FORAGE
2009
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2008-01

September 2008

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.

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2009 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 2008. (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:

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

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

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 perquisites (11). Labor costs are estimated for four labor categories: operator labor and hand labor. Operator labor and hand labor represent estimates of labor required to perform the in-field tasks. Operator labor is 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

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

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

where:

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

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

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

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

where:

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

Enterprise Budgets

Table 1.A Estimated resource use and costs for field operations, per acre
Alfalfa hay establishment, prepared seed bed
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.5000	38.00	19.00	19.00
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Disk Harrow	14'	2WD 75	0.140	2.00	Aug	4.06	1.61	1.29	3.06	0.28	3.06				13.08
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Balan	lb											1.5000	12.00	18.00	18.00
Custom Spread(Truck)	appl			1.00	Sep							1.0000	5.00	5.00	5.00
Phosphate (46% P2O5)	cwt											1.0000	50.00	50.00	50.00
Potash (60% K2O)	cwt											3.0000	41.00	123.00	123.00
Boron (Solubor)	lb											3.0000	0.40	1.20	1.20
Disk Harrow	14'	2WD 75	0.140	1.00	Sep	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.73	0.68	0.15	0.26	0.11	1.30				4.12
Cyclone Spin	825Lb	2WD 75	0.200	1.00	Sep	2.90	1.15	0.13	0.51	0.30	3.00				7.69
Alfalfa Seed	lb											20.0000	5.30	106.00	106.00
Cultipacker	12'	2WD 75	0.124	1.00	Sep	1.81	0.71	0.14	0.21	0.12	1.36				4.23
TOTALS						15.32	6.06	2.95	6.66	1.18	12.62			322.80	366.41
INTEREST ON OPERATING CAPITAL															12.65
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															379.06

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 1.B Estimated costs per acre
Alfalfa hay establishment, prepared seed bed
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	50.00	1.0000	50.00	_____
Potash (60% K2O)	cwt	41.00	3.0000	123.00	_____
Boron (Solubor)	lb	0.40	3.0000	1.20	_____
HERBICIDE					
Balan	lb	12.00	1.5000	18.00	_____
SEED/PLANTS					
Alfalfa Seed	lb	5.30	20.0000	106.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	1.0000	5.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.5000	19.00	_____
OPERATOR LABOR					
Tractors	hour	10.91	1.0584	11.54	_____
HAND LABOR					
Implements	hour	8.19	0.1313	1.08	_____
DIESEL FUEL					
Tractors	gal	3.53	4.0860	14.42	_____
REPAIR & MAINTENANCE					
Implements	acre	2.95	1.0000	2.95	_____
Tractors	acre	0.90	1.0000	0.90	_____
INTEREST ON OP. CAP.	acre	12.65	1.0000	12.65	_____

TOTAL DIRECT EXPENSES				366.34	_____
FIXED EXPENSES					
Implements	acre	6.66	1.0000	6.66	_____
Tractors	acre	6.06	1.0000	6.06	_____

TOTAL FIXED EXPENSES				12.72	_____

TOTAL SPECIFIED EXPENSES				379.06	_____

Note: Cost of production estimates are based on 2008 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 establishment, sod-seeding
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.5000	38.00	19.00	19.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Gramoxone Max	pt											2.0000	4.97	9.94	9.94
Custom Spread(Truck)	appl			1.00	Sep							1.0000	5.00	5.00	5.00
Phosphate (46% P2O5)	cwt											1.0000	50.00	50.00	50.00
Potash (60% K2O)	cwt											3.0000	41.00	123.00	123.00
Boron (Solubor)	lb											3.0000	0.40	1.20	1.20
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.85	1.13	2.15	4.65	0.39	3.75				14.53
Alfalfa Seed	lb											20.0000	5.30	106.00	106.00
TOTALS						3.75	1.49	2.31	4.87	0.48	4.69			314.74	331.85
INTEREST ON OPERATING CAPITAL															11.56
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															343.41

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 2.B Estimated costs per acre
Alfalfa hay establishment, sod-seeding
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	50.00	1.0000	50.00	_____
Potash (60% K2O)	cwt	41.00	3.0000	123.00	_____
Boron (Solubor)	lb	0.40	3.0000	1.20	_____
HERBICIDE					
Gramoxone Max	pt	4.97	2.0000	9.94	_____
SEED/PLANTS					
Alfalfa Seed	lb	5.30	20.0000	106.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	1.0000	5.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.5000	19.00	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.2591	2.82	_____
HAND LABOR					
Implements	hour	8.19	0.2277	1.87	_____
DIESEL FUEL					
Tractors	gal	3.53	1.0002	3.53	_____
REPAIR & MAINTENANCE					
Implements	acre	2.31	1.0000	2.31	_____
Tractors	acre	0.22	1.0000	0.22	_____
INTEREST ON OP. CAP.	acre	11.56	1.0000	11.56	_____

TOTAL DIRECT EXPENSES				337.05	_____
FIXED EXPENSES					
Implements	acre	4.87	1.0000	4.87	_____
Tractors	acre	1.49	1.0000	1.49	_____

TOTAL FIXED EXPENSES				6.36	_____

TOTAL SPECIFIED EXPENSES				343.41	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 3.A Estimated resource use and costs for field operations, per acre
Alfalfa hay maintenance
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Nov							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Nov							0.5000	38.00	19.00	19.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Nov	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Sencor DF75	lb											1.0000	16.01	16.01	16.01
Custom Spread(Truck)	appl			1.00	Mar							1.0000	5.00	5.00	5.00
Phosphate (46% P2O5)	cwt											2.0000	50.00	100.00	100.00
Potash (60% K2O)	cwt											1.5000	41.00	61.50	61.50
Boron (Solubor)	lb											3.0000	0.40	1.20	1.20
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Furadan 4F	pt											1.0000	9.52	9.52	9.52
Hay Cut-Cond	9'	2WD 75	0.229	1.00	May	3.31	1.31	2.57	3.11	0.22	2.50				12.80
Hay Tedder	17'	2WD 75	0.101	1.00	May	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	2.00	May	2.93	1.16	0.50	0.75	0.20	2.21				7.55
Hay Baler	Conv	2WD 75	0.229	1.00	May	3.31	1.31	2.08	3.14	0.22	2.50				12.34
Twine	bun											0.0800	25.00	2.00	2.00
Hay Trailer	20'	2WD 75	0.090	1.00	May	1.31	0.52	0.09	0.18	0.09	0.98				3.08
Hay Haul (Conv)	ton											1.5000	14.00	21.00	21.00
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Jun	3.31	1.31	2.57	3.11	0.22	2.50				12.80
Hay Tedder	17'	2WD 75	0.101	1.00	Jun	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jun	2.93	1.16	0.50	0.75	0.20	2.21				7.55
Hay Baler	Conv	2WD 75	0.229	1.00	Jun	3.31	1.31	2.08	3.14	0.22	2.50				12.34
Twine	bun											0.0800	25.00	2.00	2.00
Hay Trailer	20'	2WD 75	0.090	1.00	Jun	1.31	0.52	0.09	0.18	0.09	0.98				3.08
Hay Haul (Conv)	ton											1.5000	14.00	21.00	21.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Jun	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Poast	pt											1.7000	8.90	15.13	15.13
Custom Spread(Truck)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Potash (60% K2O)	cwt											1.5000	41.00	61.50	61.50
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Aug	3.31	1.31	2.57	3.11	0.22	2.50				12.80
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	2.00	Aug	2.93	1.16	0.50	0.75	0.20	2.21				7.55
Hay Baler	Conv	2WD 75	0.229	1.00	Aug	3.31	1.31	2.08	3.14	0.22	2.50				12.34
Twine	bun											0.0500	25.00	1.25	1.25
Hay Trailer	20'	2WD 75	0.090	1.00	Aug	1.31	0.52	0.09	0.18	0.09	0.98				3.08
Hay Haul (Conv)	ton											1.0000	14.00	14.00	14.00
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Sep	3.31	1.31	2.57	3.11	0.22	2.50				12.80
Hay Tedder	17'	2WD 75	0.101	1.00	Sep	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	2.00	Sep	2.93	1.16	0.50	0.75	0.20	2.21				7.55
Hay Baler	Conv	2WD 75	0.229	1.00	Sep	3.31	1.31	2.08	3.14	0.22	2.50				12.34
Twine	bun											0.0500	25.00	1.25	1.25
Hay Trailer	20'	2WD 75	0.090	1.00	Sep	1.31	0.52	0.09	0.18	0.09	0.98				3.08
Hay Haul (Conv)	ton											1.0000	14.00	14.00	14.00
Prorated Est Cost	acre				Jan							1.0000			48.33
TOTALS						107.10	20.60	22.48	30.94	3.68	39.98			370.96	640.39
INTEREST ON OPERATING CAPITAL															6.13
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															646.52

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 3.B Estimated costs per acre
Alfalfa hay maintenance
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	50.00	2.0000	100.00	_____
Potash (60% K2O)	cwt	41.00	3.0000	123.00	_____
Boron (Solubor)	lb	0.40	3.0000	1.20	_____
HERBICIDE					
Sencor DF75	lb	16.01	1.0000	16.01	_____
Poast	pt	8.90	1.7000	15.13	_____
INSECTICIDE					
Furadan 4F	pt	9.52	1.0000	9.52	_____
HAUL					
Hay Haul (Conv)	ton	14.00	5.0000	70.00	_____
OTHER					
Twine	bun	25.00	0.2600	6.50	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	2.0000	10.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.5000	19.00	_____
OPERATOR LABOR					
Tractors	hour	10.91	3.5946	39.20	_____
HAND LABOR					
Implements	hour	8.19	0.0940	0.78	_____
DIESEL FUEL					
Tractors	gal	3.53	29.4880	104.07	_____
REPAIR & MAINTENANCE					
Implements	acre	22.48	1.0000	22.48	_____
Tractors	acre	3.03	1.0000	3.03	_____
INTEREST ON OP. CAP.	acre	6.13	1.0000	6.13	_____

TOTAL DIRECT EXPENSES				546.65	_____
FIXED EXPENSES					
Implements	acre	30.94	1.0000	30.94	_____
Tractors	acre	20.60	1.0000	20.60	_____
Prorated Est Cost	acre	48.33	1.0000	48.33	_____

TOTAL FIXED EXPENSES				99.87	_____

TOTAL SPECIFIED EXPENSES				646.52	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 4.A Estimated resource use and costs for field operations, per acre
Bahiagrass establishment
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	38.00	12.54	12.54
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Custom Spread(Truck)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.73	0.68	0.15	0.26	0.11	1.30				4.12
Cyclone Spin	825Lb	2WD 75	0.200	1.00	Apr	2.90	1.15	0.13	0.51	0.30	3.00				7.69
Bahiagrass Seed	lb											30.0000	2.70	81.00	81.00
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.81	0.71	0.14	0.21	0.12	1.36				4.23
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.42	0.56	0.67	0.53	0.09	1.07				4.25
TOTALS						13.81	5.45	2.81	5.44	1.05	11.22			308.14	346.87
INTEREST ON OPERATING CAPITAL															11.29
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															358.16

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 4.B Estimated costs per acre
Bahiagrass establishment
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	4.0000	88.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
SEED/PLANTS					
Bahiagrass Seed	lb	2.70	30.0000	81.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	2.0000	10.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.9536	10.40	_____
HAND LABOR					
Implements	hour	8.19	0.1000	0.82	_____
DIESEL FUEL					
Tractors	gal	3.53	3.6815	13.00	_____
REPAIR & MAINTENANCE					
Implements	acre	2.81	1.0000	2.81	_____
Tractors	acre	0.81	1.0000	0.81	_____
INTEREST ON OP. CAP.	acre	11.29	1.0000	11.29	_____

TOTAL DIRECT EXPENSES				347.27	_____
FIXED EXPENSES					
Implements	acre	5.44	1.0000	5.44	_____
Tractors	acre	5.45	1.0000	5.45	_____

TOTAL FIXED EXPENSES				10.89	_____

TOTAL SPECIFIED EXPENSES				358.16	_____

Note: Cost of production estimates are based on 2008 input prices. **Fertilization decisions should be based on soil tests.**

Table 5.A Estimated resource use and costs for field operations, per acre
Common bermuda establishment
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	38.00	12.54	12.54
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Custom Spread(Truck)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.73	0.68	0.15	0.26	0.11	1.30				4.12
Cyclone Spin	825Lb	2WD 75	0.200	1.00	Apr	2.90	1.15	0.13	0.51	0.30	3.00				7.69
Common Bermuda Seed	lb											5.0000	3.70	18.50	18.50
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.81	0.71	0.14	0.21	0.12	1.36				4.23
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.42	0.56	0.67	0.53	0.09	1.07				4.25
TOTALS						13.81	5.45	2.81	5.44	1.05	11.22			245.64	284.37
INTEREST ON OPERATING CAPITAL															9.10
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															293.47

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 5.B Estimated costs per acre
Common bermuda establishment
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	4.0000	88.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
SEED/PLANTS					
Common Bermuda Seed	lb	3.70	5.0000	18.50	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	2.0000	10.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.9536	10.40	_____
HAND LABOR					
Implements	hour	8.19	0.1000	0.82	_____
DIESEL FUEL					
Tractors	gal	3.53	3.6815	13.00	_____
REPAIR & MAINTENANCE					
Implements	acre	2.81	1.0000	2.81	_____
Tractors	acre	0.81	1.0000	0.81	_____
INTEREST ON OP. CAP.	acre	9.10	1.0000	9.10	_____

TOTAL DIRECT EXPENSES				282.58	_____
FIXED EXPENSES					
Implements	acre	5.44	1.0000	5.44	_____
Tractors	acre	5.45	1.0000	5.45	_____

TOTAL FIXED EXPENSES				10.89	_____

TOTAL SPECIFIED EXPENSES				293.47	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 6.A Estimated resource use and costs for field operations, per acre
Dallisgrass establishment
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	38.00	12.54	12.54
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Disk Harrow	14'	2WD 75	0.140	1.00	Apr	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Custom Spread(Truck)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Section Harrow	13'	2WD 75	0.119	1.00	Apr	1.73	0.68	0.15	0.26	0.11	1.30				4.12
Cyclone Spin	825Lb	2WD 75	0.200	1.00	Apr	2.90	1.15	0.13	0.51	0.30	3.00				7.69
Dallisgrass Seed	lb											15.0000	6.60	99.00	99.00
Cultipacker	12'	2WD 75	0.124	1.00	Apr	1.81	0.71	0.14	0.21	0.12	1.36				4.23
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.42	0.56	0.67	0.53	0.09	1.07				4.25
TOTALS						13.81	5.45	2.81	5.44	1.05	11.22			282.14	320.87
INTEREST ON OPERATING CAPITAL															10.60
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															331.47

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

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Table 6.B Estimated costs per acre
Dallisgrass establishment
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	2.0000	44.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
SEED/PLANTS					
Dallisgrass Seed	lb	6.60	15.0000	99.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	2.0000	10.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.9536	10.40	_____
HAND LABOR					
Implements	hour	8.19	0.1000	0.82	_____
DIESEL FUEL					
Tractors	gal	3.53	3.6815	13.00	_____
REPAIR & MAINTENANCE					
Implements	acre	2.81	1.0000	2.81	_____
Tractors	acre	0.81	1.0000	0.81	_____
INTEREST ON OP. CAP.	acre	10.60	1.0000	10.60	_____

TOTAL DIRECT EXPENSES				320.58	_____
FIXED EXPENSES					
Implements	acre	5.44	1.0000	5.44	_____
Tractors	acre	5.45	1.0000	5.45	_____

TOTAL FIXED EXPENSES				10.89	_____

TOTAL SPECIFIED EXPENSES				331.47	_____

Note: Cost of production estimates are based on 2008 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 pasture maintenance (i.e. bahia,
bermuda, dallisgrass, mixed grasses),Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Custom Spread(Truck)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.0000	50.00	50.00	50.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Grazon P+D	pt											2.0000	4.01	8.02	8.02
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.42	0.56	0.67	0.53	0.09	1.07				4.25
Lime (Spread)	ton			1.00	Aug							0.3300	38.00	12.54	12.54
Prorated Est Cost	acre				Aug							1.0000			33.15
TOTALS						2.32	0.92	0.83	0.75	0.19	2.01			210.16	250.14
INTEREST ON OPERATING CAPITAL															7.80
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															257.94

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 7.B Estimated costs per acre
Permanent summer pasture maintenance (i.e. bahia, bermuda, dallisgrass, mixed grasses),Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	4.0000	88.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.0000	50.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
HERBICIDE					
Grazon P+D	pt	4.01	2.0000	8.02	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	2.0000	10.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.1608	1.75	_____
HAND LABOR					
Implements	hour	8.19	0.0313	0.26	_____
DIESEL FUEL					
Tractors	gal	3.53	0.6210	2.19	_____
REPAIR & MAINTENANCE					
Implements	acre	0.83	1.0000	0.83	_____
Tractors	acre	0.13	1.0000	0.13	_____
INTEREST ON OP. CAP.	acre	7.80	1.0000	7.80	_____

TOTAL DIRECT EXPENSES				223.12	_____
FIXED EXPENSES					
Implements	acre	0.75	1.0000	0.75	_____
Tractors	acre	0.92	1.0000	0.92	_____
Prorated Est Cost	acre	33.15	1.0000	33.15	_____

TOTAL FIXED EXPENSES				34.82	_____

TOTAL SPECIFIED EXPENSES				257.94	_____

Note: Cost of production estimates are based on 2008 input prices. **Fertilization decisions should be based on soil tests.**

Table 8.A Estimated resource use and costs for field operations, per acre
Permanent summer grass-white clover pasture maintenance
North Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.42	0.56	0.67	0.53	0.09	1.07				4.25
Soil Testing	acre			1.00	Jun							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Jun							0.3300	38.00	12.54	12.54
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Phosphate (46% P2O5)	cwt											1.0000	50.00	50.00	50.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Rotary Mower	12'	2WD 75	0.098	1.00	Oct	1.42	0.56	0.67	0.53	0.09	1.07				4.25
Tailgate Seeder		2WD 50	0.200	1.00	Oct	1.94	0.79	0.09	0.11	0.20	2.18				5.11
White Clover Seed	lb											2.0000	4.00	8.00	8.00
Prorated Est Cost	acre				Jan							1.0000			33.15
TOTALS						4.78	1.91	1.43	1.17	0.39	4.32			139.14	185.90
INTEREST ON OPERATING CAPITAL															5.67
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															191.57

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 8.B Estimated costs per acre
Permanent summer grass-white clover pasture maintenance
North Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	1.0000	22.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.0000	50.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
SEED/PLANTS					
White Clover Seed	lb	4.00	2.0000	8.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	1.0000	5.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.3964	4.32	_____
DIESEL FUEL					
Tractors	gal	3.53	1.2729	4.50	_____
REPAIR & MAINTENANCE					
Implements	acre	1.43	1.0000	1.43	_____
Tractors	acre	0.28	1.0000	0.28	_____
INTEREST ON OP. CAP.	acre	5.67	1.0000	5.67	_____

TOTAL DIRECT EXPENSES				155.34	_____
FIXED EXPENSES					
Implements	acre	1.17	1.0000	1.17	_____
Tractors	acre	1.91	1.0000	1.91	_____
Prorated Est Cost	acre	33.15	1.0000	33.15	_____

TOTAL FIXED EXPENSES				36.23	_____

TOTAL SPECIFIED EXPENSES				191.57	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 9.A Estimated resource use and costs for field operations, per acre
Mixed grass hay maintenance
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Grazon P+D	pt											2.0000	4.01	8.02	8.02
Custom Spread(Truck)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.5000	22.00	33.00	33.00
Phosphate (46% P2O5)	cwt											1.0000	50.00	50.00	50.00
Potash (60% K2O)	cwt											1.5000	41.00	61.50	61.50
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jun	3.73	1.48	1.26	1.52	0.25	2.81				10.80
Hay Rake	8.5'	2WD 50	0.202	2.00	Jun	3.91	1.59	0.94	1.41	0.40	4.41				12.26
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jun	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0400	25.00	1.00	1.00
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jun	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jul	3.73	1.48	1.26	1.52	0.25	2.81				10.80
Hay Rake	8.5'	2WD 50	0.202	2.00	Jul	3.91	1.59	0.94	1.41	0.40	4.41				12.26
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0400	25.00	1.00	1.00
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jul	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Custom Spread(Truck)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Hay Disc Mower	8'	2WD 75	0.257	1.00	Oct	3.73	1.48	1.26	1.52	0.25	2.81				10.80
Hay Rake	8.5'	2WD 50	0.202	2.00	Oct	3.91	1.59	0.94	1.41	0.40	4.41				12.26
Hay Baler	Lg Round	2WD 75	0.211	1.00	Oct	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0200	25.00	0.50	0.50
Hay Mover	1B Lift	2WD 75	0.300	1.00	Oct	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Soil Testing	acre			1.00	Oct							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Oct							0.3300	38.00	12.54	12.54
Prorated Est Cost	acre				Oct							1.0000			33.15
TOTALS						46.02	18.36	16.12	21.67	3.61	39.34			271.16	445.82
INTEREST ON OPERATING CAPITAL															9.63
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															455.45

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 9.B Estimated costs per acre
Mixed grass hay maintenance
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	5.5000	121.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.0000	50.00	_____
Potash (60% K2O)	cwt	41.00	1.5000	61.50	_____
HERBICIDE					
Grazon P+D	pt	4.01	2.0000	8.02	_____
OTHER					
Twine	bun	25.00	0.1000	2.50	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	3.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	3.5839	39.08	_____
HAND LABOR					
Implements	hour	8.19	0.0313	0.26	_____
DIESEL FUEL					
Tractors	gal	3.53	12.2744	43.30	_____
REPAIR & MAINTENANCE					
Implements	acre	16.12	1.0000	16.12	_____
Tractors	acre	2.72	1.0000	2.72	_____
INTEREST ON OP. CAP.	acre	9.63	1.0000	9.63	_____

TOTAL DIRECT EXPENSES				382.27	_____
FIXED EXPENSES					
Implements	acre	21.67	1.0000	21.67	_____
Tractors	acre	18.36	1.0000	18.36	_____
Prorated Est Cost	acre	33.15	1.0000	33.15	_____

TOTAL FIXED EXPENSES				73.18	_____

TOTAL SPECIFIED EXPENSES				455.45	_____

Note: Cost of production estimates are based on 2008 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 establishment, 1 cutting of hay
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Chisel Plow	15'	2WD 75	0.130	1.00	Mar	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	38.00	12.54	12.54
Disk Harrow	14'	2WD 75	0.140	2.00	Apr	4.06	1.61	1.29	3.06	0.28	3.06				13.08
Custom Spread(Truck)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Custom Sprig	acre			1.00	May							1.0000	65.00	65.00	65.00
Cultipacker	12'	2WD 75	0.124	1.00	May	1.81	0.71	0.14	0.21	0.12	1.36				4.23
Spray (Broadcast)	27'	2WD 75	0.062	1.00	May	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Diuron 4L	pt											3.0000	2.36	7.08	7.08
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Hay Disc Mower	8'	2WD 75	0.257	1.00	Aug	3.73	1.48	1.26	1.52	0.25	2.81				10.80
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	1.00	Aug	1.47	0.58	0.25	0.37	0.10	1.10				3.77
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0300	25.00	0.75	0.75
TOTALS						32.16	7.28	6.89	10.79	1.30	14.11			277.97	349.20
INTEREST ON OPERATING CAPITAL															10.24
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															359.44

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 10.B Estimated costs per acre
Hybrid bermuda establishment, 1 cutting of hay
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	3.0000	66.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
HERBICIDE					
Diuron 4L	pt	2.36	3.0000	7.08	_____
OTHER					
Twine	bun	25.00	0.0300	0.75	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	2.0000	10.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM PLANT					
Custom Sprig	acre	65.00	1.0000	65.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	1.2702	13.85	_____
HAND LABOR					
Implements	hour	8.19	0.0313	0.26	_____
DIESEL FUEL					
Tractors	gal	3.53	8.8064	31.07	_____
REPAIR & MAINTENANCE					
Implements	acre	6.89	1.0000	6.89	_____
Tractors	acre	1.09	1.0000	1.09	_____
INTEREST ON OP. CAP.	acre	10.24	1.0000	10.24	_____

TOTAL DIRECT EXPENSES				341.37	_____
FIXED EXPENSES					
Implements	acre	10.79	1.0000	10.79	_____
Tractors	acre	7.28	1.0000	7.28	_____

TOTAL FIXED EXPENSES				18.07	_____

TOTAL SPECIFIED EXPENSES				359.44	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 11.A Estimated resource use and costs for field operations, per acre
Hybrid bermuda hay maintenance
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Mar	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Grazon P+D	pt											2.0000	4.01	8.02	8.02
Custom Spread(Truck)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											2.0000	41.00	82.00	82.00
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jun	3.73	1.48	1.26	1.52	0.25	2.81				10.80
Hay Tedder	17'	2WD 75	0.101	1.00	Jun	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jun	2.93	1.16	0.50	0.75	0.20	2.21				7.55
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jun	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0600	25.00	1.50	1.50
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jun	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Hay Disc Mower	8'	2WD 75	0.257	1.00	Jul	3.73	1.48	1.26	1.52	0.25	2.81				10.80
Hay Tedder	17'	2WD 75	0.101	1.00	Jul	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	2.00	Jul	2.93	1.16	0.50	0.75	0.20	2.21				7.55
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0600	25.00	1.50	1.50
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jul	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Custom Spread(Truck)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.5000	38.00	19.00	19.00
Hay Disc Mower	8'	2WD 75	0.257	1.00	Aug	3.73	1.48	1.26	1.52	0.25	2.81				10.80
Hay Tedder	17'	2WD 75	0.101	1.00	Aug	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	2.00	Aug	2.93	1.16	0.50	0.75	0.20	2.21				7.55
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0300	25.00	0.75	0.75
Hay Mover	1B Lift	2WD 75	0.300	1.00	Aug	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Custom Spread(Truck)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Hay Disc Mower	8'	2WD 75	0.257	1.00	Sep	3.73	1.48	1.26	1.52	0.25	2.81				10.80
Hay Tedder	17'	2WD 75	0.101	1.00	Sep	15.24	0.58	0.26	0.39	0.10	1.10				17.57
Hay Rake-Double	17'	2WD 75	0.101	2.00	Sep	2.93	1.16	0.50	0.75	0.20	2.21				7.55
Hay Baler	Lg Round	2WD 75	0.211	1.00	Sep	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0300	25.00	0.75	0.75
Hay Mover	1B Lift	2WD 75	0.300	1.00	Sep	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Prorated Est Cost	acre				Sep							1.0000			33.27
TOTALS						118.10	24.96	20.72	27.74	4.38	47.74			404.12	676.65
INTEREST ON OPERATING CAPITAL															14.48
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															691.13

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 11.B Estimated costs per acre
Hybrid bermuda hay maintenance
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	7.0000	154.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	3.0000	123.00	_____
HERBICIDE					
Grazon P+D	pt	4.01	2.0000	8.02	_____
OTHER					
Twine	bun	25.00	0.1800	4.50	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	4.0000	20.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.5000	19.00	_____
OPERATOR LABOR					
Tractors	hour	10.91	4.3532	47.48	_____
HAND LABOR					
Implements	hour	8.19	0.0313	0.26	_____
DIESEL FUEL					
Tractors	gal	3.53	32.4168	114.41	_____
REPAIR & MAINTENANCE					
Implements	acre	20.72	1.0000	20.72	_____
Tractors	acre	3.69	1.0000	3.69	_____
INTEREST ON OP. CAP.	acre	14.48	1.0000	14.48	_____

TOTAL DIRECT EXPENSES				605.16	_____
FIXED EXPENSES					
Implements	acre	27.74	1.0000	27.74	_____
Tractors	acre	24.96	1.0000	24.96	_____
Prorated Est Cost	acre	33.27	1.0000	33.27	_____

TOTAL FIXED EXPENSES				85.97	_____

TOTAL SPECIFIED EXPENSES				691.13	_____

Note: Cost of production estimates are based on 2008 input prices. **Fertilization decisions should be based on soil tests.**

Table 12.A Estimated resource use and costs for field operations, per acre
Bermuda-overseeded annual ryegrass pasture maintenance
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	38.00	12.54	12.54
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.42	0.56	0.67	0.53	0.09	1.07				4.25
Disk Harrow	14'	2WD 75	0.140	1.00	Oct	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Custom Spread + Seed	appl			1.00	Oct							1.0000	5.00	5.00	5.00
Phosphate (46% P2O5)	cwt											2.0000	50.00	100.00	100.00
Potash (60% K2O)	cwt											1.5000	41.00	61.50	61.50
Ryegrass Seed	lb											35.0000	0.61	21.35	21.35
Section Harrow	13'	2WD 75	0.119	1.00	Oct	1.73	0.68	0.15	0.26	0.11	1.30				4.12
Custom Spread(Truck)	appl			1.00	Dec							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Custom Spread(Truck)	appl			1.00	Mar							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Rotary Mower	12'	2WD 75	0.098	1.00	Jun	1.42	0.56	0.67	0.53	0.09	1.07				4.25
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Jun	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Weedmaster	pt											2.0000	3.30	6.60	6.60
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Prorated Est Cost	acre				Jun							1.0000			27.17
TOTALS						7.50	2.96	2.29	3.07	0.55	5.91			332.59	381.49
INTEREST ON OPERATING CAPITAL															7.31
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															388.80

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 12.B Estimated costs per acre
Bermuda-overseeded annual ryegrass pasture maintenance
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	50.00	2.0000	100.00	_____
Potash (60% K2O)	cwt	41.00	1.5000	61.50	_____
Amm Nitrate (34%N)	cwt	22.00	5.0000	110.00	_____
HERBICIDE					
Weedmaster	pt	3.30	2.0000	6.60	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.61	35.0000	21.35	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	3.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM PLANT					
Custom Spread + Seed	appl	5.00	1.0000	5.00	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.5188	5.65	_____
HAND LABOR					
Implements	hour	8.19	0.0313	0.26	_____
DIESEL FUEL					
Tractors	gal	3.53	2.0030	7.07	_____
REPAIR & MAINTENANCE					
Implements	acre	2.29	1.0000	2.29	_____
Tractors	acre	0.43	1.0000	0.43	_____
INTEREST ON OP. CAP.	acre	7.31	1.0000	7.31	_____

TOTAL DIRECT EXPENSES				355.60	_____
FIXED EXPENSES					
Implements	acre	3.07	1.0000	3.07	_____
Tractors	acre	2.96	1.0000	2.96	_____
Prorated Est Cost	acre	27.17	1.0000	27.17	_____

TOTAL FIXED EXPENSES				33.20	_____

TOTAL SPECIFIED EXPENSES				388.80	_____

Note: Cost of production estimates are based on 2008 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,
prepared seedbed, Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	38.00	12.54	12.54
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Custom Spread(Truck)	appl			1.00	Sep							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Disk Harrow	14'	2WD 75	0.140	2.00	Sep	4.06	1.61	1.29	3.06	0.28	3.06				13.08
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.73	0.68	0.15	0.26	0.11	1.30				4.12
Cyclone Spin	825Lb	2WD 75	0.200	1.00	Sep	2.90	1.15	0.13	0.51	0.30	3.00				7.69
MaxQ Fescue Seed	lb											20.0000	4.00	80.00	80.00
Cultipacker	12'	2WD 75	0.124	1.00	Sep	1.81	0.71	0.14	0.21	0.12	1.36				4.23
Tailgate Seeder		2WD 50	0.200	1.00	Sep	1.94	0.79	0.09	0.11	0.20	2.18				5.11
White Clover Seed	lb											3.0000	4.00	12.00	12.00
TOTALS						14.33	5.69	2.24	5.02	1.15	12.33			248.14	287.75
INTEREST ON OPERATING CAPITAL															9.79
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															297.54

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 13.B Estimated costs per acre
Tall fescue-white clover pasture establishment,
prepared seedbed, Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	1.0000	22.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
SEED/PLANTS					
MaxQ Fescue Seed	lb	4.00	20.0000	80.00	_____
White Clover Seed	lb	4.00	3.0000	12.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	1.0000	5.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	1.0554	11.51	_____
HAND LABOR					
Implements	hour	8.19	0.1000	0.82	_____
DIESEL FUEL					
Tractors	gal	3.53	3.8171	13.48	_____
REPAIR & MAINTENANCE					
Implements	acre	2.24	1.0000	2.24	_____
Tractors	acre	0.85	1.0000	0.85	_____
INTEREST ON OP. CAP.	acre	9.79	1.0000	9.79	_____

TOTAL DIRECT EXPENSES				286.83	_____
FIXED EXPENSES					
Implements	acre	5.02	1.0000	5.02	_____
Tractors	acre	5.69	1.0000	5.69	_____

TOTAL FIXED EXPENSES				10.71	_____

TOTAL SPECIFIED EXPENSES				297.54	_____

Note: Cost of production estimates are based on 2008 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 establishment,
sod-seeding, Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	38.00	12.54	12.54
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Glyphosate Plus 4L	pt											2.5000	3.91	9.78	9.78
Custom Spread(Truck)	appl			1.00	Sep							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.27	0.90	0.96	2.08	0.31	3.00				9.21
MaxQ Fescue Seed	lb											20.0000	4.00	80.00	80.00
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.27	0.90	0.96	2.08	0.31	3.00				9.21
White Clover Seed	lb											3.0000	4.00	12.00	12.00
TOTALS						5.44	2.16	2.08	4.38	0.72	6.94			257.92	278.92
INTEREST ON OPERATING CAPITAL															9.61
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															288.53

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

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

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	1.0000	22.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
HERBICIDE					
Glyphosate Plus 4L	pt	3.91	2.5000	9.78	_____
SEED/PLANTS					
MaxQ Fescue Seed	lb	4.00	20.0000	80.00	_____
White Clover Seed	lb	4.00	3.0000	12.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	1.0000	5.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.3769	4.10	_____
HAND LABOR					
Implements	hour	8.19	0.3456	2.84	_____
DIESEL FUEL					
Tractors	gal	3.53	1.4552	5.13	_____
REPAIR & MAINTENANCE					
Implements	acre	2.08	1.0000	2.08	_____
Tractors	acre	0.31	1.0000	0.31	_____
INTEREST ON OP. CAP.	acre	9.61	1.0000	9.61	_____

TOTAL DIRECT EXPENSES				281.99	_____
FIXED EXPENSES					
Implements	acre	4.38	1.0000	4.38	_____
Tractors	acre	2.16	1.0000	2.16	_____

TOTAL FIXED EXPENSES				6.54	_____

TOTAL SPECIFIED EXPENSES				288.53	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 15.A Estimated resource use and costs for field operations, per acre
Tall fescue-white clover pasture maintenance
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Rotary Mower	12'	2WD 75	0.098	1.00	Aug	1.42	0.56	0.67	0.53	0.09	1.07				4.25
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	38.00	12.54	12.54
Tailgate Seeder		2WD 50	0.200	1.00	Oct	1.94	0.79	0.09	0.11	0.20	2.18				5.11
White Clover Seed	lb											2.0000	4.00	8.00	8.00
Custom Spread(Truck)	appl			1.00	Oct							1.0000	5.00	5.00	5.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Prorated Est Cost	acre				Oct							1.0000			26.71
TOTALS						3.36	1.35	0.76	0.64	0.29	3.25			142.14	178.21
INTEREST ON OPERATING CAPITAL															4.65
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															182.86

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 15.B Estimated costs per acre
Tall fescue-white clover pasture maintenance
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
SEED/PLANTS					
White Clover Seed	lb	4.00	2.0000	8.00	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	1.0000	5.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.2982	3.25	_____
DIESEL FUEL					
Tractors	gal	3.53	0.8938	3.16	_____
REPAIR & MAINTENANCE					
Implements	acre	0.76	1.0000	0.76	_____
Tractors	acre	0.20	1.0000	0.20	_____
INTEREST ON OP. CAP.	acre	4.65	1.0000	4.65	_____

TOTAL DIRECT EXPENSES				154.16	_____
FIXED EXPENSES					
Implements	acre	0.64	1.0000	0.64	_____
Tractors	acre	1.35	1.0000	1.35	_____
Prorated Est Cost	acre	26.71	1.0000	26.71	_____

TOTAL FIXED EXPENSES				28.70	_____

TOTAL SPECIFIED EXPENSES				182.86	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 16.A Estimated resource use and costs for field operations, per acre
No-till renovation of old tall fescue pasture with
novel endophyte tall fescue, Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Mar							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Mar							0.3300	38.00	12.54	12.54
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Apr	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Glyphosate Plus 4L	pt											2.5000	3.91	9.78	9.78
Surfactant	pt											0.4000	1.68	0.67	0.67
NT Grain Drill	12'	2WD 75	0.196	1.00	May	2.85	1.13	2.15	4.65	0.39	3.75				14.53
Sorghum x Sudan Seed	lb											25.0000	0.47	11.75	11.75
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Glyphosate Plus 4L	pt											2.5000	3.91	9.78	9.78
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.27	0.90	0.96	2.08	0.31	3.00				9.21
White Clover Seed	lb											3.0000	4.00	12.00	12.00
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.85	1.13	2.15	4.65	0.39	3.75				14.53
MaxQ Fescue Seed	lb											20.0000	4.00	80.00	80.00
Custom Spread(Truck)	appl			1.00	Oct							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
TOTALS						9.77	3.88	5.58	11.82	1.28	12.38			280.12	323.55
INTEREST ON OPERATING CAPITAL															3.48
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															327.03

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 16.B Estimated costs per acre
No-till renovation of old tall fescue pasture with
novel endophyte tall fescue, Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	1.0000	22.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
HERBICIDE					
Glyphosate Plus 4L	pt	3.91	5.0000	19.55	_____
SEED/PLANTS					
Sorghum x Sudan Seed	lb	0.47	25.0000	11.75	_____
White Clover Seed	lb	4.00	3.0000	12.00	_____
MaxQ Fescue Seed	lb	4.00	20.0000	80.00	_____
ADJUVANTS					
Surfactant	pt	1.68	0.4000	0.67	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	1.0000	5.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.6753	7.35	_____
HAND LABOR					
Implements	hour	8.19	0.6126	5.03	_____
DIESEL FUEL					
Tractors	gal	3.53	2.6071	9.20	_____
REPAIR & MAINTENANCE					
Implements	acre	5.58	1.0000	5.58	_____
Tractors	acre	0.57	1.0000	0.57	_____
INTEREST ON OP. CAP.	acre	3.48	1.0000	3.48	_____

TOTAL DIRECT EXPENSES				311.33	_____
FIXED EXPENSES					
Implements	acre	11.82	1.0000	11.82	_____
Tractors	acre	3.88	1.0000	3.88	_____

TOTAL FIXED EXPENSES				15.70	_____

TOTAL SPECIFIED EXPENSES				327.03	_____

Note: Cost of production estimates are based on 2008 input prices
Fertilization decisions should be based on soil tests.

Table 17.A Estimated resource use and costs for field operations, per acre
Ryegrass annual pasture, prepared seedbed
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	38.00	12.54	12.54
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Disk Harrow	14'	2WD 75	0.140	2.00	Aug	4.06	1.61	1.29	3.06	0.28	3.06				13.08
Custom Spread(Truck)	appl			1.00	Sep							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Ryegrass Seed	lb											35.0000	0.61	21.35	21.35
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.73	0.68	0.15	0.26	0.11	1.30				4.12
Custom Spread(Truck)	appl			1.00	Dec							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Dec	0.90	0.36	0.16	0.22	0.09	0.94				2.58
2,4-D amine	pt											1.0000	1.82	1.82	1.82
Custom Spread(Truck)	appl			1.00	Mar							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
TOTALS						8.58	3.40	2.04	4.41	0.62	6.73			277.31	302.47
INTEREST ON OPERATING CAPITAL															8.53
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															311.00

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 17.B Estimated costs per acre
Ryegrass annual pasture, prepared seedbed
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	5.0000	110.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
HERBICIDE					
2,4-D amine	pt	1.82	1.0000	1.82	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.61	35.0000	21.35	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	3.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.5937	6.47	_____
HAND LABOR					
Implements	hour	8.19	0.0313	0.26	_____
DIESEL FUEL					
Tractors	gal	3.53	2.2919	8.08	_____
REPAIR & MAINTENANCE					
Implements	acre	2.04	1.0000	2.04	_____
Tractors	acre	0.50	1.0000	0.50	_____
INTEREST ON OP. CAP.	acre	8.53	1.0000	8.53	_____

TOTAL DIRECT EXPENSES				303.19	_____
FIXED EXPENSES					
Implements	acre	4.41	1.0000	4.41	_____
Tractors	acre	3.40	1.0000	3.40	_____

TOTAL FIXED EXPENSES				7.81	_____

TOTAL SPECIFIED EXPENSES				311.00	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 18.A Estimated resource use and costs for field operations, per acre
Ryegrass-wheat annual pasture, prepared seedbed
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	38.00	12.54	12.54
Chisel Plow	15'	2WD 75	0.130	1.00	Aug	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Disk Harrow	14'	2WD 75	0.140	2.00	Aug	4.06	1.61	1.29	3.06	0.28	3.06				13.08
Custom Spread(Truck)	appl			1.00	Sep							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Section Harrow	13'	2WD 75	0.119	1.00	Sep	1.73	0.68	0.15	0.26	0.11	1.30				4.12
Grain Drill	12'	2WD 75	0.157	1.00	Sep	2.27	0.90	0.96	2.08	0.31	3.00				9.21
Wheat Seed	lb											90.0000	0.27	24.30	24.30
Ryegrass Seed	lb											25.0000	0.61	15.25	15.25
Custom Spread(Truck)	appl			1.00	Dec							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Dec	0.90	0.36	0.16	0.22	0.09	0.94				2.58
2,4-D amine	pt											1.0000	1.82	1.82	1.82
Custom Spread(Truck)	appl			1.00	Mar							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
TOTALS						10.85	4.30	3.00	6.49	0.93	9.73			295.51	329.88
INTEREST ON OPERATING CAPITAL															9.38
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															339.26

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 18.B Estimated costs per acre
Ryegrass-wheat annual pasture, prepared seedbed
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	5.0000	110.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
HERBICIDE					
2,4-D amine	pt	1.82	1.0000	1.82	_____
SEED/PLANTS					
Wheat Seed	lb	0.27	90.0000	24.30	_____
Ryegrass Seed	lb	0.61	25.0000	15.25	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	3.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.7508	8.18	_____
HAND LABOR					
Implements	hour	8.19	0.1884	1.55	_____
DIESEL FUEL					
Tractors	gal	3.53	2.8985	10.22	_____
REPAIR & MAINTENANCE					
Implements	acre	3.00	1.0000	3.00	_____
Tractors	acre	0.63	1.0000	0.63	_____
INTEREST ON OP. CAP.	acre	9.38	1.0000	9.38	_____

TOTAL DIRECT EXPENSES				328.47	_____
FIXED EXPENSES					
Implements	acre	6.49	1.0000	6.49	_____
Tractors	acre	4.30	1.0000	4.30	_____

TOTAL FIXED EXPENSES				10.79	_____

TOTAL SPECIFIED EXPENSES				339.26	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 19.A Estimated resource use and costs for field operations, per acre
No-till ryegrass into volunteer summer grasses
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Aug							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Aug							0.3300	38.00	12.54	12.54
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Aug	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Roundup Original	pt											2.0000	5.63	11.26	11.26
Custom Spread(Truck)	appl			1.00	Sep							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
NT Grain Drill	12'	2WD 75	0.196	1.00	Sep	2.85	1.13	2.15	4.65	0.39	3.75				14.53
Ryegrass Seed	lb											35.0000	0.61	21.35	21.35
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Sep	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Sevin XLR Plus	qt											1.5000	9.44	14.16	14.16
Custom Spread(Truck)	appl			1.00	Dec							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Spray (Broadcast)	27'	2WD 75	0.062	1.00	Dec	0.90	0.36	0.16	0.22	0.09	0.94				2.58
2,4-D amine	pt											1.0000	1.82	1.82	1.82
Custom Spread(Truck)	appl			1.00	Mar							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
TOTALS						5.55	2.21	2.63	5.31	0.67	6.57			302.73	325.00
INTEREST ON OPERATING CAPITAL															9.34
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															334.34

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 19.B Estimated costs per acre
No-till ryegrass into volunteer summer grasses
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	5.0000	110.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
HERBICIDE					
Roundup Original	pt	5.63	2.0000	11.26	_____
2,4-D amine	pt	1.82	1.0000	1.82	_____
INSECTICIDE					
Sevin XLR Plus	qt	9.44	1.5000	14.16	_____
SEED/PLANTS					
Ryegrass Seed	lb	0.61	35.0000	21.35	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	3.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.3844	4.18	_____
HAND LABOR					
Implements	hour	8.19	0.2904	2.39	_____
DIESEL FUEL					
Tractors	gal	3.53	1.4842	5.23	_____
REPAIR & MAINTENANCE					
Implements	acre	2.63	1.0000	2.63	_____
Tractors	acre	0.32	1.0000	0.32	_____
INTEREST ON OP. CAP.	acre	9.34	1.0000	9.34	_____

TOTAL DIRECT EXPENSES				326.82	_____
FIXED EXPENSES					
Implements	acre	5.31	1.0000	5.31	_____
Tractors	acre	2.21	1.0000	2.21	_____

TOTAL FIXED EXPENSES				7.52	_____

TOTAL SPECIFIED EXPENSES				334.34	_____

Note: Cost of production estimates are based on 2008 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 annual hay
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	38.00	12.54	12.54
Chisel Plow	15'	2WD 75	0.130	1.00	Apr	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Disk Harrow	14'	2WD 75	0.140	2.00	Apr	4.06	1.61	1.29	3.06	0.28	3.06				13.08
Custom Spread(Truck)	appl			1.00	Apr							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Grain Drill	12'	2WD 75	0.157	1.00	May	2.27	0.90	0.96	2.08	0.31	3.00				9.21
Sorghum x Sudan Seed	lb											35.0000	0.47	16.45	16.45
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Jun	3.31	1.31	2.57	3.11	0.22	2.50				12.80
Hay Rake	8.5'	2WD 50	0.202	2.00	Jun	3.91	1.59	0.94	1.41	0.40	4.41				12.26
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jun	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0800	25.00	2.00	2.00
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jun	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Custom Spread(Truck)	appl			1.00	Jun							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.5000	22.00	33.00	33.00
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Jul	3.31	1.31	2.57	3.11	0.22	2.50				12.80
Hay Rake	8.5'	2WD 50	0.202	2.00	Jul	3.91	1.59	0.94	1.41	0.40	4.41				12.26
Hay Baler	Lg Round	2WD 75	0.211	1.00	Jul	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0600	25.00	1.50	1.50
Hay Mover	1B Lift	2WD 75	0.300	1.00	Jul	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Custom Spread(Truck)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.5000	22.00	33.00	33.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Aug	3.31	1.31	2.57	3.11	0.22	2.50				12.80
Hay Rake	8.5'	2WD 50	0.202	2.00	Aug	3.91	1.59	0.94	1.41	0.40	4.41				12.26
Hay Baler	Lg Round	2WD 75	0.211	1.00	Aug	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0400	25.00	1.00	1.00
Hay Mover	1B Lift	2WD 75	0.300	1.00	Aug	4.34	1.72	0.03	0.07	0.30	3.27				9.43
Hay Cut-Cond	9'	2WD 75	0.229	1.00	Sep	3.31	1.31	2.57	3.11	0.22	2.50				12.80
Hay Rake	8.5'	2WD 50	0.202	2.00	Sep	3.91	1.59	0.94	1.41	0.40	4.41				12.26
Hay Baler	Lg Round	2WD 75	0.211	1.00	Sep	3.06	1.21	3.09	4.15	0.21	2.31				13.82
Twine	bun											0.0300	25.00	0.75	0.75
Hay Mover	1B Lift	2WD 75	0.300	1.00	Sep	4.34	1.72	0.03	0.07	0.30	3.27				9.43
TOTALS						66.70	26.58	29.21	40.97	5.30	57.45			316.84	537.75
INTEREST ON OPERATING CAPITAL															14.30
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															552.05

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 20.B Estimated costs per acre
Sorghum sudan/millet annual hay
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	5.0000	110.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	2.0000	82.00	_____
SEED/PLANTS					
Sorghum x Sudan Seed	lb	0.47	35.0000	16.45	_____
OTHER					
Twine	bun	25.00	0.2100	5.25	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	3.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	5.1492	56.16	_____
HAND LABOR					
Implements	hour	8.19	0.1571	1.29	_____
DIESEL FUEL					
Tractors	gal	3.53	17.7964	62.78	_____
REPAIR & MAINTENANCE					
Implements	acre	29.21	1.0000	29.21	_____
Tractors	acre	3.92	1.0000	3.92	_____
INTEREST ON OP. CAP.	acre	14.30	1.0000	14.30	_____

TOTAL DIRECT EXPENSES				484.50	_____
FIXED EXPENSES					
Implements	acre	40.97	1.0000	40.97	_____
Tractors	acre	26.58	1.0000	26.58	_____

TOTAL FIXED EXPENSES				67.55	_____

TOTAL SPECIFIED EXPENSES				552.05	_____

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 21.A Estimated resource use and costs for field operations, per acre
Sorghum sudan/millet annual pasture
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Soil Testing	acre			1.00	Apr							1.0000	0.60	0.60	0.60
Lime (Spread)	ton			1.00	Apr							0.3300	38.00	12.54	12.54
Chisel Plow	15'	2WD 75	0.130	1.00	Apr	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Custom Spread(Truck)	appl			1.00	May							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											1.0000	41.00	41.00	41.00
Disk Harrow	14'	2WD 75	0.140	2.00	May	4.06	1.61	1.29	3.06	0.28	3.06				13.08
Grain Drill	12'	2WD 75	0.157	1.00	May	2.27	0.90	0.96	2.08	0.31	3.00				9.21
Sorghum x Sudan Seed	lb											35.0000	0.47	16.45	16.45
Custom Spread(Truck)	appl			1.00	Jul							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											2.0000	22.00	44.00	44.00
Custom Spread(Truck)	appl			1.00	Aug							1.0000	5.00	5.00	5.00
Amm Nitrate (34%N)	cwt											1.5000	22.00	33.00	33.00
TOTALS						8.22	3.26	2.69	6.01	0.72	7.49			281.59	309.26
INTEREST ON OPERATING CAPITAL															9.54
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															318.80

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 21.B Estimated costs per acre
Sorghum sudan/millet annual pasture
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	5.5000	121.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	1.0000	41.00	_____
SEED/PLANTS					
Sorghum x Sudan Seed	lb	0.47	35.0000	16.45	_____
CUSTOM FERT					
Custom Spread(Truck)	appl	5.00	3.0000	15.00	_____
SERVICE FEE					
Soil Testing	acre	0.60	1.0000	0.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.3300	12.54	_____
OPERATOR LABOR					
Tractors	hour	10.91	0.5687	6.20	_____
HAND LABOR					
Implements	hour	8.19	0.1571	1.29	_____
DIESEL FUEL					
Tractors	gal	3.53	2.1954	7.74	_____
REPAIR & MAINTENANCE					
Implements	acre	2.69	1.0000	2.69	_____
Tractors	acre	0.48	1.0000	0.48	_____
INTEREST ON OP. CAP.	acre	9.54	1.0000	9.54	_____

TOTAL DIRECT EXPENSES				309.53	_____
FIXED EXPENSES					
Implements	acre	6.01	1.0000	6.01	_____
Tractors	acre	3.26	1.0000	3.26	_____

TOTAL FIXED EXPENSES				9.27	_____

TOTAL SPECIFIED EXPENSES				318.80	_____

Note: Cost of production estimates are based on 2008 input prices
Fertilization decisions should be based on soil tests.

Table 22.A Estimated resource use and costs for field operations, per acre
Corn silage
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Lime (Spread)	ton			1.00	Sep							0.5000	38.00	19.00	19.00
Chisel Plow	15'	2WD 75	0.130	1.00	Sep	1.89	0.75	0.44	0.87	0.13	1.43				5.38
Disk Harrow	14'	2WD 75	0.140	1.00	Mar	2.03	0.80	0.64	1.53	0.14	1.53				6.53
Spin Spreader	5 Ton	2WD 75	0.042	1.00	Mar	0.61	0.24	0.27	0.61	0.08	0.80				2.53
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											2.0000	41.00	82.00	82.00
Disk Bed (Hipper)	4R-38	2WD 75	0.147	1.00	Mar	2.14	0.85	0.29	0.85	0.14	1.61				5.74
Row Cond	13'	2WD 75	0.119	1.00	Mar	1.73	0.68	0.49	0.80	0.11	1.30				5.00
Plant & Pre Rigid	4R-38	2WD 75	0.153	1.00	Mar	2.23	0.88	1.26	2.72	0.30	2.94				10.03
Atrazine 4L	pt											2.5000	1.69	4.22	4.22
Lasso 4E	qt											2.0000	6.60	13.20	13.20
Corn Seed	thous											22.0000	1.55	34.10	34.10
Fert Appl (Liquid)	4R-38	2WD 75	0.154	1.00	Apr	2.24	0.89	1.34	1.70	0.23	2.32				8.49
UAN (32% N)	cwt											4.0000	23.00	92.00	92.00
Spray (Spot)	27'	2WD 75	0.062	1.00	May	0.90	0.36	0.16	0.22	0.09	0.94				2.58
Accent SP 75%	oz											0.6700	31.94	21.40	21.40
Cultivate (Late)	4R-40	2WD 75	0.124	1.00	Jun	1.80	0.71	0.23	0.40	0.12	1.35				4.49
Silage Harvester	2-Row	2WD 75	0.510	1.00	Aug	7.38	2.92	11.29	13.65	0.51	5.57				40.81
Silage Wagon	10-Ton	2WD 75	0.510	1.00	Aug	7.38	2.92	1.21	3.08	0.51	5.57				20.16
TOTALS						30.33	12.00	17.62	26.43	2.40	25.36			362.92	474.66
INTEREST ON OPERATING CAPITAL															3.90
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															478.56

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

Table 22.B Estimated costs per acre
Corn silage
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	1.0000	22.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	2.0000	82.00	_____
UAN (32% N)	cwt	23.00	4.0000	92.00	_____
HERBICIDE					
Atrazine 4L	pt	1.69	2.5000	4.22	_____
Lasso 4E	qt	6.60	2.0000	13.20	_____
Accent SP 75%	oz	31.94	0.6700	21.40	_____
SEED/PLANTS					
Corn Seed	thous	1.55	22.0000	34.10	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.5000	19.00	_____
OPERATOR LABOR					
Tractors	hour	10.91	2.0959	22.87	_____
HAND LABOR					
Implements	hour	8.19	0.3045	2.49	_____
DIESEL FUEL					
Tractors	gal	3.53	8.0912	28.55	_____
REPAIR & MAINTENANCE					
Implements	acre	17.62	1.0000	17.62	_____
Tractors	acre	1.78	1.0000	1.78	_____
INTEREST ON OP. CAP.	acre	3.90	1.0000	3.90	_____

TOTAL DIRECT EXPENSES				440.13	_____
FIXED EXPENSES					
Implements	acre	26.43	1.0000	26.43	_____
Tractors	acre	12.00	1.0000	12.00	_____

TOTAL FIXED EXPENSES				38.43	_____

TOTAL SPECIFIED EXPENSES				478.56	_____

Note: Cost of production estimates are based on 2008 input prices. **Fertilization decisions should be based on soil tests.**

Table 23.A Estimated resource use and costs for field operations, per acre
Sorghum silage
Mississippi, 2009

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Lime (Spread)	ton			1.00	Sep							0.5000	38.00	19.00	19.00
Chisel Plow	15'	2WD 75	0.130	2.00	Apr	3.79	1.50	0.88	1.75	0.26	2.86				10.78
Spin Spreader	5 Ton	2WD 75	0.042	1.00	May	0.61	0.24	0.27	0.61	0.08	0.80				2.53
Amm Nitrate (34%N)	cwt											1.0000	22.00	22.00	22.00
Phosphate (46% P2O5)	cwt											1.5000	50.00	75.00	75.00
Potash (60% K2O)	cwt											2.0000	41.00	82.00	82.00
Field Cultivate	12'	2WD 75	0.124	1.00	May	1.81	0.71	0.25	1.20	0.12	1.36				5.33
Disk Bed (Hipper)	4R-38	2WD 75	0.147	1.00	May	2.14	0.85	0.29	0.85	0.14	1.61				5.74
Row Cond	13'	2WD 75	0.119	1.00	May	1.73	0.68	0.49	0.80	0.11	1.30				5.00
Plant & Pre Rigid	4R-38	2WD 75	0.153	1.00	May	2.23	0.88	1.26	2.72	0.30	2.94				10.03
Forage Sorghum Seed	lb											6.0000	1.10	6.60	6.60
Bicep ll	qt											2.0000	11.34	22.68	22.68
Cultivate	4R-38	2WD 75	0.162	1.00	May	2.35	0.93	0.42	1.25	0.16	1.77				6.72
Fert Appl (Liquid)	4R-38	2WD 75	0.154	1.00	May	2.24	0.89	1.34	1.70	0.23	2.32				8.49
UAN (32% N)	cwt											4.0000	23.00	92.00	92.00
Cultivate (Late)	4R-40	2WD 75	0.124	1.00	Jun	1.80	0.71	0.23	0.40	0.12	1.35				4.49
Silage Harvester	2-Row	2WD 75	0.510	1.00	Sep	7.38	2.92	11.29	13.65	0.51	5.57				40.81
Silage Wagon	10-Ton	2WD 75	0.510	1.00	Sep	7.38	2.92	1.21	3.08	0.51	5.57				20.16
TOTALS						33.46	13.23	17.93	28.01	2.58	27.45			319.28	439.36
INTEREST ON OPERATING CAPITAL															2.34
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															441.70

Note: Cost of production estimates are based on 2008 input prices.
Fertilization decisions should be based on soil tests.

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Table 23.B Estimated costs per acre
Sorghum silage
Mississippi, 2009

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%N)	cwt	22.00	1.0000	22.00	_____
Phosphate (46% P2O5)	cwt	50.00	1.5000	75.00	_____
Potash (60% K2O)	cwt	41.00	2.0000	82.00	_____
UAN (32% N)	cwt	23.00	4.0000	92.00	_____
HERBICIDE					
Bicep ll	qt	11.34	2.0000	22.68	_____
SEED/PLANTS					
Forage Sorghum Seed	lb	1.10	6.0000	6.60	_____
CUSTOM LIME					
Lime (Spread)	ton	38.00	0.5000	19.00	_____
OPERATOR LABOR					
Tractors	hour	10.91	2.3107	25.22	_____
HAND LABOR					
Implements	hour	8.19	0.2731	2.23	_____
DIESEL FUEL					
Tractors	gal	3.53	8.9203	31.49	_____
REPAIR & MAINTENANCE					
Implements	acre	17.93	1.0000	17.93	_____
Tractors	acre	1.97	1.0000	1.97	_____
INTEREST ON OP. CAP.	acre	2.34	1.0000	2.34	_____

TOTAL DIRECT EXPENSES				400.46	_____
FIXED EXPENSES					
Implements	acre	28.01	1.0000	28.01	_____
Tractors	acre	13.23	1.0000	13.23	_____

TOTAL FIXED EXPENSES				41.24	_____

TOTAL SPECIFIED EXPENSES				441.70	_____

Note: Cost of production estimates are based on 2008 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, 2009

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	28,984	600	8	2.57	10.91	9.08	0.90	20.90	6.11	27.01
Tractor(40-59hp)CAB	MFWD 50	31,863	600	8	2.57	10.91	9.08	0.99	20.99	6.71	27.70
Tractor(40-59hp)RB	2WD 50	18,617	600	8	2.57	10.91	9.08	0.58	20.57	3.92	24.50
Tractor(40-59hp)RB	MFWD 50	23,528	600	8	2.57	10.91	9.08	0.73	20.73	4.96	25.69
Tractor(60-89hp)CAB	2WD 75	38,964	600	8	3.86	10.91	13.62	1.21	25.75	8.21	33.97
Tractor(60-89hp)CAB	MFWD 75	41,620	600	8	3.86	10.91	13.62	1.30	25.83	8.77	34.61
Tractor(60-89hp)RB	2WD 75	27,169	600	8	3.86	10.91	13.62	0.84	25.38	5.72	31.11
Tractor(60-89hp)RB	MFWD 75	33,056	600	8	3.86	10.91	13.62	1.03	25.57	6.96	32.54
Tractor(90-119hp)CB	2WD 105	54,137	600	8	5.40	10.91	19.07	1.69	31.68	11.41	43.09
Tractor(90-119hp)CB	MFWD 105	64,936	600	8	5.40	10.91	19.07	2.02	32.01	13.69	45.70
Tractor(90-119hp)RB	2WD 105	37,544	600	8	5.40	10.91	19.07	1.17	31.16	7.91	39.07
Tractor(90-119hp)RB	MFWD 105	44,843	600	8	5.40	10.91	19.07	1.40	31.38	9.45	40.84
Tractor(120-139hp)CB	2WD 130	76,003	600	8	6.69	10.91	23.62	2.37	36.90	16.02	52.93
Tractor(120-139hp)CB	MFWD 130	88,605	600	8	6.69	10.91	23.62	2.76	37.29	18.68	55.98
Tractor(140-159hp)CB	2WD 150	88,335	600	8	7.72	10.91	27.25	2.76	40.92	18.62	59.55
Tractor(140-159hp)CB	MFWD 150	102,055	600	8	7.72	10.91	27.25	3.18	41.35	21.51	62.87

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

Appendix Table 2. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2009

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			dollars	hours	years	hr/ac	$/acre							
Chisel Plow	15'	2WD 105	9,338	150	12	0.130	1.42	2.49	0.44	0.15	4.52	0.87	1.03	6.43
Chisel Plow Folding	16'	2WD 105	12,422	150	12	0.115	1.26	2.20	0.51	0.13	4.11	1.02	0.91	6.05
Cult & Post	4R-38	2WD 105	15,243	150	10	0.162	2.43	3.09	0.66	0.19	6.38	1.96	1.28	9.63
Cult & Post	6R-30	2WD 105	19,672	150	10	0.137	2.06	2.62	0.72	0.16	5.56	2.14	1.08	8.79
Cult & Post	6R-38	2WD 105	21,022	150	10	0.108	1.62	2.07	0.60	0.12	4.43	1.80	0.85	7.10
Cult & Post	8R-30	2WD 105	22,731	150	10	0.103	1.54	1.96	0.62	0.12	4.26	1.85	0.81	6.93
Cultipacker	12'	2WD 105	4,640	300	12	0.124	1.35	2.37	0.13	0.14	4.01	0.21	0.98	5.21
Cultipacker	20'	2WD 105	12,011	300	12	0.074	0.81	1.42	0.21	0.08	2.53	0.32	0.59	3.45
Cultivate	4R-38	2WD 105	9,748	150	10	0.162	1.77	3.09	0.42	0.19	5.48	1.25	1.28	8.02
Cultivate	6R-30	2WD 105	14,177	150	10	0.137	1.50	2.62	0.51	0.16	4.80	1.54	1.08	7.43
Cultivate	6R-38	2WD 105	15,527	150	10	0.108	1.18	2.07	0.44	0.12	3.83	1.33	0.85	6.02
Cultivate	8R-30	2WD 105	17,236	150	12	0.103	1.12	1.96	0.39	0.12	3.60	1.27	0.81	5.69
Cyclone Spin	825Lb	2WD 105	842	50	8	0.200	3.00	3.81	0.12	0.23	7.17	0.50	1.58	9.26
Disk & Incorporate	14'	2WD 105	22,039	200	10	0.147	2.21	2.81	0.97	0.17	6.16	1.92	1.16	9.26
Disk & Incorporate	24'	2WD 105	34,957	200	10	0.085	1.28	1.63	0.90	0.10	3.93	1.78	0.68	6.39
Disk & Incorporate	32'	2WD 130	43,916	200	10	0.064	0.96	1.52	0.84	0.15	3.49	1.68	1.03	6.20
Disk Bed (Hipper)	4R-38	2WD 105	7,781	160	10	0.147	1.61	2.81	0.28	0.17	4.88	0.85	1.16	6.90
Disk Bed (Hipper)	6R-30	2WD 50	12,271	160	10	0.125	1.36	1.13	0.38	0.07	2.95	1.13	0.49	4.58
Disk Bed (Hipper)	6R-38	2WD 105	12,271	160	10	0.098	1.07	1.88	0.30	0.11	3.37	0.89	0.78	5.05
Disk Bed (Hipper)	8R-30	2WD 130	13,070	160	10	0.093	1.02	2.21	0.30	0.22	3.76	0.90	1.50	6.17
Disk Harrow	14'	2WD 105	16,544	180	10	0.140	1.53	2.67	0.64	0.16	5.01	1.53	1.11	7.65
Disk Harrow	24'	2WD 105	29,462	180	10	0.081	0.89	1.56	0.66	0.09	3.22	1.59	0.64	5.45
Disk Harrow	32'	2WD 130	38,421	180	10	0.061	0.66	1.44	0.65	0.14	2.92	1.55	0.98	5.45
Fert Appl (Liquid)	4R-38	2WD 105	12,995	150	8	0.154	2.32	2.95	1.33	0.18	6.79	1.69	1.22	9.71
Fert Appl (Liquid)	6R-30	2WD 105	15,834	150	8	0.130	1.96	2.49	1.38	0.22	6.06	1.74	1.49	9.31
Fert Appl (Liquid)	6R-38	2WD 105	12,360	150	8	0.103	1.55	1.97	0.85	0.12	4.49	1.07	0.81	6.39
Fert Appl (Liquid)	8R-30	2WD 105	15,032	150	8	0.098	1.47	1.87	0.98	0.16	4.49	1.24	1.12	6.86
Field Cult & Inc	12'	2WD 105	13,605	100	10	0.124	1.86	2.37	0.42	0.14	4.81	2.01	0.98	7.80
Field Cult & Inc	24'	2WD 105	24,679	100	10	0.062	0.93	1.18	0.38	0.07	2.57	1.82	0.49	4.89
Field Cultivate	12'	2WD 105	8,110	100	10	0.124	1.35	2.37	0.25	0.14	4.12	1.19	0.98	6.31
Field Cultivate	24'	2WD 105	19,184	100	10	0.062	0.67	1.18	0.29	0.07	2.23	1.41	0.49	4.14
Front Loader	.5 yd	2WD 75	4,844	100	10	0.120	1.30	1.63	0.34	0.10	3.39	0.75	0.68	4.83
Grain Drill	12'	2WD 105	16,364	150	8	0.157	3.00	2.99	0.96	0.18	7.14	2.08	1.24	10.47
Hay Baler	Conv	2WD 50	18,134	200	8	0.229	2.50	2.08	2.07	0.13	6.79	3.13	0.89	10.83
Hay Baler	Lg Round	2WD 105	25,982	200	8	0.211	2.30	4.03	3.09	0.24	9.68	4.15	1.67	15.51
Hay Baler	Med Rnd	2WD 75	15,555	200	8	0.211	2.30	2.88	1.85	0.17	7.22	2.48	1.21	10.91
Hay Cut-Cond	9'	2WD 105	17,954	200	8	0.229	2.50	4.37	2.57	0.26	9.71	3.10	1.81	14.63
Hay Cut-Cond	12'	2WD 105	23,881	200	8	0.171	1.87	3.27	2.56	0.20	7.92	3.10	1.36	12.38
Hay Disc Mower	8'	2WD 75	7,821	200	8	0.257	2.81	3.51	1.26	0.21	7.80	1.52	1.47	10.80
Hay Disc Mower	10'	2WD 50	9,187	200	8	0.206	2.25	1.87	1.18	0.11	5.42	1.43	0.80	7.66
Hay Mover	1B Lift	2WD 50	348	200	10	0.300	3.27	2.72	0.02	0.17	6.19	0.06	1.17	7.44
Hay Rake	8.5'	2WD 50	4,630	200	8	0.202	2.20	1.83	0.46	0.11	4.62	0.70	0.79	6.12
Hay Rake-Double	17'	2WD 75	4,907	200	8	0.101	1.10	1.37	0.24	0.08	2.81	0.37	0.57	3.76
Hay Tedder	17'	2WD 105	5,150	200	8	0.101	1.10	1.92	0.26	0.11	3.41	0.39	0.80	4.60
Hay Trailer	20'	2WD 75	3,847	200	15	0.090	0.98	1.22	0.09	0.07	2.37	0.17	0.51	3.06
NT Grain Drill	12'	2WD 105	29,184	150	8	0.196	3.75	3.74	2.14	0.23	9.87	4.64	1.55	16.08
NT Plant & Pre Rigid	4R-38	2WD 105	23,687	150	8	0.153	2.93	2.93	1.36	0.18	7.41	2.95	1.21	11.58
NT Plant & Pre Rigid	6R-30	2WD 105	30,411	150	8	0.130	2.48	2.48	1.48	0.15	6.60	3.20	1.03	10.84
NT Plant & Pre Rigid	6R-38	2WD 105	30,249	150	8	0.102	1.96	1.96	1.16	0.12	5.20	2.51	0.81	8.54
NT Plant Rigid	4R-38	2WD 105	18,192	150	8	0.148	2.82	2.82	1.01	0.17	6.83	2.18	1.17	10.19
NT Plant Rigid	6R-30	2WD 105	24,916	150	8	0.125	2.39	2.39	1.17	0.14	6.10	2.53	0.99	9.62
NT Plant Rigid	6R-38	2WD 105	24,754	150	8	0.098	1.89	1.88	0.91	0.11	4.81	1.98	0.78	7.58
Plant & Pre Rigid	4R-38	2WD 105	21,833	150	8	0.153	2.93	2.93	1.25	0.18	7.30	2.72	1.21	11.24
Plant & Pre Rigid	6R-30	2WD 105	28,557	150	8	0.126	2.41	2.40	1.35	0.14	6.32	2.92	0.99	10.24
Plant & Pre Rigid	6R-38	2WD 105	27,468	150	8	0.102	1.96	1.96	1.05	0.12	5.10	2.28	0.81	8.20
Plant Rigid	4R-38	2WD 105	16,338	150	8	0.148	2.82	2.82	0.90	0.17	6.73	1.96	1.17	9.86
Plant Rigid	6R-30	2WD 105	23,062	150	8	0.125	2.39	2.39	1.08	0.14	6.01	2.34	0.99	9.35
Plant Rigid	6R-38	2WD 105	21,973	150	8	0.098	1.89	1.88	0.81	0.11	4.71	1.76	0.78	7.25
Rotary Mower	7'	2WD 50	3,712	185	10	0.168	1.83	1.52	0.50	0.09	3.97	0.40	0.66	5.03
Rotary Mower	8'	2WD 75	5,179	185	10	0.147	1.60	2.00	0.61	0.12	4.35	0.48	0.84	5.69
Rotary Mower	12'	2WD 105	8,455	185	10	0.098	1.07	1.87	0.67	0.11	3.73	0.53	0.77	5.04
Rotary Mower	15'	2WD 105	14,627	185	10	0.078	0.85	1.49	0.93	0.09	3.38	0.73	0.62	4.73
Row Cond	13'	2WD 105	5,440	100	10	0.119	1.30	2.27	0.48	0.14	4.20	0.79	0.94	5.95
Row Cond	21'	2WD 105	8,498	100	10	0.078	0.85	1.49	0.16	0.09	2.61	0.79	0.62	4.03
Row Cond & Inc	13'	2WD 105	10,935	100	10	0.126	1.90	2.42	0.34	0.14	4.82	1.64	1.00	7.47
Row Cond & Inc	21'	2WD 105	13,993	100	10	0.078	1.17	1.49	0.27	0.09	3.04	1.30	0.62	4.97
Section Harrow	13'	2WD 105	3,690	200	10	0.119	1.30	2.27	0.15	0.14	3.87	0.26	0.94	5.08
Silage Harvester	2-Row	2WD 105	35,421	200	8	0.510	5.56	9.73	11.29	0.59	27.19	13.65	4.03	44.88
Silage Harvester 3-R	3-Row	2WD 105	41,952	200	8	0.336	3.67	6.42	8.82	0.56	19.49	10.67	3.84	34.01
Silage Wagon	10-Ton	2WD 75	11,838	200	15	0.510	5.56	6.95	1.20	0.43	14.16	3.07	2.92	20.16
Silage Wagon 12T	12-Ton	2WD 105	12,223	200	15	0.510	5.56	9.73	1.24	0.86	17.41	3.17	5.82	26.41
Spin Spreader	5 Ton	2WD 105	11,529	100	8	0.042	0.80	0.80	0.27	0.04	1.92	0.61	0.33	2.87
Spray (Broadcast)	27'	2WD 105	5,495	200	8	0.062	0.94	1.19	0.16	0.07	2.37	0.21	0.49	3.08
Spray (Spot)	27'	2WD 105	5,495	200	8	0.062	0.94	1.19	0.16	0.07	2.37	0.21	0.49	3.08
Subsoiler	3 Shank	2WD 130	3,773	100	15	0.020	0.22	0.48	0.02	0.04	0.77	0.07	0.32	1.18
Tailgate Seeder		2WD 50	379	100	8	0.200	2.18	1.81	0.09	0.11	4.21	0.11	0.78	5.10

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, 2007

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Glyphosate Plus 4L	pt	3.91
Crop Oil (veg)	pt	2.51	Gramoxone Inteon	oz	0.23
Surfactant	pt	1.68	Gramoxone Inteon	oz	0.23
CUSTOM FERT			Gramoxone Max	pt	4.97
App Fert by Air	cwt	5.00	Grazon P+D	pt	4.01
App Fert by Air(Min)	appl	5.00	Hoelon 3 EC	pt	10.19
Custom Spread(Truck)	appl	5.00	Lasso 4E	qt	6.60
CUSTOM LIME			Londax DF	oz	12.70
Lime (Spread)	ton	38.00	Lorox DF	lb	16.56
CUSTOM PLANT			MSMA + Surfactant	pt	1.99
Custom Spread + Seed	appl	5.00	Overdrive		0.00
Custom Sprig	acre	65.00	PastureGard	pt	6.56
Plant by Air	cwt	4.50	Poast	pt	8.90
CUSTOM SPRAY			Poast Plus	pt	6.63
App by Air (10 gal)	appl	6.50	Redeem	pt	15.57
App by Air (2 gal)	appl	3.00	Remedy	pt	12.56
App by Air (3 gal)	appl	3.50	Roundup Original	pt	5.63
App by Air (5 gal)	appl	4.50	Roundup Ultra Max	pt	6.50
FERTILIZER			Sencor DF75	lb	16.01
Amm Nitrate (34%N)	cwt	22.00	Surmount	pt	7.06
Boron (Solubor)	lb	0.40	Telar		19.94
Fert 0-20-20	cwt	0.00	Treflan HFP	pt	3.33
Fert 10-34-0	cwt	0.00	Velpar DF	lb	22.82
Fert 13-13-13	cwt	0.00	Velpar L	pt	8.08
Phosphate (46% P2O5)	cwt	50.00	Weedmaster	pt	3.30
Potash (60% K2O)	cwt	41.00	INSECTICIDE		
UAN (32% N)	cwt	23.00	Baythroid 2	oz	2.36
UAN + Sulfur (28%)	cwt	0.00	Dipel ES	pt	4.26
Urea, Solid (46% N)	cwt	38.00	Disyston 8E	pt	13.89
HAUL			Furadan 4F	pt	9.52
Hay Haul (Conv)	ton	14.00	Lannate LV	pt	7.67
HERBICIDE			Lorsban 15G	lb	1.58
2,4-D amine	pt	1.82	Lorsban 4E	pt	4.45
2,4-D ester	pt	1.87	Malathion ULV	pt	4.93
2,4-DB	pt	4.29	Methyl Parathion 4	pt	4.35
AAtrex 4L	pt	1.94	Pounce 3.2 EC	oz	0.98
Accent SP 75%	oz	31.94	Sevin XLR Plus	qt	9.44
Arsenal 2E	pt	46.88	OTHER		
Atrazine 4L	pt	1.69	Twine	bun	25.00
Balan	lb	12.00	SEED/PLANTS		
Banvel	pt	8.95	Alfalfa Seed	lb	5.30
Basagran	pt	10.75	Bahiagrass Seed	lb	2.70
Bicep ll	qt	11.34	Bermuda-Seeded	lb	0.00
Blazer Ultra	pt	7.81	Common Bermuda Seed	lb	3.70
Buctril 4EC	pt	15.39	Corn Seed	thous	1.55
Cimarron	oz	13.64	Crimson Clover Seed	lb	2.50
Cimarron Max	oz	0.00	Dallisgrass Seed	lb	6.60
Crossbow	pt	8.05	Fescue Seed	lb	1.40
Diuron 4L	pt	2.36	Forage Sorghum Seed	lb	1.10
DSMA Liquid	pt	1.00	MaxQ Fescue Seed	lb	4.00
Dual Magnum	pt	12.74	Millet Seed	lb	0.50
Fusilade DX	oz	1.34	Red Clover Seed	lb	2.50

Appendix Table 4. Estimated fuel prices and interest rates, Mississippi, 2009

ITEM NAME	UNIT	PRICE
		dollars
	FUEL TYPES	
Diesel Fuel	gal	3.53
Electricity	kWh	0.00
Gasoline	gal	3.56
LP Gas	gal	0.00
Natural Gas	Mcf	0.00
	INTEREST RATES	
Short-term	%	6.00
Intermediate-term	%	6.75

Appendix Table 5. Labor names, units and wage rates Mississippi, 2009

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	10.91
HAND LABOR	hour	8.19

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