

FORAGE 2012 PLANNING BUDGETS

**Mississippi State University
Department of Agricultural Economics
Budget Report 2012-01**

May 2012

Foreword

This report is designed to provide necessary planning data to farmers, research and extension staffs, 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 staffs for the excellent cooperation that made this report possible.

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

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W. Gail Gillis, MAFES

Publication Review

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John Michael Riley, MSU-ES

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2012 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 own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage.

Committees made up of appropriate disciplines from the Mississippi Agricultural and Forestry Experiment Station, the Mississippi State University Extension Service, and the U.S. Department of Agriculture review and update the practices in the budgets every year. The updates are based on the 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 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 2011/2012. (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 cost are estimated for the life of the equipment and include oil and lubricants (1, 4, and 6).

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

RPH = R&M cost per hour of use
 RLC = Replacement cost of machine
 RP = R&M percentage (percent of RLC)
 THL = Total hours of machine life
 RPA = R&M cost per acre
 PR = Performance rate

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

The labor wage rate per hour includes social security, accident and unemployment insurance, and some prerequisites (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 that 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 which computes the annual capital recovery charge (2, p. 143). When a combination of machines or equipment is required to perform a single operation, the total cost per acre for all equipment used in the operation is estimated. The fixed cost of machinery ownership is calculated by first computing the capital recovery factor and then using it to estimate the annual capital recovery charge.

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

where:

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

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

where:

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

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

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

$$CRCPA = CRCPH \times PR$$

where:

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

Enterprise Budgets

Table 1.A Estimated resource use and costs for field operations, per acre
 Alfalfa hay establishment, prepared seed bed
 Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.5000	44.00	22.00	22.00
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Aug	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Disk Harrow	14'	2WD 75	0.140	2.00	Aug	3.99	1.91	1.64	3.54	0.28	3.26				14.34
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Balan	lb											1.5000	15.50	23.25	23.25
Custom Spread(Truck) appl				1.00	Sep							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5)	cwt											1.0000	28.65	28.65	28.65
Potash (60% K2O)	cwt											3.0000	29.19	87.57	87.57
Boron 15G	lb											3.0000	0.40	1.20	1.20
Disk Harrow	14'	2WD 75	0.140	1.00	Sep	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.70	0.81	0.16	0.24	0.11	1.39				4.30
Cyclone Spin	750 lb	2WD 75	0.200	1.00	Sep	2.85	1.36	0.16	0.59	0.30	3.23				8.19
Alfalfa Seed	lb											20.0000	5.27	105.40	105.40
Cultipacker	12'	2WD 75	0.124	1.00	Sep	1.77	0.85	0.14	0.20	0.12	1.44				4.40
TOTALS						14.96	7.16	3.44	7.17	1.18	13.39			275.67	321.79
INTEREST ON OPERATING CAPITAL															7.82
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															329.61

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 1.B Estimated costs per acre
 Alfalfa hay establishment, prepared seed bed
 Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	1.0000	28.65	_____
Potash (60% K2O)	cwt	29.19	3.0000	87.57	_____
Boron 15G	lb	0.40	3.0000	1.20	_____
HERBICIDE					
Balan	lb	15.50	1.5000	23.25	_____
SEED/PLANTS					
Alfalfa Seed	lb	5.27	20.0000	105.40	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	1.0000	7.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.5000	22.00	_____
OPERATOR LABOR					
Tractors	hour	11.60	1.0507	12.20	_____
HAND LABOR					
Implements	hour	9.06	0.1313	1.19	_____
DIESEL FUEL					
Tractors	gal	3.40	4.0563	13.79	_____
REPAIR & MAINTENANCE					
Implements	acre	3.44	1.0000	3.44	_____
Tractors	acre	1.17	1.0000	1.17	_____
INTEREST ON OP. CAP.	acre	7.82	1.0000	7.82	_____
TOTAL DIRECT EXPENSES				315.28	_____
FIXED EXPENSES					
Implements	acre	7.17	1.0000	7.17	_____
Tractors	acre	7.16	1.0000	7.16	_____
TOTAL FIXED EXPENSES				14.33	_____
TOTAL SPECIFIED EXPENSES				329.61	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 2.A Estimated resource use and costs for field operations, per acre
 Alfalfa hay maintenance
 Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Nov							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Nov							0.5000	44.00	22.00	22.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Nov	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Metribuzin 75	lb											1.0000	15.00	15.00	15.00
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5)	cwt											2.0000	28.65	57.30	57.30
Potash (60% K2O)	cwt											1.5000	29.19	43.79	43.79
Boron 15G	lb											3.0000	0.40	1.20	1.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Furadan 4F	pt											1.0000	9.81	9.81	9.81
Hay Cut-Cond	9'	2WD 75	0.229	1.00	May	3.26	1.56	3.37	3.79	0.22	2.66				14.64
Hay Tedder	17'	2WD 75	0.101	1.00	May	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	2.00	May	2.87	1.38	0.48	0.67	0.20	2.35				7.75
Hay Baler	Conv	2WD 75	0.229	1.00	May	3.26	1.56	2.54	3.57	0.22	2.66				13.59
Twine	bun											0.0800	39.00	3.12	3.12
Hay Trailer	20'	2WD 75	0.090	1.00	May	1.28	0.61	0.10	0.18	0.09	1.04				3.21
Hay Haul (Conv)	ton											1.5000	25.00	37.50	37.50
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Jun	3.26	1.56	3.37	3.79	0.22	2.66				14.64
Hay Tedder	17'	2WD 75	0.101	1.00	Jun	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jun	2.87	1.38	0.48	0.67	0.20	2.35				7.75
Hay Baler	Conv	2WD 75	0.229	1.00	Jun	3.26	1.56	2.54	3.57	0.22	2.66				13.59
Twine	bun											0.0800	39.00	3.12	3.12
Hay Trailer	20'	2WD 75	0.090	1.00	Jun	1.28	0.61	0.10	0.18	0.09	1.04				3.21
Hay Haul (Conv)	ton											1.5000	25.00	37.50	37.50
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Jun	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Poast	pt											1.7000	10.22	17.37	17.37
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.00	7.00	7.00
Potash (60% K2O)	cwt											1.5000	29.19	43.79	43.79
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Aug	3.26	1.56	3.37	3.79	0.22	2.66				14.64
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	2.00	Aug	2.87	1.38	0.48	0.67	0.20	2.35				7.75
Hay Baler	Conv	2WD 75	0.229	1.00	Aug	3.26	1.56	2.54	3.57	0.22	2.66				13.59
Twine	bun											0.0500	39.00	1.95	1.95
Hay Trailer	20'	2WD 75	0.090	1.00	Aug	1.28	0.61	0.10	0.18	0.09	1.04				3.21
Hay Haul (Conv)	ton											1.0000	25.00	25.00	25.00
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Sep	3.26	1.56	3.37	3.79	0.22	2.66				14.64
Hay Tedder	17'	2WD 75	0.101	1.00	Sep	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	2.00	Sep	2.87	1.38	0.48	0.67	0.20	2.35				7.75
Hay Baler	Conv	2WD 75	0.229	1.00	Sep	3.26	1.56	2.54	3.57	0.22	2.66				13.59
Twine	bun											0.0500	39.00	1.95	1.95
Hay Trailer	20'	2WD 75	0.090	1.00	Sep	1.28	0.61	0.10	0.18	0.09	1.04				3.21
Hay Haul (Conv)	ton											1.0000	25.00	25.00	25.00
TOTALS						104.19	24.49	27.97	35.54	3.68	42.55			360.00	594.74
INTEREST ON OPERATING CAPITAL															3.81
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															598.55

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 2.B Estimated costs per acre
Alfalfa hay maintenance
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	2.0000	57.30	_____
Potash (60% K2O)	cwt	29.19	3.0000	87.57	_____
Boron 15G	lb	0.40	3.0000	1.20	_____
HERBICIDE					
Metribuzin 75	lb	15.00	1.0000	15.00	_____
Poast	pt	10.22	1.7000	17.37	_____
INSECTICIDE					
Furadan 4F	pt	9.81	1.0000	9.81	_____
HAUL					
Hay Haul (Conv)	ton	25.00	5.0000	125.00	_____
OTHER					
Twine	bun	39.00	0.2600	10.14	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	2.0000	14.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.5000	22.00	_____
OPERATOR LABOR					
Tractors	hour	11.60	3.5946	41.71	_____
HAND LABOR					
Implements	hour	9.06	0.0940	0.84	_____
DIESEL FUEL					
Tractors	gal	3.40	29.4880	100.26	_____
REPAIR & MAINTENANCE					
Implements	acre	27.97	1.0000	27.97	_____
Tractors	acre	3.93	1.0000	3.93	_____
INTEREST ON OP. CAP.	acre	3.81	1.0000	3.81	_____
TOTAL DIRECT EXPENSES				538.52	_____
FIXED EXPENSES					
Implements	acre	35.54	1.0000	35.54	_____
Tractors	acre	24.49	1.0000	24.49	_____
TOTAL FIXED EXPENSES				60.03	_____
TOTAL SPECIFIED EXPENSES				598.55	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 3.A Estimated resource use and costs for field operations, per acre
 Bahiagrass establishment
 Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Mar	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	44.00	14.52	14.52
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Custom Spread(Truck) appl				1.00	Apr							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5) cwt												1.5000	28.65	42.97	42.97
Potash (60% K2O) cwt												1.0000	29.19	29.19	29.19
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.70	0.81	0.16	0.24	0.11	1.39				4.30
Cyclone Spin	750 lb	2WD 75	0.200	1.00	Apr	2.85	1.36	0.16	0.59	0.30	3.23				8.19
Bahiagrass Seed	lb											30.0000	4.17	125.10	125.10
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.77	0.85	0.14	0.20	0.12	1.44				4.40
Custom Spread(Truck) appl				1.00	Jun							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S cwt												2.2500	19.00	42.75	42.75
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.40	0.67	0.86	0.62	0.09	1.14				4.69
TOTALS						13.48	6.45	3.33	5.84	1.04	11.89			269.13	310.12
INTEREST ON OPERATING CAPITAL															7.00
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															317.12

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 3.B Estimated costs per acre
 Bahiagrass establishment
 Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
Fert 33-0-0-12S	cwt	19.00	2.2500	42.75	_____
SEED/PLANTS					
Bahiagrass Seed	lb	4.17	30.0000	125.10	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	2.0000	14.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.9459	10.98	_____
HAND LABOR					
Implements	hour	9.06	0.1000	0.91	_____
DIESEL FUEL					
Tractors	gal	3.40	3.6518	12.42	_____
REPAIR & MAINTENANCE					
Implements	acre	3.33	1.0000	3.33	_____
Tractors	acre	1.06	1.0000	1.06	_____
INTEREST ON OP. CAP.	acre	7.00	1.0000	7.00	_____

TOTAL DIRECT EXPENSES				304.83	_____
FIXED EXPENSES					
Implements	acre	5.84	1.0000	5.84	_____
Tractors	acre	6.45	1.0000	6.45	_____

TOTAL FIXED EXPENSES				12.29	_____

TOTAL SPECIFIED EXPENSES				317.12	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 4.A Estimated resource use and costs for field operations, per acre
Common bermuda establishment
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Mar	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	44.00	14.52	14.52
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Custom Spread(Truck) appl				1.00	Apr							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5) cwt												1.5000	28.65	42.97	42.97
Potash (60% K2O) cwt												1.0000	29.19	29.19	29.19
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.70	0.81	0.16	0.24	0.11	1.39				4.30
Cyclone Spin	750 lb	2WD 75	0.200	1.00	Apr	2.85	1.36	0.16	0.59	0.30	3.23				8.19
Common Bermuda Seed lb												5.0000	4.79	23.95	23.95
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.77	0.85	0.14	0.20	0.12	1.44				4.40
Custom Spread(Truck) appl				1.00	Jun							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S cwt												2.2500	19.00	42.75	42.75
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.40	0.67	0.86	0.62	0.09	1.14				4.69
TOTALS						13.48	6.45	3.33	5.84	1.04	11.89			167.98	208.97
INTEREST ON OPERATING CAPITAL															4.49
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															213.46

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 4.B Estimated costs per acre
Common bermuda establishment
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
Fert 33-0-0-12S	cwt	19.00	2.2500	42.75	_____
SEED/PLANTS					
Common Bermuda Seed	lb	4.79	5.0000	23.95	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	2.0000	14.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.9459	10.98	_____
HAND LABOR					
Implements	hour	9.06	0.1000	0.91	_____
DIESEL FUEL					
Tractors	gal	3.40	3.6518	12.42	_____
REPAIR & MAINTENANCE					
Implements	acre	3.33	1.0000	3.33	_____
Tractors	acre	1.06	1.0000	1.06	_____
INTEREST ON OP. CAP.	acre	4.49	1.0000	4.49	_____

TOTAL DIRECT EXPENSES				201.17	_____
FIXED EXPENSES					
Implements	acre	5.84	1.0000	5.84	_____
Tractors	acre	6.45	1.0000	6.45	_____

TOTAL FIXED EXPENSES				12.29	_____

TOTAL SPECIFIED EXPENSES				213.46	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 5.A Estimated resource use and costs for field operations, per acre
 Dallisgrass establishment
 Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Mar	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	44.00	14.52	14.52
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.70	0.81	0.16	0.24	0.11	1.39				4.30
Cyclone Spin	750 lb	2WD 75	0.200	1.00	Apr	2.85	1.36	0.16	0.59	0.30	3.23				8.19
Dallisgrass Seed	lb											15.0000	5.75	86.25	86.25
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.77	0.85	0.14	0.20	0.12	1.44				4.40
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.0000	19.00	38.00	38.00
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.40	0.67	0.86	0.62	0.09	1.14				4.69
TOTALS						13.48	6.45	3.33	5.84	1.04	11.89			225.53	266.52
INTEREST ON OPERATING CAPITAL															5.95
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															272.47

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 5.B Estimated costs per acre
Dallisgrass establishment
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
Fert 33-0-0-12S	cwt	19.00	2.0000	38.00	_____
SEED/PLANTS					
Dallisgrass Seed	lb	5.75	15.0000	86.25	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	2.0000	14.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.9459	10.98	_____
HAND LABOR					
Implements	hour	9.06	0.1000	0.91	_____
DIESEL FUEL					
Tractors	gal	3.40	3.6518	12.42	_____
REPAIR & MAINTENANCE					
Implements	acre	3.33	1.0000	3.33	_____
Tractors	acre	1.06	1.0000	1.06	_____
INTEREST ON OP. CAP.	acre	5.95	1.0000	5.95	_____

TOTAL DIRECT EXPENSES				260.18	_____
FIXED EXPENSES					
Implements	acre	5.84	1.0000	5.84	_____
Tractors	acre	6.45	1.0000	6.45	_____

TOTAL FIXED EXPENSES				12.29	_____

TOTAL SPECIFIED EXPENSES				272.47	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 6.A Estimated resource use and costs for field operations, per acre
 Permanent summer pasture maintenance (i.e. bahia,
 bermuda, dallisgrass, mixed grasses), Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Phosphate (46% P2O5)	cwt											1.0000	28.65	28.65	28.65
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.89	0.43	0.15	0.18	0.09	1.01				2.66
GrazonNext	pt											2.0000	4.56	9.12	9.12
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.40	0.67	0.86	0.62	0.09	1.14				4.69
Lime (Spread)	ton			1.00	Aug							0.3300	44.00	14.52	14.52
Prorated Est Cost	acre				Aug							1.0000			25.99
TOTALS						2.29	1.10	1.01	0.80	0.19	2.15			153.08	186.42
INTEREST ON OPERATING CAPITAL															4.01
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															190.43

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 6.B Estimated costs per acre
 Permanent summer pasture maintenance (i.e. bahia,
 bermuda, dallisgrass, mixed grasses), Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	3.0000	57.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.0000	28.65	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
HERBICIDE					
GrazonNext	pt	4.56	2.0000	9.12	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	2.0000	14.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.1608	1.87	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.40	0.6210	2.11	_____
REPAIR & MAINTENANCE					
Implements	acre	1.01	1.0000	1.01	_____
Tractors	acre	0.18	1.0000	0.18	_____
INTEREST ON OP. CAP.	acre	4.01	1.0000	4.01	_____

TOTAL DIRECT EXPENSES				162.54	_____
FIXED EXPENSES					
Implements	acre	0.80	1.0000	0.80	_____
Tractors	acre	1.10	1.0000	1.10	_____
Prorated Est Cost	acre	25.99	1.0000	25.99	_____

TOTAL FIXED EXPENSES				27.89	_____

TOTAL SPECIFIED EXPENSES				190.43	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 7.A Estimated resource use and costs for field operations, per acre
 Permanent summer grass-white clover pasture maintenance
 North Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.40	0.67	0.86	0.62	0.09	1.14				4.69
Soil Testing	acre			1.00	Jun							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Jun							0.3300	44.00	14.52	14.52
Rotary Mower	12'	2WD 75	0.098	1.00	Sep	1.40	0.67	0.86	0.62	0.09	1.14				4.69
Tailgate Seeder		2WD 50	0.200	1.00	Sep	1.91	0.98	0.22	0.25	0.20	2.32				5.68
White Clover Seed	lb											2.0000	5.43	10.86	10.86
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.0000	19.00	19.00	19.00
Phosphate (46% P2O5)	cwt											1.0000	28.65	28.65	28.65
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Prorated Est Cost	acre				Jan							1.0000			25.99
TOTALS						4.71	2.32	1.94	1.49	0.39	4.60			109.82	150.87
INTEREST ON OPERATING CAPITAL															2.05
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															152.92

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 7.B Estimated costs per acre
 Permanent summer grass-white clover pasture maintenance
 North Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	1.0000	19.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.0000	28.65	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
SEED/PLANTS					
White Clover Seed	lb	5.43	2.0000	10.86	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	1.0000	7.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.3964	4.60	_____
DIESEL FUEL					
Tractors	gal	3.40	1.2729	4.33	_____
REPAIR & MAINTENANCE					
Implements	acre	1.94	1.0000	1.94	_____
Tractors	acre	0.38	1.0000	0.38	_____
INTEREST ON OP. CAP.	acre	2.05	1.0000	2.05	_____
TOTAL DIRECT EXPENSES				123.12	_____
FIXED EXPENSES					
Implements	acre	1.49	1.0000	1.49	_____
Tractors	acre	2.32	1.0000	2.32	_____
Prorated Est Cost	acre	25.99	1.0000	25.99	_____
TOTAL FIXED EXPENSES				29.80	_____
TOTAL SPECIFIED EXPENSES				152.92	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 8.A Estimated resource use and costs for field operations, per acre
Mixed grass hay maintenance
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.89	0.43	0.15	0.18	0.09	1.01					2.66
GrazonNext	pt											2.0000	4.56	9.12		9.12
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.00	7.00		7.00
Fert 33-0-0-12S	cwt											1.2500	19.00	23.75		23.75
Phosphate (46% P2O5)	cwt											1.0000	28.65	28.65		28.65
Potash (60% K2O)	cwt											1.5000	29.19	43.79		43.79
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jun	3.67	1.76	1.66	1.86	0.25	2.99					11.94
Hay Rake	8.5'	2WD 50	0.202	2.00	Jun	3.86	1.97	1.07	1.51	0.40	4.69					13.10
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jun	3.02	1.44	3.71	4.64	0.21	2.45					15.26
Twine	bun											0.0400	39.00	1.56		1.56
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Jun	4.27	2.04	0.02	0.06	0.30	3.48					9.87
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.00	7.00		7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50		28.50
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jul	3.67	1.76	1.66	1.86	0.25	2.99					11.94
Hay Rake	8.5'	2WD 50	0.202	2.00	Jul	3.86	1.97	1.07	1.51	0.40	4.69					13.10
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.02	1.44	3.71	4.64	0.21	2.45					15.26
Twine	bun											0.0400	39.00	1.56		1.56
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Jul	4.27	2.04	0.02	0.06	0.30	3.48					9.87
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.00	7.00		7.00
Fert 33-0-0-12S	cwt											1.7500	19.00	33.25		33.25
Hay Disc Mower	8'	2WD 75	0.257	1.00	Oct	3.67	1.76	1.66	1.86	0.25	2.99					11.94
Hay Rake	8.5'	2WD 50	0.202	2.00	Oct	3.86	1.97	1.07	1.51	0.40	4.69					13.10
Hay Baler	Lg Round	2WD 75	0.211	1.00	Oct	3.02	1.44	3.71	4.64	0.21	2.45					15.26
Twine	bun											0.0200	39.00	0.78		0.78
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Oct	4.27	2.04	0.02	0.06	0.30	3.48					9.87
Soil Testing	acre			1.00	Oct							1.0000	0.60	0.60		0.60
Lime (Spread)	ton			1.00	Oct							0.3300	44.00	14.52		14.52
Prorated Est Cost	acre				Oct							1.0000				25.99
TOTALS						45.35	22.06	19.53	24.39	3.61	41.84			207.08		386.24
INTEREST ON OPERATING CAPITAL																5.41
UNALLOCATED LABOR																0.00
TOTAL SPECIFIED COST																391.65

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 8.B Estimated costs per acre
Mixed grass hay maintenance
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	4.5000	85.50	_____
Phosphate (46% P2O5)	cwt	28.65	1.0000	28.65	_____
Potash (60% K2O)	cwt	29.19	1.5000	43.79	_____
HERBICIDE					
GrazonNext	pt	4.56	2.0000	9.12	_____
OTHER					
Twine	bun	39.00	0.1000	3.90	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	3.0000	21.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	3.5839	41.56	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.40	12.2744	41.74	_____
REPAIR & MAINTENANCE					
Implements	acre	19.53	1.0000	19.53	_____
Tractors	acre	3.61	1.0000	3.61	_____
INTEREST ON OP. CAP.	acre	5.41	1.0000	5.41	_____
TOTAL DIRECT EXPENSES				319.21	_____
FIXED EXPENSES					
Implements	acre	24.39	1.0000	24.39	_____
Tractors	acre	22.06	1.0000	22.06	_____
Prorated Est Cost	acre	25.99	1.0000	25.99	_____
TOTAL FIXED EXPENSES				72.44	_____
TOTAL SPECIFIED EXPENSES				391.65	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 9.A Estimated resource use and costs for field operations, per acre
Hybrid bermuda establishment, 1 cutting of hay
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Mar	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	44.00	14.52	14.52
Disk Harrow	14'	2WD 75	0.140	2.00	Apr	3.99	1.91	1.64	3.54	0.28	3.26				14.34
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											0.9000	19.00	17.10	17.10
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Custom Sprig	acre			1.00	May							1.0000	100.00	100.00	100.00
Cultipacker	12'	2WD 75	0.124	1.00	May	1.77	0.85	0.14	0.20	0.12	1.44				4.40
Spray (Broadcast)	27'	2WD 75	0.062	1.00	May	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Diuron 4L	pt											3.0000	3.28	9.84	9.84
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.1000	19.00	39.90	39.90
Hay Disc Mower	8'	2WD 75	0.257	1.00	Aug	3.67	1.76	1.66	1.86	0.25	2.99				11.94
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	1.00	Aug	1.44	0.69	0.24	0.34	0.10	1.17				3.88
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0300	39.00	1.17	1.17
TOTALS						31.25	8.61	8.30	11.95	1.29	14.92			269.29	344.32
INTEREST ON OPERATING CAPITAL															6.75
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															351.07

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 9.B Estimated costs per acre
 Hybrid bermuda establishment, 1 cutting of hay
 Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	3.0000	57.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
HERBICIDE					
Diuron 4L	pt	3.28	3.0000	9.84	_____
OTHER					
Twine	bun	39.00	0.0300	1.17	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	2.0000	14.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM PLANT					
Custom Sprig	acre	100.00	1.0000	100.00	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	1.2625	14.64	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.40	8.7767	29.84	_____
REPAIR & MAINTENANCE					
Implements	acre	8.30	1.0000	8.30	_____
Tractors	acre	1.41	1.0000	1.41	_____
INTEREST ON OP. CAP.	acre	6.75	1.0000	6.75	_____
TOTAL DIRECT EXPENSES				330.51	_____
FIXED EXPENSES					
Implements	acre	11.95	1.0000	11.95	_____
Tractors	acre	8.61	1.0000	8.61	_____
TOTAL FIXED EXPENSES				20.56	_____
TOTAL SPECIFIED EXPENSES				351.07	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 10.A Estimated resource use and costs for field operations, per acre
Hybrid bermuda hay maintenance
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.89	0.43	0.15	0.18	0.09	1.01				2.66
GrazonNext	pt											2.0000	4.56	9.12	9.12
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											2.0000	29.19	58.38	58.38
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jun	3.67	1.76	1.66	1.86	0.25	2.99				11.94
Hay Tedder	17'	2WD 75	0.101	1.00	Jun	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jun	2.87	1.38	0.48	0.67	0.20	2.35				7.75
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jun	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0600	39.00	2.34	2.34
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Jun	4.27	2.04	0.02	0.06	0.30	3.48				9.87
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jul	3.67	1.76	1.66	1.86	0.25	2.99				11.94
Hay Tedder	17'	2WD 75	0.101	1.00	Jul	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jul	2.87	1.38	0.48	0.67	0.20	2.35				7.75
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0600	39.00	2.34	2.34
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Jul	4.27	2.04	0.02	0.06	0.30	3.48				9.87
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.5000	44.00	22.00	22.00
Hay Disc Mower	8'	2WD 75	0.257	1.00	Aug	3.67	1.76	1.66	1.86	0.25	2.99				11.94
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	2.00	Aug	2.87	1.38	0.48	0.67	0.20	2.35				7.75
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0300	39.00	1.17	1.17
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Aug	4.27	2.04	0.02	0.06	0.30	3.48				9.87
Custom Spread(Truck)	appl			1.00	Aug							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Hay Disc Mower	8'	2WD 75	0.257	1.00	Sep	3.67	1.76	1.66	1.86	0.25	2.99				11.94
Hay Tedder	17'	2WD 75	0.101	1.00	Sep	14.71	0.69	0.39	0.54	0.10	1.17				17.50
Hay Rake-Double	17'	2WD 75	0.101	2.00	Sep	2.87	1.38	0.48	0.67	0.20	2.35				7.75
Hay Baler	Lg Round	2WD 75	0.211	1.00	Sep	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0300	39.00	1.17	1.17
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Sep	4.27	2.04	0.02	0.06	0.30	3.48				9.87
Prorated Est Cost	acre				Sep							1.0000			28.77
TOTALS						115.05	29.67	25.19	31.26	4.38	50.77			311.28	591.99
INTEREST ON OPERATING CAPITAL															8.21
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															600.20

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 10.B Estimated costs per acre
Hybrid bermuda hay maintenance
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	6.0000	114.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	3.0000	87.57	_____
HERBICIDE					
GrazonNext	pt	4.56	2.0000	9.12	_____
OTHER					
Twine	bun	39.00	0.1800	7.02	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	4.0000	28.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.5000	22.00	_____
OPERATOR LABOR					
Tractors	hour	11.60	4.3532	50.49	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.40	32.4168	110.22	_____
REPAIR & MAINTENANCE					
Implements	acre	25.19	1.0000	25.19	_____
Tractors	acre	4.83	1.0000	4.83	_____
INTEREST ON OP. CAP.	acre	8.21	1.0000	8.21	_____
TOTAL DIRECT EXPENSES				510.50	_____
FIXED EXPENSES					
Implements	acre	31.26	1.0000	31.26	_____
Tractors	acre	29.67	1.0000	29.67	_____
Prorated Est Cost	acre	28.77	1.0000	28.77	_____
TOTAL FIXED EXPENSES				89.70	_____
TOTAL SPECIFIED EXPENSES				600.20	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 11.A Estimated resource use and costs for field operations, per acre
Overseeded annual(min till)ryegrass pasture maintenance
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	44.00	14.52	14.52
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.40	0.67	0.86	0.62	0.09	1.14				4.69
Disk Harrow	14'	2WD 75	0.140	1.00	Oct	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Custom Spread + Seed appl				1.00	Oct							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5)	cwt											2.0000	28.65	57.30	57.30
Potash (60% K2O)	cwt											1.5000	29.19	43.79	43.79
Ryegrass Seed	lb											35.0000	0.79	27.65	27.65
Section Harrow	13'	2WD 75	0.119	1.00	Oct	1.70	0.81	0.16	0.24	0.11	1.39				4.30
Custom Spread(Truck)	appl			1.00	Feb							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											0.9000	19.00	17.10	17.10
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.2000	19.00	22.80	22.80
Rotary Mower	12'	2WD 75	0.098	1.00	May	1.40	0.67	0.86	0.62	0.09	1.14				4.69
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Jun	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Weedmaster	pt											2.0000	2.94	5.88	5.88
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.1000	19.00	39.90	39.90
Prorated Est Cost	acre				Jun							1.0000			17.49
TOTALS						7.39	3.54	2.85	3.43	0.55	6.31			257.54	298.55
INTEREST ON OPERATING CAPITAL															3.85
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															302.40

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 11.B Estimated costs per acre
Overseeded annual(min till)ryegrass pasture maintenance
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	2.0000	57.30	_____
Potash (60% K2O)	cwt	29.19	1.5000	43.79	_____
Fert 33-0-0-12S	cwt	19.00	4.2000	79.80	_____
HERBICIDE					
Weedmaster	pt	2.94	2.0000	5.88	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.79	35.0000	27.65	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	3.0000	21.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM PLANT					
Custom Spread + Seed	appl	7.00	1.0000	7.00	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.5188	6.03	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.40	2.0030	6.81	_____
REPAIR & MAINTENANCE					
Implements	acre	2.85	1.0000	2.85	_____
Tractors	acre	0.58	1.0000	0.58	_____
INTEREST ON OP. CAP.	acre	3.85	1.0000	3.85	_____
TOTAL DIRECT EXPENSES				277.94	_____
FIXED EXPENSES					
Implements	acre	3.43	1.0000	3.43	_____
Tractors	acre	3.54	1.0000	3.54	_____
Prorated Est Cost	acre	17.49	1.0000	17.49	_____
TOTAL FIXED EXPENSES				24.46	_____
TOTAL SPECIFIED EXPENSES				302.40	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 12.A Estimated resource use and costs for field operations, per acre
Tall fescue-white clover pasture establishment,
prepared seedbed, North Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	44.00	14.52	14.52
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Aug	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Disk Harrow	14'	2WD 75	0.140	2.00	Sep	3.99	1.91	1.64	3.54	0.28	3.26				14.34
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.70	0.81	0.16	0.24	0.11	1.39				4.30
Cyclone Spin	750 lb	2WD 75	0.200	1.00	Sep	2.85	1.36	0.16	0.59	0.30	3.23				8.19
MaxQ Fescue Seed	lb											20.0000	5.18	103.60	103.60
Cultipacker	12'	2WD 75	0.124	1.00	Sep	1.77	0.85	0.14	0.20	0.12	1.44				4.40
Tailgate Seeder		2WD 50	0.200	1.00	Sep	1.91	0.98	0.22	0.25	0.20	2.32				5.68
White Clover Seed	lb											3.0000	5.43	16.29	16.29
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.0000	19.00	19.00	19.00
TOTALS						13.98	6.75	2.69	5.47	1.14	13.07			240.17	282.13
INTEREST ON OPERATING CAPITAL															6.65
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															288.78

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 12.B Estimated costs per acre
Tall fescue-white clover pasture establishment,
prepared seedbed, North Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
Fert 33-0-0-12S	cwt	19.00	1.0000	19.00	_____
SEED/PLANTS					
MaxQ Fescue Seed	lb	5.18	20.0000	103.60	_____
White Clover Seed	lb	5.43	3.0000	16.29	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	2.0000	14.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	1.0477	12.16	_____
HAND LABOR					
Implements	hour	9.06	0.1000	0.91	_____
DIESEL FUEL					
Tractors	gal	3.40	3.7874	12.88	_____
REPAIR & MAINTENANCE					
Implements	acre	2.69	1.0000	2.69	_____
Tractors	acre	1.10	1.0000	1.10	_____
INTEREST ON OP. CAP.	acre	6.65	1.0000	6.65	_____
TOTAL DIRECT EXPENSES				276.56	_____
FIXED EXPENSES					
Implements	acre	5.47	1.0000	5.47	_____
Tractors	acre	6.75	1.0000	6.75	_____
TOTAL FIXED EXPENSES				12.22	_____
TOTAL SPECIFIED EXPENSES				288.78	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 13.A Estimated resource use and costs for field operations, per acre
Tall fescue-white clover pasture establishment,
sod-seeding, North Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	44.00	14.52	14.52
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Glyphosate 3lbs a.e.	pt											2.5000	1.75	4.38	4.38
Custom Spread(Truck) appl				1.00	Sep							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.0000	19.00	19.00	19.00
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.23	1.07	1.05	2.05	0.31	3.24				9.64
MaxQ Fescue Seed	lb											20.0000	5.18	103.60	103.60
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.23	1.07	1.05	2.05	0.31	3.24				9.64
White Clover Seed	lb											3.0000	5.43	16.29	16.29
TOTALS						5.35	2.57	2.25	4.28	0.72	7.49			237.55	259.49
INTEREST ON OPERATING CAPITAL															6.31
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															265.80

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 13.B Estimated costs per acre
Tall fescue-white clover pasture establishment,
sod-seeding, North Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	1.0000	19.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	1.75	2.5000	4.38	_____
SEED/PLANTS					
MaxQ Fescue Seed	lb	5.18	20.0000	103.60	_____
White Clover Seed	lb	5.43	3.0000	16.29	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	1.0000	7.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.3769	4.37	_____
HAND LABOR					
Implements	hour	9.06	0.3456	3.12	_____
DIESEL FUEL					
Tractors	gal	3.40	1.4552	4.94	_____
REPAIR & MAINTENANCE					
Implements	acre	2.25	1.0000	2.25	_____
Tractors	acre	0.41	1.0000	0.41	_____
INTEREST ON OP. CAP.	acre	6.31	1.0000	6.31	_____
TOTAL DIRECT EXPENSES				258.95	_____
FIXED EXPENSES					
Implements	acre	4.28	1.0000	4.28	_____
Tractors	acre	2.57	1.0000	2.57	_____
TOTAL FIXED EXPENSES				6.85	_____
TOTAL SPECIFIED EXPENSES				265.80	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 14.A Estimated resource use and costs for field operations, per acre
 Tall fescue-white clover pasture maintenance
 sod-seeding, `North Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.40	0.67	0.86	0.62	0.09	1.14				4.69
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	44.00	14.52	14.52
Tailgate Seeder		2WD 50	0.200	1.00	Oct	1.91	0.98	0.22	0.25	0.20	2.32				5.68
White Clover Seed	lb											2.0000	5.43	10.86	10.86
Custom Spread(Truck) appl				1.00	Oct							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5) cwt												1.5000	28.65	42.97	42.97
Potash (60% K2O) cwt												1.0000	29.19	29.19	29.19
Prorated Est Cost	acre				Oct							1.0000			21.78
TOTALS						3.31	1.65	1.08	0.87	0.29	3.46			105.14	137.29
INTEREST ON OPERATING CAPITAL															2.53
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															139.82

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 14.B Estimated costs per acre
Tall fescue-white clover pasture maintenance
sod-seeding, North Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
SEED/PLANTS					
White Clover Seed	lb	5.43	2.0000	10.86	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	1.0000	7.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.2982	3.46	_____
DIESEL FUEL					
Tractors	gal	3.40	0.8938	3.04	_____
REPAIR & MAINTENANCE					
Implements	acre	1.08	1.0000	1.08	_____
Tractors	acre	0.27	1.0000	0.27	_____
INTEREST ON OP. CAP.	acre	2.53	1.0000	2.53	_____
TOTAL DIRECT EXPENSES				115.52	_____
FIXED EXPENSES					
Implements	acre	0.87	1.0000	0.87	_____
Tractors	acre	1.65	1.0000	1.65	_____
Prorated Est Cost	acre	21.78	1.0000	21.78	_____
TOTAL FIXED EXPENSES				24.30	_____
TOTAL SPECIFIED EXPENSES				139.82	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 15.A Estimated resource use and costs for field operations, per acre
 No-till renovation of old tall fescue pasture with
 novel endophyte tall fescue, North Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Mar							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Mar							0.3300	44.00	14.52	14.52
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Glyphosate 3lbs a.e.	pt											2.5000	1.75	4.38	4.38
Surfactant	pt											0.4000	2.62	1.05	1.05
NT Grain Drill	12'	2WD 75	0.196	1.00	May	2.80	1.34	2.64	5.15	0.39	4.06				15.99
Sorghum x Sudan Seed	lb											25.0000	1.54	38.50	38.50
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Glyphosate 3lbs a.e.	pt											2.5000	1.75	4.38	4.38
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.84	1.58	2.64	5.15	0.39	4.06				16.27
White Clover Seed	lb											3.0000	5.43	16.29	16.29
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.80	1.34	2.64	5.15	0.39	4.06				15.99
MaxQ Fescue Seed	lb											20.0000	5.18	103.60	103.60
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.0000	19.00	19.00	19.00
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
TOTALS						10.22	5.12	8.22	15.81	1.36	14.20			281.48	335.05
INTEREST ON OPERATING CAPITAL															3.01
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															338.06

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 15.B Estimated costs per acre
 No-till renovation of old tall fescue pasture with
 novel endophyte tall fescue, North Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	1.0000	19.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	1.75	5.0000	8.75	_____
SEED/PLANTS					
Sorghum x Sudan Seed	lb	1.54	25.0000	38.50	_____
White Clover Seed	lb	5.43	3.0000	16.29	_____
MaxQ Fescue Seed	lb	5.18	20.0000	103.60	_____
ADJUVANTS					
Surfactant	pt	2.62	0.4000	1.05	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	1.0000	7.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.7146	8.30	_____
HAND LABOR					
Implements	hour	9.06	0.6519	5.90	_____
DIESEL FUEL					
Tractors	gal	3.40	2.7588	9.38	_____
REPAIR & MAINTENANCE					
Implements	acre	8.22	1.0000	8.22	_____
Tractors	acre	0.84	1.0000	0.84	_____
INTEREST ON OP. CAP.	acre	3.01	1.0000	3.01	_____
TOTAL DIRECT EXPENSES				317.13	_____
FIXED EXPENSES					
Implements	acre	15.81	1.0000	15.81	_____
Tractors	acre	5.12	1.0000	5.12	_____
TOTAL FIXED EXPENSES				20.93	_____
TOTAL SPECIFIED EXPENSES				338.06	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 16.A Estimated resource use and costs for field operations, per acre
Ryegrass annual pasture, prepared seedbed
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	44.00	14.52	14.52
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Aug	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Disk Harrow	14'	2WD 75	0.140	2.00	Aug	3.99	1.91	1.64	3.54	0.28	3.26				14.34
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Ryegrass Seed	lb											35.0000	0.79	27.65	27.65
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.70	0.81	0.16	0.24	0.11	1.39				4.30
Custom Spread(Truck)	appl			1.00	Oct							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.0000	19.00	19.00	19.00
Custom Spread(Truck)	appl			1.00	Dec							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.0000	19.00	38.00	38.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Dec	0.89	0.43	0.15	0.18	0.09	1.01				2.66
2,4-D amine	pt											1.0000	2.01	2.01	2.01
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.0000	19.00	38.00	38.00
TOTALS						8.34	3.99	2.32	4.61	0.61	7.09			239.94	266.29
INTEREST ON OPERATING CAPITAL															4.91
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															271.20

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 16.B Estimated costs per acre
 Ryegrass annual pasture, prepared seedbed
 Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
Fert 33-0-0-12S	cwt	19.00	5.0000	95.00	_____
HERBICIDE					
2,4-D amine	pt	2.01	1.0000	2.01	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.79	35.0000	27.65	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	4.0000	28.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.5860	6.81	_____
HAND LABOR					
Implements	hour	9.06	0.0313	0.28	_____
DIESEL FUEL					
Tractors	gal	3.40	2.2622	7.69	_____
REPAIR & MAINTENANCE					
Implements	acre	2.32	1.0000	2.32	_____
Tractors	acre	0.65	1.0000	0.65	_____
INTEREST ON OP. CAP.	acre	4.91	1.0000	4.91	_____
TOTAL DIRECT EXPENSES				262.60	_____
FIXED EXPENSES					
Implements	acre	4.61	1.0000	4.61	_____
Tractors	acre	3.99	1.0000	3.99	_____
TOTAL FIXED EXPENSES				8.60	_____
TOTAL SPECIFIED EXPENSES				271.20	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 17.A Estimated resource use and costs for field operations, per acre
 Ryegrass-wheat annual pasture, prepared seedbed
 Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	44.00	14.52	14.52
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Aug	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Disk Harrow	14'	2WD 75	0.140	2.00	Aug	3.99	1.91	1.64	3.54	0.28	3.26				14.34
Custom Spread(Truck)	appl			1.00	Sep							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.0000	19.00	19.00	19.00
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.70	0.81	0.16	0.24	0.11	1.39				4.30
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.23	1.07	1.05	2.05	0.31	3.24				9.64
Wheat Seed	1b											90.0000	0.32	28.80	28.80
Ryegrass Seed	1b											25.0000	0.79	19.75	19.75
Custom Spread(Truck)	appl			1.00	Dec							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.0000	19.00	38.00	38.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Dec	0.89	0.43	0.15	0.18	0.09	1.01				2.66
2,4-D amine	pt											1.0000	2.01	2.01	2.01
Custom Spread(Truck)	appl			1.00	Mar							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.0000	19.00	38.00	38.00
TOTALS						10.57	5.06	3.37	6.66	0.93	10.33			253.84	289.83
INTEREST ON OPERATING CAPITAL															5.50
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															295.33

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 17.B Estimated costs per acre
 Ryegrass-wheat annual pasture, prepared seedbed
 Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	5.0000	95.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
HERBICIDE					
2,4-D amine	pt	2.01	1.0000	2.01	_____
SEED/PLANTS					
Wheat Seed	lb	0.32	90.0000	28.80	_____
Ryegrass Seed	lb	0.79	25.0000	19.75	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	3.0000	21.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.7431	8.63	_____
HAND LABOR					
Implements	hour	9.06	0.1884	1.70	_____
DIESEL FUEL					
Tractors	gal	3.40	2.8688	9.75	_____
REPAIR & MAINTENANCE					
Implements	acre	3.37	1.0000	3.37	_____
Tractors	acre	0.82	1.0000	0.82	_____
INTEREST ON OP. CAP.	acre	5.50	1.0000	5.50	_____
TOTAL DIRECT EXPENSES				283.61	_____
FIXED EXPENSES					
Implements	acre	6.66	1.0000	6.66	_____
Tractors	acre	5.06	1.0000	5.06	_____
TOTAL FIXED EXPENSES				11.72	_____
TOTAL SPECIFIED EXPENSES				295.33	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 18.A Estimated resource use and costs for field operations, per acre
 No-till ryegrass into volunteer summer grasses
 Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	44.00	14.52	14.52
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Glyphosate 3lbs a.e.	pt											2.0000	1.75	3.50	3.50
Custom Spread(Truck) appl				1.00	Sep							1.0000	7.00	7.00	7.00
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.80	1.34	2.64	5.15	0.39	4.06				15.99
Ryegrass Seed	lb											35.0000	0.79	27.65	27.65
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Sevin WSP	lb											1.5000	7.35	11.02	11.02
Custom Spread(Truck) appl				1.00	Oct							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.0000	19.00	19.00	19.00
Custom Spread(Truck) appl				1.00	Dec							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.0000	19.00	38.00	38.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Dec	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Gramoxone Inteon	oz											16.0000	0.25	4.00	4.00
Custom Spread(Truck) appl				1.00	Mar							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.0000	19.00	38.00	38.00
TOTALS						5.47	2.63	3.09	5.69	0.67	7.09			256.45	280.42
INTEREST ON OPERATING CAPITAL															5.23
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															285.65

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 18.B Estimated costs per acre
 No-till ryegrass into volunteer summer grasses
 Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
Fert 33-0-0-12S	cwt	19.00	5.0000	95.00	_____
HERBICIDE					
Glyphosate 3lbs a.e.	pt	1.75	2.0000	3.50	_____
Gramoxone Inteon	oz	0.25	16.0000	4.00	_____
INSECTICIDE					
Sevin WSP	lb	7.35	1.5000	11.02	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.79	35.0000	27.65	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	4.0000	28.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.3844	4.47	_____
HAND LABOR					
Implements	hour	9.06	0.2904	2.62	_____
DIESEL FUEL					
Tractors	gal	3.40	1.4842	5.04	_____
REPAIR & MAINTENANCE					
Implements	acre	3.09	1.0000	3.09	_____
Tractors	acre	0.43	1.0000	0.43	_____
INTEREST ON OP. CAP.	acre	5.23	1.0000	5.23	_____
TOTAL DIRECT EXPENSES				277.33	_____
FIXED EXPENSES					
Implements	acre	5.69	1.0000	5.69	_____
Tractors	acre	2.63	1.0000	2.63	_____
TOTAL FIXED EXPENSES				8.32	_____
TOTAL SPECIFIED EXPENSES				285.65	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 19.A Estimated resource use and costs for field operations, per acre
Sorghum sudan/millet/sudangrass annual hay
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	44.00	14.52	14.52
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Apr	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Disk Harrow	14'	2WD 75	0.140	2.00	Apr	3.99	1.91	1.64	3.54	0.28	3.26				14.34
Custom Spread(Truck)	appl			1.00	Apr							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Grain Drill	12'	2WD 75	0.157	1.00	May	2.23	1.07	1.05	2.05	0.31	3.24				9.64
Sorghum x Sudan Seed	lb											35.0000	1.54	53.90	53.90
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Jun	3.26	1.56	3.37	3.79	0.22	2.66				14.64
Hay Rake	8.5'	2WD 50	0.202	2.00	Jun	3.86	1.97	1.07	1.51	0.40	4.69				13.10
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jun	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0800	39.00	3.12	3.12
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Jun	4.27	2.04	0.02	0.06	0.30	3.48				9.87
Custom Spread(Truck)	appl			1.00	Jun							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Jul	3.26	1.56	3.37	3.79	0.22	2.66				14.64
Hay Rake	8.5'	2WD 50	0.202	2.00	Jul	3.86	1.97	1.07	1.51	0.40	4.69				13.10
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0600	39.00	2.34	2.34
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Jul	4.27	2.04	0.02	0.06	0.30	3.48				9.87
Custom Spread(Truck)	appl			1.00	Aug							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Aug	3.26	1.56	3.37	3.79	0.22	2.66				14.64
Hay Rake	8.5'	2WD 50	0.202	2.00	Aug	3.86	1.97	1.07	1.51	0.40	4.69				13.10
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0400	39.00	1.56	1.56
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Aug	4.27	2.04	0.02	0.06	0.30	3.48				9.87
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Sep	3.26	1.56	3.37	3.79	0.22	2.66				14.64
Hay Rake	8.5'	2WD 50	0.202	2.00	Sep	3.86	1.97	1.07	1.51	0.40	4.69				13.10
Hay Baler	Lg Round	2WD 75	0.211	1.00	Sep	3.02	1.44	3.71	4.64	0.21	2.45				15.26
Twine	bun											0.0300	39.00	1.17	1.17
Hay Carrier	1B Lift	2WD 75	0.300	1.00	Sep	4.27	2.04	0.02	0.06	0.30	3.48				9.87
TOTALS						65.62	31.86	35.74	46.24	5.29	61.05			285.06	525.57
INTEREST ON OPERATING CAPITAL															9.44
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															535.01

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 19.B Estimated costs per acre
Sorghum sudan/millet/sudangrass annual hay
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	4.5000	85.50	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	2.0000	58.38	_____
SEED/PLANTS					
Sorghum x Sudan Seed	lb	1.54	35.0000	53.90	_____
OTHER					
Twine	bun	39.00	0.2100	8.19	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	3.0000	21.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	5.1415	59.63	_____
HAND LABOR					
Implements	hour	9.06	0.1571	1.42	_____
DIESEL FUEL					
Tractors	gal	3.40	17.7667	60.44	_____
REPAIR & MAINTENANCE					
Implements	acre	35.74	1.0000	35.74	_____
Tractors	acre	5.18	1.0000	5.18	_____
INTEREST ON OP. CAP.	acre	9.44	1.0000	9.44	_____
TOTAL DIRECT EXPENSES				456.91	_____
FIXED EXPENSES					
Implements	acre	46.24	1.0000	46.24	_____
Tractors	acre	31.86	1.0000	31.86	_____
TOTAL FIXED EXPENSES				78.10	_____
TOTAL SPECIFIED EXPENSES				535.01	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 20.A Estimated resource use and costs for field operations, per acre
Sorghum sudan/millet/sudangrass annual pasture
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	44.00	14.52	14.52
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Apr	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Custom Spread(Truck)	appl			1.00	May							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											1.0000	29.19	29.19	29.19
Disk Harrow	14'	2WD 75	0.140	2.00	May	3.99	1.91	1.64	3.54	0.28	3.26				14.34
Grain Drill	12'	2WD 75	0.157	1.00	May	2.23	1.07	1.05	2.05	0.31	3.24				9.64
Sorghum x Sudan Seed	lb											35.0000	1.54	53.90	53.90
Custom Spread(Truck)	appl			1.00	Jul							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											2.0000	19.00	38.00	38.00
Custom Spread(Truck)	appl			1.00	Aug							1.0000	7.00	7.00	7.00
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
TOTALS						7.98	3.82	3.06	6.24	0.71	7.93			257.18	286.21
INTEREST ON OPERATING CAPITAL															6.21
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															292.42

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 20.B Estimated costs per acre
Sorghum sudan/millet/sudangrass annual pasture
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	5.0000	95.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	1.0000	29.19	_____
SEED/PLANTS					
Sorghum x Sudan Seed	lb	1.54	35.0000	53.90	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	7.00	3.0000	21.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.3300	14.52	_____
OPERATOR LABOR					
Tractors	hour	11.60	0.5610	6.51	_____
HAND LABOR					
Implements	hour	9.06	0.1571	1.42	_____
DIESEL FUEL					
Tractors	gal	3.40	2.1657	7.36	_____
REPAIR & MAINTENANCE					
Implements	acre	3.06	1.0000	3.06	_____
Tractors	acre	0.62	1.0000	0.62	_____
INTEREST ON OP. CAP.	acre	6.21	1.0000	6.21	_____

TOTAL DIRECT EXPENSES				282.36	_____
FIXED EXPENSES					
Implements	acre	6.24	1.0000	6.24	_____
Tractors	acre	3.82	1.0000	3.82	_____

TOTAL FIXED EXPENSES				10.06	_____

TOTAL SPECIFIED EXPENSES				292.42	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 21.A Estimated resource use and costs for field operations, per acre
Corn silage
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES			POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Lime (Spread)	ton			1.00	Sep							0.5000	44.00	22.00	22.00
Chisel Plow Rigid	15'	2WD 75	0.123	1.00	Sep	1.76	0.84	0.37	0.65	0.12	1.43				5.05
Disk Harrow	14'	2WD 75	0.140	1.00	Mar	2.00	0.96	0.82	1.77	0.14	1.63				7.18
Spin Spreader	5 Ton	2WD 75	0.042	1.00	Mar	0.60	0.29	0.27	0.55	0.08	0.87				2.58
Fert 33-0-0-12S	cwt											1.0000	19.00	19.00	19.00
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											2.0000	29.19	58.38	58.38
Disk Bed (Hipper)	4R-38	2WD 75	0.147	1.00	Mar	2.10	1.01	0.29	0.79	0.14	1.71				5.90
Row Cond Rigid	13'	2WD 75	0.119	1.00	Mar	1.70	0.81	0.19	0.81	0.11	1.39				4.90
Plant & Pre Rigid	4R-38	2WD 75	0.153	1.00	Mar	2.19	1.05	1.44	2.81	0.30	3.17				10.66
Atrazine 4L	pt											2.5000	2.04	5.10	5.10
Dual II Magnum	pt											1.3300	12.25	16.29	16.29
Corn Seed RR2	thous											22.0000	2.78	61.16	61.16
Fert Appl (Liquid)	4R-38	2WD 75	0.154	1.00	Apr	2.20	1.05	1.44	1.66	0.23	2.49				8.84
UAN (32% N)	cwt											4.0000	18.54	74.16	74.16
Spray (Spot)	27'	2WD 75	0.062	1.00	May	0.89	0.43	0.15	0.18	0.09	1.01				2.66
Accent SP 75%	oz											0.6700	36.25	24.29	24.29
Cultivate	4R-38	2WD 105	0.162	1.00	Jun	3.25	1.64	0.45	1.21	0.16	1.88				8.43
Silage Harvester	2-Row	2WD 75	0.510	1.00	Aug	7.27	3.47	12.87	14.49	0.51	5.92				44.02
Silage Wagon 12T	12-Ton	2WD 75	0.510	1.00	Aug	7.27	3.47	1.66	3.79	0.51	5.92				22.11
TOTALS						31.23	15.02	19.95	28.71	2.43	27.42			323.35	445.68
INTEREST ON OPERATING CAPITAL															2.57
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															448.25

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 21.B Estimated costs per acre
Corn silage
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	1.0000	19.00	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	2.0000	58.38	_____
UAN (32% N)	cwt	18.54	4.0000	74.16	_____
HERBICIDE					
Atrazine 4L	pt	2.04	2.5000	5.10	_____
Dual II Magnum	pt	12.25	1.3300	16.29	_____
Accent SP 75%	oz	36.25	0.6700	24.29	_____
SEED/PLANTS					
Corn Seed RR2	thous	2.78	22.0000	61.16	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.5000	22.00	_____
OPERATOR LABOR					
Tractors	hour	11.60	2.1266	24.67	_____
HAND LABOR					
Implements	hour	9.06	0.3045	2.75	_____
DIESEL FUEL					
Tractors	gal	3.40	8.4604	28.77	_____
REPAIR & MAINTENANCE					
Implements	acre	19.95	1.0000	19.95	_____
Tractors	acre	2.46	1.0000	2.46	_____
INTEREST ON OP. CAP.	acre	2.57	1.0000	2.57	_____
TOTAL DIRECT EXPENSES				404.52	_____
FIXED EXPENSES					
Implements	acre	28.71	1.0000	28.71	_____
Tractors	acre	15.02	1.0000	15.02	_____
TOTAL FIXED EXPENSES				43.73	_____
TOTAL SPECIFIED EXPENSES				448.25	_____

Note: Cost of production estimates are based on 2011-12 input prices.
Fertilization decisions should be based on soil tests.

Table 22.A Estimated resource use and costs for field operations, per acre
Sorghum silage
Mississippi, 2012

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Lime (Spread)	ton			1.00	Sep							0.5000	44.00	22.00	22.00
Chisel Plow Rigid	15'	2WD 75	0.123	2.00	Apr	3.51	1.68	0.74	1.30	0.24	2.86				10.09
Spin Spreader	5 Ton	2WD 75	0.042	1.00	May	0.60	0.29	0.27	0.55	0.08	0.87				2.58
Fert 33-0-0-12S	cwt											1.5000	19.00	28.50	28.50
Phosphate (46% P2O5)	cwt											1.5000	28.65	42.97	42.97
Potash (60% K2O)	cwt											2.0000	29.19	58.38	58.38
Field Cultivate	12'	2WD 75	0.124	1.00	May	1.77	0.85	0.32	1.38	0.12	1.44				5.76
Disk Bed (Hipper)	4R-38	2WD 75	0.147	1.00	May	2.10	1.01	0.29	0.79	0.14	1.71				5.90
Row Cond Rigid	13'	2WD 75	0.119	1.00	May	1.70	0.81	0.19	0.81	0.11	1.39				4.90
Plant & Pre Rigid	4R-38	2WD 75	0.153	1.00	May	2.19	1.05	1.44	2.81	0.30	3.17				10.66
Forage Sorghum Seed	lb											15.0000	1.79	26.85	26.85
Bicep 11 Magnum	qt											2.0000	11.01	22.02	22.02
Cultivate	4R-38	2WD 75	0.162	1.00	May	2.31	1.11	0.45	1.21	0.16	1.88				6.96
Spin Spreader	5 Ton	2WD 75	0.042	1.00	May	0.60	0.29	0.27	0.55	0.08	0.87				2.58
Fert 33-0-0-12S	cwt											3.0000	19.00	57.00	57.00
Cultivate	4R-38	2WD 105	0.162	1.00	Jun	3.25	1.64	0.45	1.21	0.16	1.88				8.43
Silage Harvester	2-Row	2WD 75	0.510	1.00	Sep	7.27	3.47	12.87	14.49	0.51	5.92				44.02
Silage Wagon 12T	12-Ton	2WD 75	0.510	1.00	Sep	7.27	3.47	1.66	3.79	0.51	5.92				22.11
TOTALS						32.57	15.67	18.95	28.89	2.45	27.91			257.72	381.71
INTEREST ON OPERATING CAPITAL															1.81
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															383.52

Note: Cost of production estimates are based on 2011-12 input prices.

Fertilization decisions should be based on soil tests.

Table 22.B Estimated costs per acre
Sorghum silage
Mississippi, 2012

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Fert 33-0-0-12S	cwt	19.00	4.5000	85.50	_____
Phosphate (46% P2O5)	cwt	28.65	1.5000	42.97	_____
Potash (60% K2O)	cwt	29.19	2.0000	58.38	_____
HERBICIDE					
Bicep 11 Magnum	qt	11.01	2.0000	22.02	_____
SEED/PLANTS					
Forage Sorghum Seed	lb	1.79	15.0000	26.85	_____
CUSTOM LIME					
Lime (Spread)	ton	44.00	0.5000	22.00	_____
OPERATOR LABOR					
Tractors	hour	11.60	2.2211	25.76	_____
HAND LABOR					
Implements	hour	9.06	0.2379	2.15	_____
DIESEL FUEL					
Tractors	gal	3.40	8.8253	30.01	_____
REPAIR & MAINTENANCE					
Implements	acre	18.95	1.0000	18.95	_____
Tractors	acre	2.56	1.0000	2.56	_____
INTEREST ON OP. CAP.	acre	1.81	1.0000	1.81	_____
TOTAL DIRECT EXPENSES				338.96	_____
FIXED EXPENSES					
Implements	acre	28.89	1.0000	28.89	_____
Tractors	acre	15.67	1.0000	15.67	_____
TOTAL FIXED EXPENSES				44.56	_____
TOTAL SPECIFIED EXPENSES				383.52	_____

Note: Cost of production estimates are based on 2011-12 input prices
Fertilization decisions should be based on soil tests.

Appendix

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2012

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	31,500	600	8	2.57	11.60	8.75	0.98	21.33	6.02	27.36
Tractor(40-59hp)CAB	MFWD 50	32,900	600	8	2.57	11.60	8.75	1.02	21.37	6.29	27.67
Tractor(40-59hp)RB	2WD 50	25,500	600	8	2.57	11.60	8.75	0.79	21.14	4.87	26.02
Tractor(40-59hp)RB	MFWD 50	30,100	600	8	2.57	11.60	8.75	0.94	21.29	5.75	27.04
Tractor(60-89hp)CAB	2WD 75	42,100	600	8	3.86	11.60	13.12	1.31	26.04	8.05	34.09
Tractor(60-89hp)CAB	MFWD 75	46,600	600	8	3.86	11.60	13.12	1.45	26.18	8.91	35.09
Tractor(60-89hp)RB	2WD 75	35,600	600	8	3.86	11.60	13.12	1.11	25.83	6.80	32.64
Tractor(60-89hp)RB	MFWD 75	39,300	600	8	3.86	11.60	13.12	1.22	25.95	7.51	33.47
Tractor(90-119hp)CB	2WD 105	65,300	600	8	5.40	11.60	18.37	2.04	32.01	12.49	44.50
Tractor(90-119hp)CB	MFWD 105	69,600	600	8	5.40	11.60	18.37	2.17	32.15	13.31	45.46
Tractor(90-119hp)RB	2WD 105	52,700	600	8	5.40	11.60	18.37	1.64	31.62	10.08	41.70
Tractor(90-119hp)RB	MFWD 105	55,500	600	8	5.40	11.60	18.37	1.73	31.71	10.61	42.32
Tractor(120-139hp)CB	2WD 130	97,500	600	8	6.69	11.60	22.75	3.04	37.39	18.65	56.04
Tractor(120-139hp)CB	MFWD 130	98,000	600	8	6.69	11.60	22.75	3.06	37.41	18.74	56.15
Tractor(140-159hp)CB	2WD 150	113,000	600	8	7.72	11.60	26.25	3.53	41.38	21.61	62.99
Tractor(140-159hp)CB	MFWD 150	122,000	600	8	7.72	11.60	26.25	3.81	41.66	23.33	65.00

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, 2012

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Chisel Plow Folding	16'	2WD 105	21,300	150	12	0.115	1.34	2.12	0.88	0.19	4.54	1.57	1.16	7.28
Chisel Plow Rigid	15'	2WD 105	8,280	150	12	0.123	1.42	2.26	0.36	0.20	4.26	0.65	1.24	6.16
Cult & Post	4R-38	2WD 105	15,500	150	10	0.173	2.79	3.18	0.71	0.28	6.97	1.92	1.74	10.64
Cult & Post	6R-30	2WD 105	20,000	150	10	0.146	2.36	2.69	0.78	0.24	6.08	2.10	1.47	9.66
Cult & Post	6R-38	2WD 105	20,900	150	10	0.115	1.86	2.12	0.64	0.19	4.83	1.73	1.16	7.73
Cult & Post	8R-30	2WD 105	24,100	150	10	0.110	1.77	2.02	0.70	0.18	4.68	1.90	1.10	7.69
Cultipacker	12'	2WD 105	4,846	300	12	0.124	1.44	2.28	0.14	0.20	4.07	0.19	1.25	5.53
Cultipacker	20'	2WD 105	15,200	300	12	0.074	0.86	1.37	0.26	0.12	2.62	0.37	0.75	3.75
Cultivate	4R-38	2WD 105	10,400	150	10	0.162	1.88	2.98	0.45	0.26	5.58	1.21	1.63	8.43
Cultivate	6R-30	2WD 105	14,900	150	10	0.137	1.59	2.52	0.54	0.22	4.89	1.46	1.38	7.74
Cultivate	6R-38	2WD 105	15,800	150	10	0.108	1.25	1.99	0.45	0.17	3.88	1.22	1.09	6.21
Cultivate	8R-30	2WD 105	19,000	150	10	0.103	1.19	1.89	0.52	0.16	3.78	1.40	1.03	6.22
Cyclone Spin	750 lb	2WD 105	1,040	50	8	0.200	3.22	3.67	0.15	0.32	7.38	0.58	2.01	9.98
Disk & Incorporate	14'	2WD 105	26,200	200	10	0.147	2.37	2.70	1.15	0.24	6.48	2.07	1.48	10.04
Disk & Incorporate	24'	2WD 105	38,100	200	10	0.085	1.38	1.57	0.98	0.14	4.08	1.76	0.86	6.71
Disk & Incorporate	32'	2WD 130	50,800	200	10	0.064	1.03	1.46	0.98	0.19	3.68	1.75	1.20	6.64
Disk Bed (Hipper)	4R-38	2WD 105	7,970	160	10	0.147	1.71	2.71	0.29	0.24	4.96	0.79	1.48	7.24
Disk Bed (Hipper)	6R-30	2WD 50	10,904	160	10	0.125	1.45	1.09	0.34	0.09	2.98	0.91	0.60	4.50
Disk Bed (Hipper)	6R-38	2WD 105	12,600	160	10	0.098	1.14	1.81	0.31	0.16	3.43	0.83	0.99	5.26
Disk Bed (Hipper)	8R-30	2WD 130	14,400	160	10	0.093	1.08	2.13	0.33	0.28	3.84	0.90	1.74	6.49
Disk Harrow	14'	2WD 105	21,100	180	10	0.140	1.62	2.57	0.82	0.23	5.25	1.76	1.41	8.44
Disk Harrow	24'	2WD 105	33,000	180	10	0.081	0.94	1.50	0.75	0.13	3.33	1.61	0.82	5.77
Disk Harrow	32'	2WD 130	45,700	180	10	0.061	0.71	1.39	0.77	0.18	3.07	1.67	1.14	5.89
Fert Appl (Liquid)	4R-38	2WD 105	14,000	150	8	0.154	2.49	2.84	1.44	0.25	7.03	1.65	1.55	10.25
Fert Appl (Liquid)	6R-30	2WD 105	16,900	150	8	0.130	2.11	2.40	1.47	0.26	6.26	1.69	1.63	9.59
Fert Appl (Liquid)	6R-38	2WD 105	14,700	150	8	0.103	1.66	1.89	1.01	0.17	4.75	1.16	1.04	6.95
Fert Appl (Liquid)	8R-30	2WD 105	15,400	150	8	0.098	1.58	1.80	1.00	0.20	4.59	1.15	1.22	6.98
Field Cult & Inc	12'	2WD 105	15,400	100	10	0.132	2.13	2.42	0.50	0.21	5.28	2.18	1.33	8.81
Field Cult & Inc	24'	2WD 105	28,600	100	10	0.066	1.06	1.21	0.47	0.10	2.86	2.03	0.66	5.56
Field Cultivate	12'	2WD 105	10,300	100	10	0.124	1.44	2.28	0.32	0.20	4.25	1.37	1.25	6.88
Field Cultivate Fld	24'	2WD 105	23,500	100	10	0.062	0.72	1.14	0.36	0.10	2.33	1.57	0.62	4.53
Front Loader	.5 yd	2WD 75	5,687	100	10	0.120	1.39	1.57	0.20	0.13	3.30	0.84	0.81	4.96
Grain Drill	12'	2WD 105	17,900	150	8	0.157	3.24	2.88	1.05	0.25	7.44	2.05	1.58	11.08
Hay Baler	Conv	2WD 50	22,156	200	8	0.229	2.65	2.00	2.53	0.18	7.38	3.57	1.11	12.07
Hay Baler	Lg Round	2WD 105	31,207	200	8	0.211	2.45	3.88	3.71	0.34	10.40	4.64	2.13	17.18
Hay Baler	Med Rnd	2WD 75	23,213	200	8	0.211	2.45	2.77	2.76	0.23	8.22	3.45	1.44	13.12
Hay Carrier	1B Lift	2WD 50	312	200	10	0.300	3.48	2.62	0.02	0.23	6.36	0.05	1.46	7.88
Hay Cut-Cond	9'	2WD 105	23,535	200	8	0.229	2.65	4.21	3.37	0.37	10.61	3.79	2.31	16.72
Hay Cut-Cond	12'	2WD 105	28,156	200	8	0.171	1.99	3.15	3.02	0.28	8.45	3.40	1.73	13.59
Hay Disc Mower	8'	2WD 75	10,272	200	8	0.257	2.99	3.38	1.65	0.28	8.31	1.86	1.75	11.93
Hay Disc Mower	10'	2WD 50	11,359	200	8	0.206	2.39	1.80	1.46	0.16	5.82	1.64	1.00	8.48
Hay Rake	8.5'	2WD 50	5,312	200	8	0.202	2.34	1.76	0.53	0.16	4.81	0.75	0.98	6.55
Hay Rake-Double	17'	2WD 75	4,738	200	8	0.101	1.17	1.32	0.23	0.11	2.85	0.33	0.68	3.87
Hay Tedder	17'	2WD 105	7,654	200	8	0.101	1.17	1.85	0.38	0.16	3.58	0.54	1.01	5.14
Hay Trailer	20'	2WD 75	4,296	200	15	0.090	1.04	1.18	0.10	0.10	2.42	0.17	0.61	3.21
NT Grain Drill	12'	2WD 105	35,900	150	8	0.196	4.05	3.60	2.64	0.32	10.63	5.15	1.98	17.76
NT Plant & Pre Rigid	4R-38	2WD 105	27,100	150	8	0.166	3.44	3.06	1.69	0.27	8.46	3.29	1.67	13.44
NT Plant & Pre Rigid	6R-30	2WD 105	34,500	150	8	0.130	2.68	2.39	1.68	0.21	6.98	3.28	1.31	11.57
NT Plant & Pre Rigid	6R-38	2WD 105	32,000	150	8	0.102	2.12	1.88	1.23	0.16	5.41	2.40	1.03	8.85
NT Plant Rigid	4R-38	2WD 105	22,100	150	8	0.148	3.06	2.72	1.23	0.24	7.27	2.39	1.49	11.16
NT Plant Rigid	6R-30	2WD 105	29,500	150	8	0.125	2.59	2.31	1.39	0.20	6.50	2.70	1.26	10.48
NT Plant Rigid	6R-38	2WD 105	27,000	150	8	0.099	2.05	1.82	1.00	0.16	5.04	1.95	1.00	8.00
Plant & Pre Rigid	4R-38	2WD 105	25,000	150	8	0.153	3.17	2.82	1.44	0.25	7.69	2.80	1.54	12.05
Plant & Pre Rigid	6R-30	2WD 105	32,400	150	8	0.126	2.60	2.32	1.53	0.20	6.67	2.98	1.27	10.93
Plant & Pre Rigid	6R-38	2WD 105	28,900	150	8	0.102	2.12	1.88	1.11	0.16	5.29	2.16	1.03	8.50
Plant Rigid	4R-38	2WD 105	20,000	150	8	0.148	3.06	2.72	1.11	0.24	7.15	2.16	1.49	10.82
Plant Rigid	6R-30	2WD 105	27,400	150	8	0.125	2.59	2.31	1.29	0.20	6.40	2.51	1.26	10.18
Plant Rigid	6R-38	2WD 105	23,900	150	8	0.099	2.05	1.82	0.88	0.16	4.92	1.73	1.00	7.66
Rotary Mower	7'	2WD 50	3,950	185	10	0.168	1.95	1.47	0.53	0.13	4.09	0.38	0.82	5.30
Rotary Mower	8'	2WD 75	5,179	185	10	0.147	1.70	1.93	0.61	0.16	4.42	0.44	1.00	5.87
Rotary Mower	12'	2WD 105	10,800	185	10	0.098	1.13	1.80	0.86	0.16	3.96	0.61	0.99	5.57
Rotary Mower Flex	15'	2WD 105	17,700	185	10	0.078	0.91	1.44	1.12	0.12	3.61	0.80	0.79	5.21
Row Cond & Inc Rigid	13'	2WD 105	11,400	100	10	0.126	2.04	2.33	0.36	0.20	4.95	1.55	1.27	7.78
Row Cond & Inc Rigid	21'	2WD 105	15,200	100	10	0.078	1.26	1.44	0.29	0.12	3.13	1.28	0.79	5.21
Row Cond Rigid	13'	2WD 105	6,310	100	10	0.119	1.38	2.19	0.18	0.19	3.96	0.81	1.20	5.98
Row Cond Rigid	21'	2WD 105	10,100	100	10	0.073	0.85	1.35	0.18	0.12	2.52	0.80	0.74	4.07
Section Harrow	13'	2WD 105	3,810	200	10	0.119	1.38	2.19	0.15	0.19	3.93	0.24	1.20	5.38
Silage Harvester	2-Row	2WD 105	40,362	200	8	0.510	5.91	9.37	12.87	0.84	29.00	14.48	5.14	48.63
Silage Harvester 3-R	3-Row	2WD 105	37,929	200	8	0.336	3.90	6.18	7.98	0.68	18.76	8.98	4.20	31.95
Silage Wagon 12T	12-Ton	2WD 105	16,284	200	15	0.510	5.91	9.37	1.66	1.04	17.99	3.78	6.37	28.15
Spin Spreader	5 Ton	2WD 105	11,300	100	8	0.042	0.86	0.77	0.26	0.06	1.97	0.54	0.42	2.95
Spray (Broadcast)	27'	2WD 105	5,110	200	8	0.062	1.01	1.15	0.15	0.10	2.41	0.18	0.63	3.23
Spray (Spot)	27'	2WD 105	5,110	200	8	0.062	1.01	1.15	0.15	0.10	2.41	0.18	0.63	3.23
Subsoiler	3 Shank	2WD 130	3,250	100	15	0.204	2.37	4.64	0.22	0.62	7.86	0.56	3.81	12.23
Tailgate Seeder		2WD 50	885	100	8	0.200	2.32	1.75	0.22	0.15	4.45	0.24	0.97	5.67

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, 2012

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
DJUVANTS			Gramoxone Inteon	oz	0.25
Crop Oil (veg)	pt	3.36	GrazonNext	pt	4.56
Surfactant	pt	2.62	Hoelon 3 EC	pt	11.03
CUSTOM FERT			Intrro	pt	3.06
App Fert by Air	cwt	6.25	Londax DF	oz	14.50
App Fert by Air(Min)	appl	6.25	Lorox DF	lb	18.83
Custom Spread(Truck)	appl	7.00	Metribuzin 75	lb	15.00
CUSTOM LIME			MSMA + Surfactant	pt	2.81
Lime (Spread)	ton	44.00	Poast	pt	10.22
CUSTOM PLANT			Poast Plus	pt	7.84
Custom Spread + Seed	appl	7.00	Remedy Ultra	pt	111.86
Custom Sprig	acre	100.00	Roundup Power Max	oz	0.14
Plant by Air	cwt	6.25	Roundup Power Max	pt	2.28
CUSTOM SPRAY			Surmount	pt	6.88
App by Air (10 gal)	appl	7.75	Telar XP	oz	20.50
App by Air (2 gal)	appl	3.75	Treflan HFP	pt	3.12
App by Air (3 gal)	appl	4.50	Velpar DF	lb	30.50
App by Air (5 gal)	appl	5.75	Velpar L	pt	10.24
FERTILIZER			Weedmaster	pt	2.94
Amm Nitrate (34%N)	cwt	20.58	INSECTICIDE		
Boron 15G	lb	0.40	Baythroid XL	oz	2.19
Fert 10-34-0	cwt	29.25	Dipel ES	pt	4.56
Fert 33-0-0-12S	cwt	19.00	Disyston 8E	pt	14.32
Phosphate (46% P2O5)	cwt	28.65	Furadan 4F	pt	9.81
Potash (60% K2O)	cwt	29.19	Lannate LV	pt	9.56
UAN (32% N)	cwt	18.54	Lorsban 4E	pt	5.00
UAN + Sulfur (28%)	cwt	18.54	Malathion 5E	pt	4.44
Urea, Solid (46% N)	cwt	22.29	Methyl Parathion 4	pt	5.44
HAUL			Sevin WSP	lb	7.35
Hay Haul (Conv)	ton	25.00	Sevin XLR Plus	qt	11.13
HERBICIDE			OTHER		
2,4-D amine	pt	2.01	Twine	bun	39.00
2,4-D ester	pt	2.31	SEED/PLANTS		
2,4-DB 200	pt	4.34	Alfalfa RR Seed	lb	7.50
AAtrex 4L	pt	2.12	Alfalfa Seed	lb	5.27
Accent SP 75%	oz	36.25	Bahagrass Seed	lb	4.17
Arsenal 2E	pt	46.88	Common Bermuda Seed	lb	4.79
Atrazine 4L	pt	2.04	Corn Seed RR2	thous	2.78
Balan	lb	15.50	Dallisgrass Seed	lb	5.75
Banvel	pt	4.94	Fescue K-31Seed	lb	1.74
Basagran	pt	11.69	Forage Sorghum Seed	lb	1.79
Bicep 1l Magnum	qt	11.01	MaxQ Fescue Seed	lb	5.18
Blazer Ultra	pt	8.94	Millet Seed	lb	0.96
Buctril 4EC	pt	17.06	Red Clover Seed	lb	3.05
Cimarron	oz	20.00	Ryegrass Seed	lb	0.79
Cimarron Plus	oz	11.75	Sorghum x Sudan Seed	lb	1.54
Crossbow	pt	6.87	Wheat Seed	lb	0.32
Diuron 4L	pt	3.28	White Clover Seed	lb	5.43
Dual Magnum	pt	12.25	SERVICE FEE		
Fusilade DX	oz	1.13	Soil Testing	acre	0.60
Glyphosate 3lbs a.e.	pt	1.75	Soil Testing	acre	0.20

Appendix Table 4. Estimated fuel prices
and interest rates, Mississippi, 2012

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	3.40
Gasoline	gal	3.50
LP Gas	gal	2.60
INTEREST RATES		
Short-term	%	4.25
Intermediate-term	%	5.25

Appendix Table 5. Labor names, units and wage rates,
Mississippi, 2012.

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	11.60
HAND LABOR	hour	9.06

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