. CAP.	acre	15.31	1.0000	15.31	_____

TOTAL DIRECT EXPENSES				387.74	_____
FIXED EXPENSES					
Implements	acre	59.97	1.0000	59.97	_____
Tractors	acre	34.90	1.0000	34.90	_____

TOTAL FIXED EXPENSES				94.87	_____

TOTAL SPECIFIED EXPENSES				482.61	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
2,4-D applied when sorghum/sudan is 4 to 6 inches tall.

Table 26A. Estimated resource use and costs for field operations, per acre
Sorghum x Sudan (SS), Pearl Millet (PM),
Forage Sorghum (FS) annual pasture, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Apr								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Apr	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	2.00	May	4.25	3.93	3.07	8.12	0.28	5.03				24.40
Spray (Broadcast)	27'	2WD 75	0.062	1.00	May	0.95	0.88	0.17	0.26	0.09	1.40				3.66
2,4-D amine	pt											1.5000	2.72	4.08	4.08
Grain Drill	12'	2WD 75	0.157	1.00	May	2.38	2.20	3.03	7.31	0.31	4.24				19.16
SS, PM, FS Seed	lb											30.0000	1.29	38.70	38.70
Custom Spread(Truck)	appl			1.00	May							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.4000	31.08	12.43	12.43
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.4000	31.08	12.43	12.43
TOTALS						9.56	8.84	7.23	17.83	0.81	13.02			168.89	225.37
INTEREST ON OPERATING CAPITAL															9.02
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															234.39

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
2,4-D applied when sorghum/sudan is 4 to 6 inches tall.

Table 26B. Estimated costs per acre
Sorghum x Sudan (SS), Pearl Millet (PM),
Forage Sorghum (FS) annual pasture, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	0.8000	24.86	_____
HERBICIDE					
2,4-D amine	pt	2.72	1.5000	4.08	_____
SEED/PLANTS					
SS, PM, FS Seed	lb	1.29	30.0000	38.70	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.6313	11.32	_____
HAND LABOR					
Implements	hour	9.06	0.1884	1.70	_____
DIESEL FUEL					
Tractors	gal	3.44	2.4374	8.39	_____
REPAIR & MAINTENANCE					
Implements	acre	7.23	1.0000	7.23	_____
Tractors	acre	1.17	1.0000	1.17	_____
INTEREST ON OP. CAP.	acre	9.02	1.0000	9.02	_____

TOTAL DIRECT EXPENSES				207.72	_____
FIXED EXPENSES					
Implements	acre	17.83	1.0000	17.83	_____
Tractors	acre	8.84	1.0000	8.84	_____

TOTAL FIXED EXPENSES				26.67	_____

TOTAL SPECIFIED EXPENSES				234.39	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
2,4-D applied when sorghum/sudan is 4 to 6 inches tall.

Table 27A. Estimated resource use and costs for field operations, per acre
Sorghum silage,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Lime (Spread)	ton			1.00	Sep								65.00		
Chisel Plow	15'	2WD 75	0.130	2.00	Apr	3.97	3.66	1.92	4.28	0.26	4.70				18.53
Spin Spreader	5 Ton	2WD 75	0.042	1.00	May	0.64	0.59	0.34	0.86	0.08	1.14				3.57
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											2.0000	36.20	72.40	72.40
Field Cultivate	12'	2WD 75	0.124	1.00	May	1.88	1.74	0.54	2.83	0.12	2.23				9.22
Disk Bed (Hipper)	4R-38	2WD 75	0.147	1.00	May	2.24	2.07	0.58	1.91	0.14	2.65				9.45
Row Cond	13'	2WD 75	0.119	1.00	May	1.81	1.67	1.16	2.09	0.11	2.14				8.87
Plant & Pre Rigid	4R-38	2WD 75	0.153	1.00	May	2.33	2.15	1.93	4.65	0.30	4.15				15.21
Forage Sorghum Seed	lb											6.0000	0.88	5.28	5.28
Bicep ll Magnum	qt											2.0000	15.44	30.88	30.88
Cultivate	4R-38	2WD 75	0.162	1.00	May	2.46	2.27	0.93	3.08	0.16	2.91				11.65
Spin Spreader	5 Ton	2WD 75	0.042	1.00	May	0.64	0.59	0.34	0.86	0.08	1.14				3.57
Nitrogen	cwt											2.6500	31.08	82.36	82.36
Cultivate	4R-38	2WD 75	0.162	1.00	Jun	2.46	2.27	0.93	3.08	0.16	2.91				11.65
Silage Harvester	2-Row	2WD 75	0.510	1.00	Sep	7.73	7.14	27.52	35.99	0.51	9.15				87.53
Silage Wagon 12T	12-Ton	2WD 75	0.510	1.00	Sep	7.73	7.14	3.37	9.69	0.51	9.15				37.08
TOTALS						33.89	31.29	39.56	69.32	2.47	42.27			283.06	499.39
INTEREST ON OPERATING CAPITAL															3.62
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															503.01

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 27B. Estimated costs per acre
Sorghum silage,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Nitrogen	cwt	31.08	3.7200	115.62	_____
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	2.0000	72.40	_____
HERBICIDE					
Bicep ll Magnum	qt	15.44	2.0000	30.88	_____
SEED/PLANTS					
Forage Sorghum Seed	lb	0.88	6.0000	5.28	_____
OPERATOR LABOR					
Tractors	hour	17.94	2.2365	40.12	_____
HAND LABOR					
Implements	hour	9.06	0.2379	2.15	_____
DIESEL FUEL					
Tractors	gal	3.44	8.6340	29.72	_____
REPAIR & MAINTENANCE					
Implements	acre	39.56	1.0000	39.56	_____
Tractors	acre	4.17	1.0000	4.17	_____
INTEREST ON OP. CAP.	acre	3.62	1.0000	3.62	_____

TOTAL DIRECT EXPENSES				402.40	_____
FIXED EXPENSES					
Implements	acre	69.32	1.0000	69.32	_____
Tractors	acre	31.29	1.0000	31.29	_____

TOTAL FIXED EXPENSES				100.61	_____

TOTAL SPECIFIED EXPENSES				503.01	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 28A. Estimated resource use and costs for field operations, per acre
Ryegrass, Small Grains (oat, cereal rye, triticale),
Annual Clover, Brassica mix annual pasture, prepared seedbed, Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	1.00	Aug	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Grain Drill	12'	2WD 130	0.157	1.00	Sep	4.28	4.98	3.03	7.31	0.31	4.24				23.84
Ryegrass Seed	lb											18.0000	0.83	14.94	14.94
Small Grains Seed	lb											60.0000	1.43	85.80	85.80
Brassica Seed	lb											2.0000	1.08	2.16	2.16
Balansa Clover	lb.											15.0000	3.13	46.95	46.95
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.5000	31.08	15.54	15.54
Custom Spread(Truck)	appl			1.00	Feb							1.0000	7.50	7.50	7.50
Nitrogen	cwt											0.5000	31.08	15.54	15.54
TOTALS						10.19	10.44	5.66	13.76	0.70	11.25			282.18	333.48
INTEREST ON OPERATING CAPITAL															15.24
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															348.72

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 28B. Estimated costs per acre
Ryegrass, Small Grains (oat, cereal rye, triticale), Annual Clover, Brassica mix annual pasture, prepared seedbed, Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	1.0000	31.08	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.83	18.0000	14.94	_____
Small Grains Seed	lb	1.43	60.0000	85.80	_____
Brassica Seed	lb	1.08	2.0000	2.16	_____
Balansa Clover	lb.	3.13	15.0000	46.95	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.5478	9.83	_____
HAND LABOR					
Implements	hour	9.06	0.1571	1.42	_____
DIESEL FUEL					
Tractors	gal	3.44	2.5598	8.81	_____
REPAIR & MAINTENANCE					
Implements	acre	5.66	1.0000	5.66	_____
Tractors	acre	1.38	1.0000	1.38	_____
INTEREST ON OP. CAP.	acre	15.24	1.0000	15.24	_____

TOTAL DIRECT EXPENSES				324.52	_____
FIXED EXPENSES					
Implements	acre	13.76	1.0000	13.76	_____
Tractors	acre	10.44	1.0000	10.44	_____

TOTAL FIXED EXPENSES				24.20	_____

TOTAL SPECIFIED EXPENSES				348.72	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 29A. Estimated resource use and costs for field operations, per acre
Ryegrass-Small grains annual pasture, prepared seedbed,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Jul							0.3300	10.00	3.30	3.30
Lime (Spread)	ton			1.00	Aug								65.00		
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Disk Harrow	14'	2WD 75	0.140	1.00	Aug	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.38	2.20	3.03	7.31	0.31	4.24				19.16
Ryegrass Seed	lb											20.0000	0.83	16.60	16.60
Small Grains Seed	lb											70.0000	1.43	100.10	100.10
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.0000	39.25	39.25	39.25
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.95	0.88	0.17	0.26	0.09	1.40				3.66
2,4-D amine	pt											1.5000	2.72	4.08	4.08
TOTALS						9.24	8.54	5.83	14.02	0.79	12.65			247.79	298.07
INTEREST ON OPERATING CAPITAL															12.63
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															310.70

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 29B. Estimated costs per acre
Ryegrass-Small grains annual pasture, prepared seedbed,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.0000	39.25	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	1.0700	33.26	_____
HERBICIDE					
2,4-D amine	pt	2.72	1.5000	4.08	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.83	20.0000	16.60	_____
Small Grains Seed	lb	1.43	70.0000	100.10	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	2.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	0.6105	10.95	_____
HAND LABOR					
Implements	hour	9.06	0.1884	1.70	_____
DIESEL FUEL					
Tractors	gal	3.44	2.3569	8.11	_____
REPAIR & MAINTENANCE					
Implements	acre	5.83	1.0000	5.83	_____
Tractors	acre	1.13	1.0000	1.13	_____
INTEREST ON OP. CAP.	acre	12.63	1.0000	12.63	_____

TOTAL DIRECT EXPENSES				288.14	_____
FIXED EXPENSES					
Implements	acre	14.02	1.0000	14.02	_____
Tractors	acre	8.54	1.0000	8.54	_____

TOTAL FIXED EXPENSES				22.56	_____

TOTAL SPECIFIED EXPENSES				310.70	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.

Table 30A. Estimated resource use and costs for field operations, per acre
Crabgrass establishment, broadcast,
Mississippi, 2025

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			0.33	Feb							0.3300	10.00	3.30	3.30
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.98	1.83	0.96	2.14	0.13	2.35				9.26
Lime (Spread)	ton			1.00	Apr								65.00		
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.96	0.94	0.17	0.26	0.09	1.40				3.73
Glyphosate 3lbs a.e.	pt											2.0000	4.03	8.06	8.06
Surfactant	pt											1.0000	3.30	3.30	3.30
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.12	1.96	1.54	4.06	0.14	2.52				12.20
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.81	1.67	0.13	0.25	0.11	2.14				6.00
Cyclone Spin	750Lb	2WD 105	0.200	1.00	Apr	4.25	3.93	0.28	1.22	0.30	4.50				14.18
Crabgrass seed	lb											20.0000	9.35	187.00	187.00
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.88	1.74	0.22	0.38	0.12	2.23				6.45
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.50	7.50	7.50
Phosphate (46% P2O5)	cwt											1.5000	39.25	58.88	58.88
Potash (60% K2O)	cwt											1.0000	36.20	36.20	36.20
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.48	1.37	1.61	1.42	0.09	1.76				7.64
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.50	7.50	7.50
Nitrogen	cwt											1.0700	31.08	33.26	33.26
TOTALS						16.60	15.40	6.45	13.79	1.14	19.42			385.76	457.42
INTEREST ON OPERATING CAPITAL															19.02
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															476.44

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Table 30B. Estimated costs per acre
Crabgrass establishment, broadcast,
Mississippi, 2025

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	39.25	1.5000	58.88	_____
Potash (60% K2O)	cwt	36.20	1.0000	36.20	_____
Nitrogen	cwt	31.08	2.1400	66.51	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	4.03	2.0000	8.06	_____
SEED/PLANTS					
Crabgrass seed	lb	9.35	20.0000	187.00	_____
ADJUVANTS					
Surfactant	pt	3.30	1.0000	3.30	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.50	3.0000	22.50	_____
SERVICE FEE					
Soil Testing	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	17.94	1.0163	18.23	_____
HAND LABOR					
Implements	hour	9.06	0.1313	1.19	_____
DIESEL FUEL					
Tractors	gal	3.44	4.2323	14.55	_____
REPAIR & MAINTENANCE					
Implements	acre	6.45	1.0000	6.45	_____
Tractors	acre	2.05	1.0000	2.05	_____
INTEREST ON OP. CAP.	acre	19.02	1.0000	19.02	_____

TOTAL DIRECT EXPENSES				447.25	_____
FIXED EXPENSES					
Implements	acre	13.79	1.0000	13.79	_____
Tractors	acre	15.40	1.0000	15.40	_____

TOTAL FIXED EXPENSES				29.19	_____

TOTAL SPECIFIED EXPENSES				476.44	_____

Note: Cost of production estimates are based on 2023 input prices.
Fertilization and lime decisions should be based on soil test recommendations.
Nitrogen price is an average of Urea, Ammonium Nitrate, and Ammonium Sulfate prices.
This budget assumes 40 units of nitrogen being applied after emergence and 40 units applied after the first grazing cycle.

Appendix

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2025

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					
Tractor(40-59hp)CAB	2WD 50	39,900	600	8	2.57	17.94	8.85	1.24	28.04	9.33	37.37
Tractor(40-59hp)CAB	MFWD 50	50,300	600	8	2.57	17.94	8.85	1.57	28.36	11.77	40.13
Tractor(40-59hp)RB	2WD 50	28,100	600	8	2.57	17.94	8.85	0.87	27.67	6.57	34.24
Tractor(40-59hp)RB	MFWD 50	33,900	600	8	2.57	17.94	8.85	1.05	27.85	7.93	35.78
Tractor(60-89hp)CAB	2WD 75	64,000	600	8	3.86	17.94	13.27	2.00	33.21	14.97	48.19
Tractor(60-89hp)CAB	MFWD 75	74,900	600	8	3.86	17.94	13.27	2.34	33.56	17.52	51.08
Tractor(60-89hp)RB	2WD 75	59,800	600	8	3.86	17.94	13.27	1.86	33.08	13.99	47.08
Tractor(60-89hp)RB	MFWD 75	53,500	600	8	3.86	17.94	13.27	1.67	32.89	12.51	45.41
Tractor(90-119hp)CB	2WD 105	94,400	600	8	5.40	17.94	18.59	2.95	39.48	22.08	61.57
Tractor(90-119hp)CB	MFWD 105	102,500	600	8	5.40	17.94	18.59	3.20	39.73	23.98	63.71
Tractor(90-119hp)RB	2WD 105	84,000	600	8	5.40	17.94	18.59	2.62	39.15	19.65	58.81
Tractor(90-119hp)RB	MFWD 105	90,700	600	8	5.40	17.94	18.59	2.83	39.36	21.22	60.58
Tractor(120-139hp)CB	2WD 130	135,400	600	8	6.69	17.94	23.01	4.23	45.18	31.68	76.87
Tractor(120-139hp)CB	MFWD 130	170,900	600	8	6.69	17.94	23.01	5.34	46.29	39.99	86.28
Tractor(140-159hp)CB	2WD 150	137,500	600	8	7.72	17.94	26.55	4.29	48.79	32.17	80.97
Tractor(140-159hp)CB	MFWD 150	171,000	600	8	7.72	17.94	26.55	5.34	49.84	40.01	89.85

Notes:
Labor: Includes allocated labor from power unit.
Total Direct: Does not include interest on operating capital.

Appendix Table 2 Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2025

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	----------$/acre----------							
Chisel Plow	15'	2WD 130	20,300	150	12	0.130	2.34	3.01	0.95	0.55	6.87	2.14	4.14	13.16
Cult & Post	4R-38	2WD 105	27,300	150	10	0.162	3.64	3.01	1.18	0.42	8.27	3.90	3.19	15.37
Cult & Post	6R-30	MFWD 150	33,900	150	10	0.137	3.08	3.65	1.24	0.73	8.71	4.10	5.50	18.32
Cult & Post	6R-38	MFWD 150	33,800	150	10	0.108	2.43	2.88	0.97	0.58	6.88	3.23	4.34	14.45
Cult & Post	8R-30	MFWD 150	44,200	150	10	0.103	2.31	2.73	1.21	0.55	6.82	4.01	4.12	14.96
Cultipacker	12'	2WD 105	7,470	300	12	0.124	2.23	2.31	0.21	0.32	5.09	0.38	2.44	7.91
Cultipacker	20'	MFWD 150	13,500	300	12	0.074	1.33	1.98	0.23	0.39	3.95	0.41	2.98	7.36
Cultivate	4R-38	2WD 105	21,500	150	10	0.162	2.91	3.01	0.93	0.42	7.29	3.07	3.19	13.55
Cultivate	6R-30	MFWD 150	28,100	150	10	0.137	2.46	3.65	1.03	0.73	7.88	3.40	5.50	16.79
Cultivate	6R-38	MFWD 150	28,000	150	10	0.108	1.94	2.88	0.81	0.58	6.22	2.67	4.34	13.24
Cultivate	8R-30	MFWD 150	38,400	150	10	0.103	1.85	2.73	1.05	0.55	6.19	3.48	4.12	13.81
Cyclone Spin	750Lb	2WD 105	1,860	50	8	0.200	4.49	3.71	0.27	0.52	9.01	1.21	3.93	14.16
Disk & Incorporate	14'	2WD 130	45,300	200	10	0.147	3.31	3.39	2.00	0.62	9.32	4.41	4.66	18.40
Disk & Incorporate	24'	MFWD 150	77,700	200	10	0.085	1.93	2.28	2.00	0.45	6.67	4.41	3.43	14.52
Disk & Incorporate	32'	MFWD 150	95,100	200	10	0.064	1.44	1.71	1.83	0.34	5.34	4.05	2.57	11.97
Disk Bed (Hipper)	4R-38	MFWD 150	15,700	160	10	0.147	2.64	3.92	0.57	0.78	7.93	1.91	5.90	15.76
Disk Bed (Hipper)	6R-38	MFWD 150	23,900	160	10	0.098	1.77	2.62	0.58	0.52	5.50	1.94	3.94	11.40
Disk Bed (Hipper)	8R-30	MFWD 150	33,100	160	10	0.093	1.68	2.48	0.77	0.50	5.44	2.56	3.75	11.76
Disk Harrow	14'	2WD 130	39,400	180	10	0.140	2.51	3.22	1.53	0.59	7.87	4.05	4.44	16.38
Disk Harrow	24'	MFWD 150	71,900	180	10	0.081	1.46	2.17	1.63	0.43	5.71	4.32	3.27	13.31
Disk Harrow	32'	MFWD 150	89,300	180	10	0.061	1.10	1.63	1.52	0.32	4.58	4.02	2.45	11.06
Fert Appl (Liquid)	4R-38	MFWD 150	25,400	150	8	0.154	3.47	4.10	2.61	0.82	11.02	3.67	6.18	20.89
Fert Appl (Liquid)	6R-30	MFWD 150	25,300	150	8	0.130	2.94	3.47	2.20	0.69	9.32	3.10	5.23	17.66
Fert Appl (Liquid)	6R-38	MFWD 150	25,300	150	8	0.103	2.32	2.74	1.74	0.55	7.36	2.44	4.13	13.94
Fert Appl (Liquid)	8R-30	MFWD 150	26,300	150	8	0.098	2.20	2.60	1.72	0.52	7.06	2.41	3.92	13.40
Field Cult & Inc	12'	2WD 150	23,000	100	10	0.124	2.79	3.30	0.71	0.53	7.35	3.78	4.00	15.13
Field Cult & Inc	24'	MFWD 150	44,400	100	10	0.062	1.39	1.65	0.69	0.33	4.07	3.65	2.48	10.21
Field Cultivate	12'	2WD 150	17,200	100	10	0.124	2.23	3.30	0.53	0.53	6.60	2.82	4.00	13.43
Field Cultivate	24'	MFWD 150	38,600	100	10	0.062	1.11	1.65	0.60	0.33	3.70	3.17	2.48	9.36
Front Loader	.5 yd	2WD 75	6,880	100	10	0.120	2.15	1.59	0.49	0.22	4.46	1.17	1.67	7.31
Grain Drill	12'	2WD 130	51,400	150	8	0.157	4.24	3.61	3.02	0.66	11.55	7.31	4.97	23.84
Hay Baler	Lg Round	2WD 105	66,200	200	8	0.211	3.79	3.93	7.87	0.55	16.16	11.44	4.15	31.76
Hay Baler	Med Rnd	2WD 75	46,700	200	8	0.211	3.79	2.80	5.55	0.39	12.55	8.07	2.96	23.59
Hay Baler	Square	2WD 50	37,000	200	8	0.229	4.11	2.02	4.23	0.20	10.58	6.93	1.50	19.01
Hay Cut-Cond	9'	2WD 105	35,800	200	8	0.229	4.11	4.26	5.12	0.60	14.10	6.70	4.50	25.31
Hay Cut-Cond	12'	2WD 105	47,300	200	8	0.171	3.08	3.19	5.08	0.45	11.81	6.64	3.37	21.83
Hay Disc Mower	8'	2WD 75	15,000	200	8	0.257	4.62	3.42	2.41	0.48	10.94	3.16	3.60	17.71
Hay Disc Mower	10'	2WD 50	17,300	200	8	0.206	3.70	1.82	2.23	0.18	7.93	2.91	1.35	12.21
Hay Mover	1B Lift	2WD 50	680	200	10	0.300	5.38	2.65	0.05	0.26	8.35	0.14	1.97	10.47
Hay Rake	8.5'	2WD 50	8,340	200	8	0.202	3.62	1.79	0.84	0.17	6.43	1.37	1.32	9.14
Hay Rake-Double	17'	2WD 75	8,100	200	8	0.101	1.81	1.34	0.40	0.18	3.75	0.66	1.41	5.83
Hay Tedder	17'	2WD 105	12,300	200	8	0.101	1.81	1.87	0.62	0.26	4.58	1.01	1.98	7.58
Hay Trailer	20'	2WD 75	4,840	200	15	0.090	1.61	1.19	0.11	0.16	3.09	0.25	1.25	4.60
NT Grain Drill	12'	2WD 130	57,200	150	8	0.196	5.30	4.52	4.21	0.83	14.86	10.17	6.22	31.26
NT Plant & Pre Rigid	4R-38	2WD 130	37,500	150	8	0.153	4.15	3.53	2.16	0.65	10.50	5.21	4.87	20.59
NT Plant & Pre Rigid	6R-30	MFWD 150	50,800	150	8	0.130	3.51	3.45	2.47	0.69	10.14	5.98	5.20	21.34
NT Plant & Pre Rigid	6R-38	MFWD 150	49,500	150	8	0.102	2.77	2.72	1.90	0.54	7.96	4.60	4.11	16.67
NT Plant Rigid	4R-38	2WD 130	37,500	150	8	0.148	3.99	3.40	2.08	0.62	10.11	5.02	4.69	19.83
NT Plant Rigid	6R-30	MFWD 150	50,800	150	8	0.125	3.38	3.32	2.38	0.66	9.77	5.76	5.01	20.55
NT Plant Rigid	6R-38	MFWD 150	49,500	150	8	0.098	2.67	2.62	1.83	0.52	7.66	4.43	3.96	16.06
Plant & Pre Rigid	4R-38	2WD 130	33,400	150	8	0.153	4.15	3.53	1.92	0.65	10.26	4.64	4.87	19.78
Plant & Pre Rigid	6R-30	MFWD 150	44,700	150	8	0.126	3.40	3.35	2.11	0.67	9.55	5.11	5.05	19.71
Plant & Pre Rigid	6R-38	MFWD 150	43,300	150	8	0.102	2.77	2.72	1.66	0.54	7.72	4.02	4.11	15.86
Plant Rigid	4R-38	2WD 130	27,600	150	8	0.148	3.99	3.40	1.53	0.62	9.56	3.69	4.69	17.95
Plant Rigid	6R-30	MFWD 150	38,900	150	8	0.125	3.38	3.32	1.82	0.66	9.21	4.41	5.01	18.64
Plant Rigid	6R-38	MFWD 150	37,500	150	8	0.098	2.67	2.62	1.39	0.52	7.22	3.35	3.96	14.54
Rotary Mower	7'	MFWD 130	6,580	185	10	0.168	3.02	3.87	0.89	0.89	8.69	0.79	6.73	16.21
Rotary Mower	12'	2WD 150	20,200	185	10	0.098	1.76	2.60	1.60	0.42	6.40	1.41	3.15	10.97
Rotary Mower	15'	MFWD 150	27,300	185	10	0.078	1.40	2.08	1.73	0.41	5.65	1.53	3.14	10.33
Row Cond	13'	2WD 130	12,900	100	10	0.119	2.14	2.74	1.15	0.50	6.55	2.08	3.78	12.42
Row Cond	21'	2WD 150	21,200	100	10	0.078	1.40	2.08	0.41	0.33	4.25	2.20	2.52	8.98
Row Cond & Inc	13'	2WD 130	18,700	100	10	0.126	2.85	2.92	0.59	0.53	6.90	3.13	4.02	14.06
Row Cond & Inc	21'	2WD 150	26,900	100	10	0.078	1.76	2.08	0.52	0.33	4.71	2.79	2.52	10.04
Section Harrow	13'	2WD 105	3,210	200	10	0.119	2.14	2.22	0.13	0.31	4.81	0.25	2.34	7.41
Silage Harvester	2-Row	2WD 105	86,300	200	8	0.510	9.15	9.48	27.51	1.33	47.49	35.99	10.02	93.51
Silage Harvester 3-R	3-Row	2WD 105	69,100	200	8	0.336	6.04	6.26	14.54	0.99	27.83	19.01	7.43	54.29
Silage Wagon	10-Ton	2WD 75	11,838	200	15	0.510	9.15	6.77	1.20	0.95	18.08	3.47	7.13	28.70
Silage Wagon 12T	12-Ton	2WD 105	33,000	200	15	0.510	9.15	9.48	3.36	1.50	23.51	9.69	11.26	44.47
Spin Spreader	5 Ton	MFWD 150	14,500	100	8	0.042	1.13	1.11	0.34	0.22	2.82	0.85	1.68	5.36
Spray (Broadcast)	27'	MFWD 150	5,810	200	8	0.062	1.40	1.66	0.17	0.33	3.57	0.25	2.50	6.34
Spray (Spot)	27'	MFWD 150	5,810	200	8	0.062	1.40	1.66	0.17	0.33	3.57	0.25	2.50	6.34
Subsoiler	3 Shank	MFWD 150	5,690	100	15	0.020	0.36	0.54	0.03	0.10	1.05	0.12	0.81	2.00
Tailgate Seeder		2WD 50	2,100	100	8	0.200	3.58	1.77	0.52	0.17	6.05	0.68	1.31	8.06

Notes:
Labor: Includes labor from Power unit plus additional labor from the implement.
Total Direct: Does not include interest on operating capital.

Appendix Table 3. Operating inputs: estimated prices, Mississippi, 2025

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Gramoxone SL 2.0	oz	0.33
Crop Oil (veg)	pt	2.90	Grazon P+D	pt	6.12
Surfactant	pt	3.30	GrazonNext	pt	8.56
CUSTOM FERT			Metribuzin 75	lb	10.90
App Fert by Air	cwt	8.00	Pendimethalin	pt	6.63
App Fert by Air(Min)	appl	8.00	Poast	pt	16.86
Custom Spread(Truck)	appl	7.50	Poast Plus	pt	9.49
CUSTOM LIME			Pursuit	oz	3.04
Lime (Spread)	ton	65.00	Remedy Ultra	pt	11.80
CUSTOM PLANT			Roundup Original	pt	4.50
Custom Spread + Seed	appl	5.00	Roundup Power Max	pt	4.50
Custom Sprig	acre	100.00	Roundup Power Max	oz	0.28
Plant by Air	cwt	8.43	Ultra Blazer	pt	7.50
CUSTOM SPRAY			Weedmaster	pt	2.82
App by Air (10 gal)	appl	10.57	INSECTICIDE		
App by Air (2 gal)	appl	3.00	Baythroid XL	oz	1.32
App by Air (3 gal)	appl	6.87	Blackhawk 36 WG	oz	10.47
App by Air (5 gal)	appl	8.11	Coragen	oz	6.93
FERTILIZER			Intrepid 2F	oz	1.80
Boron Plus	gal	40.80	Lannate LV	pt	8.33
Fert 10-34-0	cwt	40.00	Malathion 57 EC	pt	6.61
Fert 13-13-13	cwt	33.92	Mustang Max	oz	1.52
Fert 33-0-0-12S	cwt	47.79	Prevathon	oz	1.28
Molybdenum	lb	24.50	Sevin XLR Plus	qt	21.50
Nitrogen	cwt	31.08	OTHER		
Phosphate (46% P2O5)	cwt	39.25	Twine	bun	31.66
Potash (60% K2O)	cwt	36.20	SEED/PLANTS		
UAN (32% N)	cwt	36.15	Alfalfa Seed	lb	4.84
UAN + Sulfur (28%)	cwt	31.10	Bahiagrass Seed	lb	3.40
Urea, Solid (46% N)	cwt	31.69	Balansa Clover	lb.	3.13
HAUL			Brassica Seed	lb	1.08
Hay Haul (Conv)	ton	25.00	Common Bermuda Seed	lb	6.16
HERBICIDE			Corn Seed RR2	thous	4.26
2,4-D amine	pt	2.72	Crabgrass seed	lb	9.35
2,4-D ester	pt	4.87	Crimson Clover Seed	lb	2.30
2,4-DB	pt	3.76	Dallisgrass Seed	lb	10.95
AAtrex 4L	pt	3.00	Fescue Seed	lb	2.70
Accent Q	oz	23.39	Forage Sorghum Seed	lb	0.88
Atrazine 4L	pt	2.71	MaxQ Fescue Seed	lb	5.84
Balan	lb	1.28	Millet Seed	lb	1.44
Banvel	pt	10.94	Red Clover Seed	lb	3.20
Basagran	pt	5.43	Ryegrass Seed	lb	0.83
Bicep ll Magnum	qt	15.44	Small Grains Seed	lb	1.43
Buctril 4EC	pt	4.28	SS, PM, FS Seed	lb	1.29
Clethodim	oz	0.33	SS, PM, Seed	lb	1.28
Dicamba	pt	5.32	Wheat Seed	lb	0.34
Diuron 4L	pt	4.25	White Clover Seed	lb	5.11
Dual II Magnum	pt	13.25	SERVICE FEE		
Dual Magnum	pt	10.75	Soil Testing	acre	10.00
Glyphosate 3lbs a.e.	pt	4.03			
Gramoxone Inteon	oz	0.17			

Appendix Table 4. Estimated fuel prices and interest rates, Mississippi, 2025

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

Appendix Table 5. Labor types and wage rates, Mississippi, 2025

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	17.94
HAND LABOR	hour	9.06

Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.

2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.

3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968.".

4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961

5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.

6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.

7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.

8. "Corn, Grain Sorghum & Wheat 2024 Planning Budgets." Budget Report No. 2023-03, Department of Agricultural Economics, Mississippi State University, November 2023.

9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.

10. "Cotton 2024 Planning Budgets." Budget Report No. 2023-01, Department of Agricultural Economics, Mississippi State University, November 2023.

11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.

12. "Forage 2024 Planning Budgets." Budget Report No. 2023-08, Department of Agricultural Economics, Mississippi State University, April 2023.

13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.

14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.

15. "Peanuts 2024 Planning Budgets." Budget Report No. 2023-07, Department of Agricultural Economics, Mississippi State University, November 2023.

16. "Rice 2024 Planning Budgets." Budget Report No. 2023-04, Department of Agricultural Economics, Mississippi State University, November 2023.

17. "Soybeans 2024 Planning Budgets." Budget Report No. 2023-02, Department of Agricultural Economics, Mississippi State University, November 2023.

18. "Vegetables 2018 Planning Budgets." Budget Report No. 2017-09, Department of Agricultural Economics, Mississippi State University December 2017.

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