

WINE GRAPES

2010

FRUIT AND NUT

PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2010-08

June 2010

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

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

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2010 Planning Budgets

Budgets for Agricultural Enterprises

This publication provides economic and technical information in the form of enterprise budgets for fruit 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. Income is not included in the fruit planning budgets due to the volatile nature of prices in the fresh produce market. Budgets reflect the cost of production per acre planted.

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 current practices.

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

Machinery

Machinery manufacturers form the basis for machinery prices used in these publications. Prices by size of equipment are determined from the most common sales in each category as reported by machinery dealers. Prices used in the budgets reflect prices paid by farmers in 2009. (Appendix Tables 1, 2, and 3).

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

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

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

The labor wage rate per hour includes social security, accident and unemployment insurance, and some perquisites (11). Labor costs are estimated for several different labor categories. Operator labor is that labor required to operate all power-driven equipment.

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

Estimates of Fixed Costs

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

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

where:

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

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

where:

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

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

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

$$CRCPA = CRCPH \times PR$$

where:

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

Estimates of Irrigation Costs

Generally, irrigation is recommended for fruit production. Irrigation costs for the most commonly used irrigation systems are presented in Appendix Tables 7, 8, 9, 10, 11, and 12. Each appendix table lists all annual supplies, prices, and quantities required. Costs for the water will vary depending on the water source. Climatic conditions during the growing season will dictate water usage.

Estimates of Marketing and Grading Costs

Marketing and grading costs should be viewed as only rough estimates. These costs are highly dependent upon the market outlet. For producers with traditional customers acquired over the years, there may be no brokerage fees. Other packing for shipping may go through a broker and incur packing costs as well.

Wine Grape Production

The user should consider the following assumptions when using the wine grape enterprise budgets. These assumptions are based on the growing conditions and environment which best represent current production systems. To reduce site preparation costs, the site is established on previously cleared land. The life of the vineyard is estimated at 20 years. The planting pattern is 8 ft vine spacings with 12 ft from row center to row center, 454 vines per 5 acres. Varieties represented are American hybrids and V, vinifera cultivars. This budget does not estimate costs of irrigation water. A single wire trellis system is used.

Enterprise Budgets

Table 1.A Estimated resource use and costs for field operations, per acre
 Wine Grape, year 1, prep vineyard site
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape, Mississippi, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Hand Labor	hour			1.00	Mar						0.60	5.35				5.35
Soil Test	each												1.0000	6.00	6.00	6.00
Lime (Spread)	ton			1.00	Mar								3.0000	38.00	114.00	114.00
Cyclone Spin	825 Lb	2WD 50 hp	0.084	1.00	Apr	0.55	0.48	0.06	0.23	0.08	0.95					2.27
Phosphorus(46% P205)	cwt												1.3000	46.00	59.80	59.80
Potash (60% K20)	cwt												1.5000	44.00	66.00	66.00
Amm Nitrate (34%)	cwt												1.7500	28.00	49.00	49.00
Sub-Soiler	1 shank	2WD 50 hp	1.078	3.00	Apr	21.24	18.35	1.00	2.75	3.23	36.33					79.67
Chisel Plow	8 Ft	2WD 50 hp	0.220	1.00	May	1.45	1.25	0.59	1.15	0.22	2.47					6.91
Disk Harrow	10 Ft	2WD 50 hp	0.198	1.00	May	1.30	1.12	0.43	1.02	0.19	2.23					6.10
Fescue Seed	lb			1.00	Sep								90.0000	1.40	126.00	126.00
TOTALS						24.54	21.20	2.08	5.15	4.33	47.33				420.80	521.10
INTEREST ON OPERATING CAPITAL																9.39
UNALLOCATED LABOR																8.40
TOTAL SPECIFIED COST																538.89

Note: Cost of production estimates are based on 2009 input prices.

Fertilization decisions should be based on soil tests.

Table 1.B Estimated costs per acre
 Wine Grape, year 1, prep vineyard site
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	38.00	3.0000	114.00	_____
Phosphorus (46% P205)	cwt	46.00	1.3000	59.80	_____
Potash (60% K20)	cwt	44.00	1.5000	66.00	_____
Amm Nitrate (34%)	cwt	28.00	1.7500	49.00	_____
SEED/PLANTS					
Fescue Seed	lb	1.40	90.0000	126.00	_____
OTHER					
Soil Test	each	6.00	1.0000	6.00	_____
Operator Labor					
Tractors	hour	11.23	3.7381	41.98	_____
Hand Labor					
Special Labor	hour	8.92	0.6000	5.35	_____
UNALLOCATED LABOR	hour	11.23	0.7476	8.40	_____
DIESEL FUEL					
Tractors	gal	2.22	9.6204	21.35	_____
REPAIR & MAINTENANCE					
Implements	acre	2.08	1.0000	2.08	_____
Tractors	acre	3.19	1.0000	3.19	_____
INTEREST ON OP. CAP.	acre	9.39	1.0000	9.39	_____
TOTAL DIRECT EXPENSES				512.54	_____
FIXED EXPENSES					
Implements	acre	5.15	1.0000	5.15	_____
Tractors	acre	21.20	1.0000	21.20	_____
TOTAL FIXED EXPENSES				26.35	_____
TOTAL SPECIFIED EXPENSES				538.89	_____

Note: Cost of production estimates are based on 2009 input prices.

Fertilization decisions should be based on soil tests.

Table 2.A Estimated resource use and costs for field operations, per acre
 Wine Grapes, year 2
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Dig Holes for Vines				1.00	Feb											
Auger	18"	2WD 50 hp	2.000			13.14	11.34		0.68	2.00	22.46					47.62
Hand Labor	hour									2.00	17.84					17.84
Planting				1.00	Feb											
Trailer Utility	10 ft	2WD 50 hp	0.600			3.94	3.40	0.09	0.33	0.60	6.74					14.50
Hand Labor	hour									60.00	535.20					535.20
Wine Grape Vines	each											454.0000	1.75	794.50		794.50
Grow Tubes	each											454.0000	0.85	385.90		385.90
Bamboo Stakes	each											454.0000	0.30	136.20		136.20
Bldg Trellis Grapes				1.00	Mar											
Trailer Utility	10 ft	2WD 50 hp	0.600			3.94	3.40	0.09	0.33	0.60	6.74					14.50
Hand Labor	hour									60.00	535.20					535.20
Grape Trellis Inputs				1.00	Mar											
End Post Wine Grapes	each											24.0000	22.00	528.00		528.00
Line Posts Metal	each											216.0000	6.25	1350.00		1350.00
Wire - Wine Grape	ft											3720.0000	0.01	73.47		73.47
Anchors	each											288.0000	6.65	1915.20		1915.20
Tighteners	each											24.0000	2.50	60.00		60.00
Bldg Trellis Grapes				1.00	Mar											
Wire Links - W.Grape	each											12.0000	2.15	25.80		25.80
Wire Vises - W.Grape	each											24.0000	1.65	39.60		39.60
End Post Anchors	each											24.0000	6.90	165.60		165.60
Irrigate & Check				2.00	Apr											
Irrigation Labor	hour									2.00	17.84					17.84
Mow between Rows				2.00	Apr											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Side Dresser	1R 3ft	2WD 50 hp	0.846	1.00	Apr	5.55	4.80	2.11	9.02	0.84	9.50					30.98
Amm Nitrate (34%)	cwt											0.9000	28.00	25.20		25.20
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Apr	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt											3.0000	16.00	48.00		48.00
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Apr	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Nova 40W	oz											4.0000	4.00	16.00		16.00
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Apr	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Malathion 5E	pt											3.0000	3.81	11.43		11.43
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Irrigate & Check				3.00	May											
Irrigation Labor	hour									4.50	40.14					40.14
Mow between Rows				2.00	May											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	May											
Hand Labor	hour									38.00	338.96					338.96
Utility Vehicle	4 x 4		0.249	1.00	May	0.61	1.61			0.25	2.81					5.03
Hand Labor	hour									1.00	8.92					8.92
Amm Nitrate (34%)	cwt											0.2300	28.00	6.44		6.44
Utility Vehicle	4 x 4		0.249	1.00	May	0.61	1.61			0.25	2.81					5.03
Hand Labor	hour									1.00	8.92					8.92
Amm Nitrate (34%)	cwt											0.2300	28.00	6.44		6.44
Weeding with Hoe				1.00	May											
Hand Labor	hour									15.00	133.80					133.80
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	May	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	May	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Irrigate & Check				4.00	Jun											
Irrigation Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Jun											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	Jun											
Hand Labor	hour									38.00	338.96					338.96

(continued)

Table 2.A Estimated resource use and costs for field operations, per acre
 Wine Grapes, year 2
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC HOURS	LABOR COST	OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED			AMOUNT	PRICE	COST		
						dollars				dollars		dollars				
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Jun	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt											3.0000	16.00	48.00		48.00
Gramoxone Max	pt											2.2000	4.97	10.93		10.93
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jun	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jun	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Malathion 5E	pt											3.0000	3.81	11.43		11.43
Irrigate & Check				4.00	Jul											
Irrigation Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Jul											
Rotary Cutter	7 ft	2WD 50 hp	0.169	1.00	Jul	2.23	1.92	1.11	0.87	0.33	3.80					9.93
Weeding with Hoe				1.00	Jul											
Hand Labor	hour									15.00	133.80					133.80
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jul	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jul	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Lorsban 4E	pt											4.5000	6.42	28.89		28.89
Irrigate & Check				4.00	Aug											
Hand Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Aug											
Rotary Cutter	7 ft	2WD 50 hp	0.169	1.00	Aug	2.23	1.92	1.11	0.87	0.33	3.80					9.93
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Aug	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Irrigate & Check				2.00	Sep											
Irrigation Labor	hour									3.00	26.76					26.76
Mow between Rows				2.00	Sep											
Rotary Cutter	7 ft	2WD 50 hp	0.169	1.00	Sep	2.23	1.92	1.11	0.87	0.33	3.80					9.93
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Sep	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Oct	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Prorated Establish.	acre				Jan							1.0000				44.18
Irrigation Setup	acre				Jan							1.0000				222.86
TOTALS						46.90	44.88	10.66	18.12	271.61	2440.68					8746.15
INTEREST ON OPERATING CAPITAL																240.93
UNALLOCATED LABOR																17.43
TOTAL SPECIFIED COST																9004.51

Note: Cost of production estimates are based on 2009 input prices.
Fertilization decisions should be based on soil tests.

Table 2.B Estimated costs per acre
 Wine Grapes, year 2
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Amm Nitrate (34%)	cwt	28.00	1.3600	38.08	_____
FUNGICIDE					
Dithane F-45	qt	7.15	5.5000	39.33	_____
Nova 40W	oz	4.00	4.0000	16.00	_____
Elite 45DF	lb	48.12	1.0000	48.12	_____
Rovral 4F	pt	17.83	5.2500	93.61	_____
Captan 50 WP	lb	5.53	9.0000	49.77	_____
HERBICIDE					
Surflan AS	qt	16.00	6.0000	96.00	_____
Gramoxone Max	pt	4.97	2.2000	10.93	_____
INSECTICIDE					
Malathion 5E	pt	3.81	6.0000	22.86	_____
Lorsban 4E	pt	6.42	4.5000	28.89	_____
SEED/PLANTS					
Wine Grape Vines	each	1.75	454.0000	794.50	_____
OTHER					
Grow Tubes	each	0.85	454.0000	385.90	_____
Bamboo Stakes	each	0.30	454.0000	136.20	_____
End Post Wine Grapes	each	22.00	24.0000	528.00	_____
Line Posts Metal	each	6.25	216.0000	1350.00	_____
Wire - Wine Grape	ft	0.01	3720.0000	73.47	_____
Anchors	each	6.65	288.0000	1915.20	_____
Tighteners	each	2.50	24.0000	60.00	_____
Wire Links - W.Grape	each	2.15	12.0000	25.80	_____
Wire Vises - W.Grape	each	1.65	24.0000	39.60	_____
End Post Anchors	each	6.90	24.0000	165.60	_____
Operator Labor					
Tractors	hour	11.23	7.2677	81.56	_____
Self-Propelled	hour	11.23	0.4999	5.62	_____
Hand Labor					
Special Labor	hour	8.92	238.0000	2122.96	_____
Implements	hour	8.92	0.3447	3.08	_____
Irrigation Labor					
Special Labor	hour	8.92	25.5000	227.46	_____
UNALLOCATED LABOR	hour	11.21	1.5535	17.43	_____
DIESEL FUEL					
Tractors	gal	2.22	17.4173	38.72	_____
GASOLINE					
Tractors	gal	2.47	0.3000	0.74	_____
Self-Propelled	gal	2.47	0.2999	0.74	_____
REPAIR & MAINTENANCE					
Implements	acre	10.66	1.0000	10.66	_____
Tractors	acre	6.22	1.0000	6.22	_____
Self-Propelled	acre	0.48	1.0000	0.48	_____
INTEREST ON OP. CAP.	acre	240.93	1.0000	240.93	_____
TOTAL DIRECT EXPENSES				8674.47	_____
FIXED EXPENSES					
Implements	acre	18.12	1.0000	18.12	_____
Tractors	acre	41.66	1.0000	41.66	_____
Self-Propelled	acre	3.22	1.0000	3.22	_____
Prorated Establish.	acre	44.18	1.0000	44.18	_____
Irrigation Setup	acre	222.86	1.0000	222.86	_____
TOTAL FIXED EXPENSES				330.04	_____
TOTAL SPECIFIED EXPENSES				9004.51	_____

Note: Cost of production estimates are based on 2009 input prices.
Fertilization decisions should be based on soil tests.

Table 3.A Estimated resource use and costs for field operations, per acre
Wine Grapes, year 3
Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC HOURS	LABOR COST	OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED			AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Pruning & Training				1.00	Jan											
Hand Labor	hour									23.00	205.16					205.16
Trellis repair Grape				1.00	Jan											
Hand Labor	hour									2.00	17.84					17.84
Replant Grapes				1.00	Feb											
Hand Labor	hour									2.00	17.84					17.84
Wine Grape Vines	each											9.0000	1.75	15.75		15.75
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Feb	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Liquid Lime Sulfur	gal											10.0000	11.41	114.10		114.10
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Mar	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Roundup Weathermax	pt											2.0000	8.98	17.96		17.96
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Mar	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Nova 40W	oz											4.0000	4.00	16.00		16.00
Irrigate & Check				2.00	Apr											
Irrigation Labor	hour									2.00	17.84					17.84
Mow between Rows				2.00	Apr											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Side Dresser	1R 3ft	2WD 50 hp	0.846	1.00	Apr	5.55	4.80	2.11	9.02	0.84	9.50					30.98
Amm Nitrate (34%)	cwt											0.9000	28.00	25.20		25.20
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Apr	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt											3.0000	16.00	48.00		48.00
Train Vines				1.00	Apr											
Hand Labor	hour									13.00	115.96					115.96
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Apr	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Nova 40W	oz											4.0000	4.00	16.00		16.00
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Apr	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Malathion 5E	pt											3.0000	3.81	11.43		11.43
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Irrigate & Check				3.00	May											
Irrigation Labor	hour									4.50	40.14					40.14
Mow between Rows				2.00	May											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	May											
Hand Labor	hour									13.00	115.96					115.96
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	May	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	May	0.41	0.36	0.15	0.20	0.09	0.98					2.10
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Irrigate & Check				4.00	Jun											
Irrigation Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Jun											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	Jun											
Hand Labor	hour									13.00	115.96					115.96
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Jun	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt											3.0000	16.00	48.00		48.00
Gramoxone Max	pt											2.2000	4.97	10.93		10.93

(continued)

Table 3.A Estimated resource use and costs for field operations, per acre
 Wine Grapes, year 3
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jun	0.41	0.36	0.15	0.20	0.09	0.98				2.10
Captan 50 WP	lb											3.0000	5.53	16.59	16.59
Elite 45DF	lb											0.2500	48.12	12.03	12.03
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jun	0.41	0.36	0.15	0.20	0.09	0.98				2.10
Rovral 4F	pt											1.7500	17.83	31.20	31.20
Malathion 5E	pt											3.0000	3.81	11.43	11.43
Irrigate & Check				4.00	Jul										
Irrigation Labor	hour									8.00	71.36				71.36
Mow between Rows				2.00	Jul										
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80				9.93
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jul	0.41	0.36	0.15	0.20	0.09	0.98				2.10
Captan 50 WP	lb											3.0000	5.53	16.59	16.59
Elite 45DF	lb											0.2500	48.12	12.03	12.03
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jul	0.41	0.36	0.15	0.20	0.09	0.98				2.10
Lorsban 4E	pt											4.5000	6.42	28.89	28.89
Irrigate & Check				4.00	Aug										
Hand Labor	hour									8.00	71.36				71.36
Mow between Rows				2.00	Aug										
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80				9.93
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Aug	0.41	0.36	0.15	0.20	0.09	0.98				2.10
Captan 50 WP	lb											3.0000	5.53	16.59	16.59
Rovral 4F	pt											1.7500	17.83	31.20	31.20
Irrigate & Check				2.00	Sep										
Irrigation Labor	hour									3.00	26.76				26.76
Mow between Rows				2.00	Sep										
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80				9.93
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Sep	0.41	0.36	0.15	0.20	0.09	0.98				2.10
Dithane F-45	qt											1.1000	7.15	7.87	7.87
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Oct	0.41	0.36	0.15	0.20	0.09	0.98				2.10
Dithane F-45	qt											1.1000	7.15	7.87	7.87
Prorated Establish.	acre				Jan							1.0000			44.18
Irrigation Setup	acre				Jan							1.0000			222.86
TOTALS						26.09	25.86	10.81	17.35	104.35	941.01			602.40	1890.56
INTEREST ON OPERATING CAPITAL															37.71
UNALLOCATED LABOR															9.96
TOTAL SPECIFIED COST															1938.23

Note: Cost of production estimates are based on 2009 input prices.

Fertilization decisions should be based on soil tests.

Table 3.B Estimated costs per acre
 Wine Grapes, year 3
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Liquid Lime Sulfur	gal	11.41	10.0000	114.10	_____
Amm Nitrate (34%)	cwt	28.00	0.9000	25.20	_____
FUNGICIDE					
Dithane F-45	qt	7.15	6.6000	47.19	_____
Nova 40W	oz	4.00	8.0000	32.00	_____
Elite 45DF	lb	48.12	1.0000	48.12	_____
Rovral 4F	pt	17.83	5.2500	93.61	_____
Captan 50 WP	lb	5.53	9.0000	49.77	_____
HERBICIDE					
Roundup Weathermax	pt	8.98	2.0000	17.96	_____
Surflan AS	qt	16.00	6.0000	96.00	_____
Gramoxone Max	pt	4.97	2.2000	10.93	_____
INSECTICIDE					
Malathion 5E	pt	3.81	6.0000	22.86	_____
Lorsban 4E	pt	6.42	4.5000	28.89	_____
SEED/PLANTS					
Wine Grape Vines	each	1.75	9.0000	15.75	_____
Operator Labor					
Tractors	hour	11.23	4.4430	49.83	_____
Hand Labor					
Special Labor	hour	8.92	74.0000	660.08	_____
Implements	hour	8.92	0.4074	3.64	_____
Irrigation Labor					
Special Labor	hour	8.92	25.5000	227.46	_____
UNALLOCATED LABOR	hour	11.20	0.8886	9.96	_____
DIESEL FUEL					
Tractors	gal	2.22	9.5044	21.15	_____
GASOLINE					
Tractors	gal	2.47	0.4500	1.11	_____
REPAIR & MAINTENANCE					
Implements	acre	10.81	1.0000	10.81	_____
Tractors	acre	3.83	1.0000	3.83	_____
INTEREST ON OP. CAP.	acre	37.71	1.0000	37.71	_____

TOTAL DIRECT EXPENSES				1627.98	_____
FIXED EXPENSES					
Implements	acre	17.35	1.0000	17.35	_____
Tractors	acre	25.86	1.0000	25.86	_____
Prorated Establish.	acre	44.18	1.0000	44.18	_____
Irrigation Setup	acre	222.86	1.0000	222.86	_____

TOTAL FIXED EXPENSES				310.25	_____

TOTAL SPECIFIED EXPENSES				1938.23	_____

Note: Cost of production estimates are based on 2009 input prices.
Fertilization decisions should be based on soil tests.

Table 4.A Estimated resource use and costs for field operations, per acre
 Wine Grapes, year 4, 3 ton yield
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape, Mississippi, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Pruning & Training				1.00	Jan											
Hand Labor	hour										30.00	267.60				267.60
Trellis repair Grape				1.00	Jan											
Hand Labor	hour										2.00	17.84				17.84
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Feb	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Liquid Lime Sulfur	gal												10.0000	11.41	114.10	114.10
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Mar	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Roundup Weathermax	pt												2.0000	8.98	17.96	17.96
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Mar	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt												1.1000	7.15	7.87	7.87
Nova 40W	oz												4.0000	4.00	16.00	16.00
Irrigate & Check				2.00	Apr											
Irrigation Labor	hour										2.00	17.84				17.84
Mow between Rows				2.00	Apr											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Side Dresser	1R 3ft	2WD 50 hp	0.846	1.00	Apr	5.55	4.80	2.11	9.02	0.84	9.50					30.98
Amm Nitrate (34%)	cwt												1.2000	28.00	33.60	33.60
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Apr	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt												3.0000	16.00	48.00	48.00
Train Vines				1.00	Apr											
Hand Labor	hour										10.00	89.20				89.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Apr	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt												1.1000	7.15	7.87	7.87
Nova 40W	oz												4.0000	4.00	16.00	16.00
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Apr	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt												1.1000	7.15	7.87	7.87
Malathion 5E	pt												3.0000	3.81	11.43	11.43
Elite 45DF	lb												0.2500	48.12	12.03	12.03
Irrigate & Check				3.00	May											
Irrigation Labor	hour										4.50	40.14				40.14
Mow between Rows				2.00	May											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	May											
Hand Labor	hour										10.00	89.20				89.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	May	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Rovral 4F	pt												1.7500	17.83	31.20	31.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	May	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt												1.1000	7.15	7.87	7.87
Elite 45DF	lb												0.2500	48.12	12.03	12.03
Irrigate & Check				4.00	Jun											
Irrigation Labor	hour										8.00	71.36				71.36
Mow between Rows				2.00	Jun											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	Jun											
Hand Labor	hour										10.00	89.20				89.20

(continued)

Table 4.A Estimated resource use and costs for field operations, per acre
Wine Grapes, year 4, 3 ton yield
Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Jun	0.61	1.62	0.03	0.17	0.25	2.81				5.24
Surflan AS	qt											3.0000	16.00	48.00	48.00
Gramoxone Max	pt											2.2000	4.97	10.93	10.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jun	1.61	1.39	7.55	14.72	0.24	2.76				28.03
Captan 50 WP	lb											3.0000	5.53	16.59	16.59
Elite 45DF	lb											0.2500	48.12	12.03	12.03
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jun	1.61	1.39	7.55	14.72	0.24	2.76				28.03
Rovral 4F	pt											1.7500	17.83	31.20	31.20
Malathion 5E	pt											3.0000	3.81	11.43	11.43
Irrigate & Check				4.00	Jul										
Irrigation Labor	hour									8.00	71.36				71.36
Mow between Rows				2.00	Jul										
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80				9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jul	1.61	1.39	7.55	14.72	0.24	2.76				28.03
Captan 50 WP	lb											3.0000	5.53	16.59	16.59
Elite 45DF	lb											0.2500	48.12	12.03	12.03
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jul	1.61	1.39	7.55	14.72	0.24	2.76				28.03
Lorsban 4E	pt											4.5000	6.42	28.89	28.89
Irrigate & Check				4.00	Aug										
Hand Labor	hour									8.00	71.36				71.36
Mow between Rows				2.00	Aug										
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80				9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Aug	1.61	1.39	7.55	14.72	0.24	2.76				28.03
Captan 50 WP	lb											3.0000	5.53	16.59	16.59
Rovral 4F	pt											1.7500	17.83	31.20	31.20
Harvest Wine Grapes				1.00	Aug										
Harvest Labor	hour									51.00	454.92				454.92
Lugs (grapes)	each											200.0000	4.00	800.00	800.00
Irrigate & Check				2.00	Sep										
Irrigation Labor	hour									3.00	26.76				26.76
Mow between Rows				2.00	Sep										
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80				9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Sep	1.61	1.39	7.55	14.72	0.24	2.76				28.03
Dithane F-45	qt											1.1000	7.15	7.87	7.87
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Oct	1.61	1.39	7.55	14.72	0.24	2.76				28.03
Dithane F-45	qt											1.1000	7.15	7.87	7.87
Prorated Establish.	acre				Jan							1.0000			44.18
Irrigation Setup	acre				Jan							1.0000			222.86
TOTALS						41.69	39.25	107.01	206.11	153.32	1383.39			1395.05	3439.54
INTEREST ON OPERATING CAPITAL															54.17
UNALLOCATED LABOR															15.29
TOTAL SPECIFIED COST															3509.00

Note: Cost of production estimates are based on 2009 input prices.
Fertilization decisions should be based on soil tests.

Table 4.B Estimated costs per acre
 Wine Grapes, year 4, 3 ton yield
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Liquid Lime Sulfur	gal	11.41	10.0000	114.10	_____
Amm Nitrate (34%)	cwt	28.00	1.2000	33.60	_____
FUNGICIDE					
Dithane F-45	qt	7.15	6.6000	47.19	_____
Nova 40W	oz	4.00	8.0000	32.00	_____
Elite 45DF	lb	48.12	1.0000	48.12	_____
Rovral 4F	pt	17.83	5.2500	93.61	_____
Captan 50 WP	lb	5.53	9.0000	49.77	_____
HERBICIDE					
Roundup Weathermax	pt	8.98	2.0000	17.96	_____
Surflan AS	qt	16.00	6.0000	96.00	_____
Gramoxone Max	pt	4.97	2.2000	10.93	_____
INSECTICIDE					
Malathion 5E	pt	3.81	6.0000	22.86	_____
Lorsban 4E	pt	6.42	4.5000	28.89	_____
SEED/PLANTS					
Lugs (grapes)	each	4.00	200.0000	800.00	_____
Operator Labor					
Tractors	hour	11.23	6.8202	76.61	_____
Harvest Labor					
Special Labor	hour	8.92	51.0000	454.92	_____
Hand Labor					
Special Labor	hour	8.92	70.0000	624.40	_____
Irrigation Labor					
Special Labor	hour	8.92	25.5000	227.46	_____
UNALLOCATED LABOR	hour	11.20	1.3640	15.29	_____
DIESEL FUEL					
Tractors	gal	2.22	15.6223	34.67	_____
GASOLINE					
Tractors	gal	2.47	0.4500	1.11	_____
REPAIR & MAINTENANCE					
Implements	acre	107.01	1.0000	107.01	_____
Tractors	acre	5.91	1.0000	5.91	_____
INTEREST ON OP. CAP.	acre	54.17	1.0000	54.17	_____
TOTAL DIRECT EXPENSES				2996.60	_____
FIXED EXPENSES					
Implements	acre	206.11	1.0000	206.11	_____
Tractors	acre	39.25	1.0000	39.25	_____
Prorated Establish.	acre	44.18	1.0000	44.18	_____
Irrigation Setup	acre	222.86	1.0000	222.86	_____
TOTAL FIXED EXPENSES				512.40	_____
TOTAL SPECIFIED EXPENSES				3509.00	_____

Note: Cost of production estimates are based on 2009 input prices.

Fertilization decisions should be based on soil tests.

Table 5.A Estimated resource use and costs for field operations, per acre
Wine Grapes, year 5, 4.5 ton yield
Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape, Mississippi, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC	LABOR	OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Pruning & Training				1.00	Jan											
Hand Labor	hour									30.00	267.60					267.60
Trellis repair Grape				1.00	Jan											
Hand Labor	hour															17.84
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Feb	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Liquid Lime Sulfur	gal											10.0000	11.41	114.10		114.10
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Mar	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Roundup Weathermax	pt											2.0000	8.98	17.96		17.96
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Mar	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Nova 40W	oz											4.0000	4.00	16.00		16.00
Irrigate & Check				2.00	Apr											
Irrigation Labor	hour									2.00	17.84					17.84
Mow between Rows				2.00	Apr											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Side Dresser	1R 3ft	2WD 50 hp	0.846	1.00	Apr	5.55	4.80	2.11	9.02	0.84	9.50					30.98
Amm Nitrate (34%)	cwt											2.3500	28.00	65.80		65.80
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Apr	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt											3.0000	16.00	48.00		48.00
Train Vines				1.00	Apr											
Hand Labor	hour									10.00	89.20					89.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Apr	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Nova 40W	oz											4.0000	4.00	16.00		16.00
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Apr	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Malathion 5E	pt											3.0000	3.81	11.43		11.43
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Irrigate & Check				3.00	May											
Irrigation Labor	hour									4.50	40.14					40.14
Mow between Rows				2.00	May											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	May											
Hand Labor	hour									10.00	89.20					89.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	May	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	May	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Irrigate & Check				4.00	Jun											
Irrigation Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Jun											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	Jun											
Hand Labor	hour									10.00	89.20					89.20

(continued)

Table 5.A Estimated resource use and costs for field operations, per acre
 Wine Grapes, year 5, 4.5 ton yield
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Jun	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt											3.0000	16.00	48.00		48.00
Gramoxone Max	pt											2.2000	4.97	10.93		10.93
Princep 4L	gal											0.7500	25.44	19.08		19.08
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jun	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jun	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Malathion 5E	pt											3.0000	3.81	11.43		11.43
Irrigate & Check				4.00	Jul											
Irrigation Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Jul											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jul	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jul	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Lorsban 4E	pt											4.5000	6.42	28.89		28.89
Irrigate & Check				4.00	Aug											
Hand Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Aug											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Aug	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Harvest Wine Grapes				1.00	Aug											
Harvest Labor	hour									76.00	677.92					677.92
Lugs (grapes)	each											100.0000	4.00	400.00		400.00
Irrigate & Check				2.00	Sep											
Irrigation Labor	hour									3.00	26.76					26.76
Mow between Rows				2.00	Sep											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Sep	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Oct	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Prorated Establish.	acre				Jan							1.0000				44.18
Irrigation Setup	acre				Jan							1.0000				222.86
TOTALS						41.69	39.25	107.01	206.11	178.32	1606.39			1046.33		3313.82
INTEREST ON OPERATING CAPITAL																53.39
UNALLOCATED LABOR																15.29
TOTAL SPECIFIED COST																3382.50

Note: Cost of production estimates are based on 2009 input prices.

Fertilization decisions should be based on soil tests.

Table 5.B Estimated costs per acre
 Wine Grapes, year 5, 4.5 ton yield
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Liquid Lime Sulfur	gal	11.41	10.0000	114.10	_____
Amm Nitrate (34%)	cwt	28.00	2.3500	65.80	_____
FUNGICIDE					
Dithane F-45	qt	7.15	6.6000	47.19	_____
Nova 40W	oz	4.00	8.0000	32.00	_____
Elite 45DF	lb	48.12	1.0000	48.12	_____
Rovral 4F	pt	17.83	5.2500	93.61	_____
Captan 50 WP	lb	5.53	9.0000	49.77	_____
HERBICIDE					
Roundup Weathermax	pt	8.98	2.0000	17.96	_____
Surflan AS	qt	16.00	6.0000	96.00	_____
Gramoxone Max	pt	4.97	2.2000	10.93	_____
Princep 4L	gal	25.44	0.7500	19.08	_____
INSECTICIDE					
Malathion 5E	pt	3.81	6.0000	22.86	_____
Lorsban 4E	pt	6.42	4.5000	28.89	_____
SEED/PLANTS					
Lugs (grapes)	each	4.00	100.0000	400.00	_____
Operator Labor					
Tractors	hour	11.23	6.8202	76.61	_____
Harvest Labor					
Special Labor	hour	8.92	76.0000	677.92	_____
Hand Labor					
Special Labor	hour	8.92	70.0000	624.40	_____
Irrigation Labor					
Special Labor	hour	8.92	25.5000	227.46	_____
UNALLOCATED LABOR	hour	11.20	1.3640	15.29	_____
DIESEL FUEL					
Tractors	gal	2.22	15.6223	34.67	_____
GASOLINE					
Tractors	gal	2.47	0.4500	1.11	_____
REPAIR & MAINTENANCE					
Implements	acre	107.01	1.0000	107.01	_____
Tractors	acre	5.91	1.0000	5.91	_____
INTEREST ON OP. CAP.	acre	53.39	1.0000	53.39	_____
TOTAL DIRECT EXPENSES				2870.10	_____
FIXED EXPENSES					
Implements	acre	206.11	1.0000	206.11	_____
Tractors	acre	39.25	1.0000	39.25	_____
Prorated Establish.	acre	44.18	1.0000	44.18	_____
Irrigation Setup	acre	222.86	1.0000	222.86	_____
TOTAL FIXED EXPENSES				512.40	_____
TOTAL SPECIFIED EXPENSES				3382.50	_____

Note: Cost of production estimates are based on 2009 input prices.

Fertilization decisions should be based on soil tests.

Table 6.A Estimated resource use and costs for field operations, per acre
 Wine Grapes, year 6, 6 ton yield
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape, Mississippi, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
						-----dollars-----				dollars		-----dollars-----				
Pruning & Training				1.00	Jan											
Hand Labor	hour										30.00	267.60				267.60
Trellis repair Grape				1.00	Jan											
Hand Labor	hour															
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Feb	1.61	1.39	7.55	14.72	0.24	2.76					17.84
Liquid Lime Sulfur	gal												10.0000	11.41	114.10	114.10
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Mar	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Roundup Weathermax	pt												2.0000	8.98	17.96	17.96
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Mar	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt												1.1000	7.15	7.87	7.87
Nova 40W	oz												4.0000	4.00	16.00	16.00
Irrigate & Check				2.00	Apr											
Irrigation Labor	hour										2.00	17.84				17.84
Mow between Rows				2.00	Apr											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Side Dresser	1R 3ft	2WD 50 hp	0.846	1.00	Apr	5.55	4.80	2.11	9.02	0.84	9.50					30.98
Amm Nitrate (34%)	cwt												2.4000	28.00	67.20	67.20
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Apr	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt												3.0000	16.00	48.00	48.00
Train Vines				1.00	Apr											
Hand Labor	hour										10.00	89.20				89.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Apr	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt												1.1000	7.15	7.87	7.87
Nova 40W	oz												4.0000	4.00	16.00	16.00
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Apr	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt												1.1000	7.15	7.87	7.87
Malathion 5E	pt												3.0000	3.81	11.43	11.43
Elite 45DF	lb												0.2500	48.12	12.03	12.03
Irrigate & Check				3.00	May											
Irrigation Labor	hour										4.50	40.14				40.14
Mow between Rows				2.00	May											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	May											
Hand Labor	hour										10.00	89.20				89.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	May	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Rovral 4F	pt												1.7500	17.83	31.20	31.20
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	May	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt												1.1000	7.15	7.87	7.87
Elite 45DF	lb												0.2500	48.12	12.03	12.03
Irrigate & Check				4.00	Jun											
Irrigation Labor	hour										8.00	71.36				71.36
Mow between Rows				2.00	Jun											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Train Vines				1.00	Jun											
Hand Labor	hour										10.00	89.20				89.20

(continued)

Table 6.A Estimated resource use and costs for field operations, per acre
Wine Grapes, year 6, 6 ton yield
Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC HOURS	LABOR COST	OPERATING/DURABLE INPUT			TOTAL COST	
						DIRECT	FIXED	DIRECT	FIXED			AMOUNT	PRICE	COST		
						-----dollars-----						-----dollars-----				
Sprayer - Utility	4 ft	4 x 4	0.250	1.00	Jun	0.61	1.62	0.03	0.17	0.25	2.81					5.24
Surflan AS	qt											3.0000	16.00	48.00		48.00
Gramoxone Max	pt											2.2000	4.97	10.93		10.93
Princep 4L	gal											0.7500	25.44	19.08		19.08
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jun	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jun	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Malathion 5E	pt											3.0000	3.81	11.43		11.43
Irrigate & Check				4.00	Jul											
Irrigation Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Jul											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jul	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Elite 45DF	lb											0.2500	48.12	12.03		12.03
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Jul	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Lorsban 4E	pt											4.5000	6.42	28.89		28.89
Irrigate & Check				4.00	Aug											
Hand Labor	hour									8.00	71.36					71.36
Mow between Rows				2.00	Aug											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Aug	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Captan 50 WP	lb											3.0000	5.53	16.59		16.59
Rovral 4F	pt											1.7500	17.83	31.20		31.20
Harvest Wine Grapes				1.00	Aug											
Harvest Labor	hour									102.00	909.84					909.84
Lugs (grapes)	each											100.0000	4.00	400.00		400.00
Irrigate & Check				2.00	Sep											
Irrigation Labor	hour									3.00	26.76					26.76
Mow between Rows				2.00	Sep											
Rotary Cutter	7 ft	2WD 50 hp	0.169			2.23	1.92	1.11	0.87	0.33	3.80					9.93
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Sep	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Sprayer Air Blast	16' 100gal	2WD 50 hp	0.245	1.00	Oct	1.61	1.39	7.55	14.72	0.24	2.76					28.03
Dithane F-45	qt											1.1000	7.15	7.87		7.87
Prorated Establish.	acre				Jan							1.0000				44.18
Irrigation Setup	acre				Jan							1.0000				222.86
TOTALS						41.69	39.25	107.01	206.11	204.32	1838.31					3547.14
INTEREST ON OPERATING CAPITAL																56.03
UNALLOCATED LABOR																15.29
TOTAL SPECIFIED COST																3618.46

Note: Cost of production estimates are based on 2009 input prices.

Fertilization decisions should be based on soil tests.

Table 6.B Estimated costs per acre
 Wine Grapes, year 6, 6 ton yield
 Irrigated, 12 ft spacing, 10gpm, 3630 row ft, drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Liquid Lime Sulfur	gal	11.41	10.0000	114.10	_____
Amm Nitrate (34%)	cwt	28.00	2.4000	67.20	_____
FUNGICIDE					
Dithane F-45	qt	7.15	6.6000	47.19	_____
Nova 40W	oz	4.00	8.0000	32.00	_____
Elite 45DF	lb	48.12	1.0000	48.12	_____
Rovral 4F	pt	17.83	5.2500	93.61	_____
Captan 50 WP	lb	5.53	9.0000	49.77	_____
HERBICIDE					
Roundup Weathermax	pt	8.98	2.0000	17.96	_____
Surflan AS	qt	16.00	6.0000	96.00	_____
Gramoxone Max	pt	4.97	2.2000	10.93	_____
Princep 4L	gal	25.44	0.7500	19.08	_____
INSECTICIDE					
Malathion 5E	pt	3.81	6.0000	22.86	_____
Lorsban 4E	pt	6.42	4.5000	28.89	_____
SEED/PLANTS					
Lugs (grapes)	each	4.00	100.0000	400.00	_____
Operator Labor					
Tractors	hour	11.23	6.8202	76.61	_____
Harvest Labor					
Special Labor	hour	8.92	102.0000	909.84	_____
Hand Labor					
Special Labor	hour	8.92	70.0000	624.40	_____
Irrigation Labor					
Special Labor	hour	8.92	25.5000	227.46	_____
UNALLOCATED LABOR					
	hour	11.20	1.3640	15.29	_____
DIESEL FUEL					
Tractors	gal	2.22	15.6223	34.67	_____
GASOLINE					
Tractors	gal	2.47	0.4500	1.11	_____
REPAIR & MAINTENANCE					
Implements	acre	107.01	1.0000	107.01	_____
Tractors	acre	5.91	1.0000	5.91	_____
INTEREST ON OP. CAP.	acre	56.03	1.0000	56.03	_____
TOTAL DIRECT EXPENSES				3106.06	_____
FIXED EXPENSES					
Implements	acre	206.11	1.0000	206.11	_____
Tractors	acre	39.25	1.0000	39.25	_____
Prorated Establish.	acre	44.18	1.0000	44.18	_____
Irrigation Setup	acre	222.86	1.0000	222.86	_____
TOTAL FIXED EXPENSES				512.40	_____
TOTAL SPECIFIED EXPENSES				3618.46	_____

Note: Cost of production estimates are based on 2009 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, 2010

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 hp	27,323	600	8	2.57	11.23	5.71	0.85	17.79	5.67	23.46
Tractor (40-59hp)Cab	MFWD 50 hp	31,011	600	8	2.57	11.23	5.71	0.96	17.91	6.43	24.34
Tractor (40-59hp)RB	2WD 50 hp	21,340	600	8	2.57	11.23	5.71	0.66	17.61	4.42	22.03
Tractor (40-59hp)RB	MFWD 50 hp	25,324	600	8	2.57	11.23	5.71	0.79	17.73	5.25	22.99
Tractor (60-89hp)CAB	2WD 75 hp	37,648	600	8	3.86	11.23	8.57	1.17	20.97	7.81	28.79
Tractor (60-89hp)CAB	MFWD 75 hp	41,918	600	8	3.86	11.23	8.57	1.30	21.11	8.70	29.81
Tractor (60-89hp)RB	2WD 75 hp	30,393	600	8	3.86	11.23	8.57	0.94	20.74	6.30	27.05
Tractor (60-89hp)RB	MFWD 75 hp	34,785	600	8	3.86	11.23	8.57	1.08	20.88	7.22	28.10
Tractor (120-139hp)CB	MFWD 130	91,323	600	8	6.69	11.23	14.85	2.85	28.93	18.95	47.89
Tractor (160-179hp)CB	MFWD 170	123,668	600	8	8.75	11.23	19.42	3.86	34.52	26.69	61.21
Utility Vehicle	4 x 4	12,485	200	13	0.60	11.23	1.48	0.96	13.67	6.49	20.16

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2010

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
Riding Mower	42" cut	2,799	12	10	2.00	0.708	7.96	3.50	4.96	16.42	19.32	35.74
Utility Vehicle	4 x 4	12,485	200	13	0.60	0.249	2.80	0.37	0.24	3.41	1.61	5.03

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 3. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2010

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---		Total Direct	--Fixed--		Total Cost
									Imp.	P.U.		Imp.	P.U.	
			dollars	hours	years	hr/ac	-----\$/acre-----							
Auger	18"	2WD 50 hp	1,877	500	20	2.000	22.46	11.42	0.00	1.70	35.59	0.68	11.34	47.62
Auger	24"	2WD 50 hp	1,877	80	20	2.000	22.46	11.42	1.99	1.70	37.58	4.13	11.34	53.06
Bd Shaper (Blue B.)	Bed 8ftctr	2WD 75 hp	2,349	40	16	0.808	9.08	6.93	1.42	0.76	18.20	4.56	5.10	27.87
Blade-Scraper	6-7'	2WD 50 hp	1,583	200	20	2.500	28.07	14.28	1.87	2.13	46.37	1.71	14.17	62.27
Brush Blade	7ft	MFWD 50 hp	1,250	50	30	0.500	5.61	2.85	0.00	0.39	8.87	0.94	2.62	12.44
BS,L,T,Fung S Berry	6ftctr	2WD 75 hp	6,290	54	16	1.078	40.96	9.24	3.76	1.02	55.00	12.06	6.80	73.87
Chain Harrow	6 ft	4 x 4	430	100	1	0.343	3.86	0.50	0.01	0.33	4.71	1.55	2.23	8.50
Chisel Plow	8 Ft	2WD 75 hp	7,463	150	12	0.220	2.47	1.88	0.59	0.20	5.16	1.15	1.39	7.71
Chisel Plow	5 ft	MFWD 50 hp	2,800	150	12	0.220	2.47	1.25	0.22	0.17	4.12	0.43	1.15	5.71
Cultipacker	12 Ft	2WD 75 hp	5,583	300	12	0.124	1.39	1.06	0.16	0.11	2.74	0.25	0.78	3.78
Cultivate	2-Row	2WD 75 hp	4,160	59	27	0.312	3.50	2.67	0.32	0.29	6.81	1.69	1.97	10.48
Cyclone Spin	825 Lb	2WD 75 hp	899	50	8	0.084	0.94	0.72	0.05	0.07	1.80	0.22	0.53	2.56
Disk Bed (Hipper)	1-row	2WD 50 hp	3,167	160	10	0.750	8.42	4.28	0.44	0.64	13.79	1.90	4.25	19.94
Disk Bed (Hipper)	2-row	2WD 75 hp	3,785	160	10	0.284	3.19	2.43	0.20	0.26	6.09	0.86	1.79	8.74
Disk Harrow	6ft	MFWD 50 hp	2,224	180	10	0.330	3.71	1.88	0.20	0.26	6.06	0.47	1.73	8.28
Disk Harrow	10 Ft	2WD 75 hp	7,889	180	10	0.198	2.22	1.69	0.43	0.18	4.54	1.01	1.25	6.81
Fert Appl (Liquid)	4R-6'	MFWD 50 hp	15,003	150	8	1.309	20.54	7.48	13.09	1.03	42.16	16.31	6.88	65.35
Fert Sprd Pull Type	10 ft	2WD 75 hp	4,020	12	10	0.235	2.64	2.02	2.36	0.22	7.25	10.10	1.48	18.85
Front End Loader	.5yd	2WD 75 hp	5,822	100	10	0.600	6.73	5.14	1.04	0.56	13.49	4.60	3.78	21.88
Harvester Pecan	61"	2WD 50 hp	19,652	100	15	0.500	5.61	2.85	4.91	0.42	13.81	10.04	2.83	26.69
Mulch Lifter	1 Row	2WD 75 hp	1,900	29	30	0.589	6.61	5.05	0.12	0.55	12.35	2.77	3.71	18.85
Planter/Transplanter	1 Row	2WD 75 hp	2,380	31	19	1.586	60.27	13.59	0.12	1.50	75.50	10.76	10.00	96.27
Rotary Cutter	6ft	MFWD 50 hp	3,484	185	10	0.572	6.43	3.27	1.61	0.45	11.77	1.26	3.01	16.05
Rotary Cutter	7 ft	2WD 75 hp	4,057	185	10	0.169	1.90	1.45	0.55	0.16	4.07	0.43	1.06	5.57
Rotary Tiller	5 ft	2WD 75 hp	1,831	49	18	0.970	10.89	8.31	2.53	0.92	22.67	3.27	6.12	32.07
Shaker Pecan PTO	up to 38"	2WD 50 hp	9,323	50	15	0.500	5.61	2.85	3.10	0.42	12.00	9.52	2.83	24.37
Side Dresser	1R 3ft	2WD 75 hp	3,498	42	10	0.846	9.50	7.25	2.11	0.80	19.67	9.01	5.33	34.02
Spray (Broadcast)	27'	2WD 50 hp	5,022	200	8	0.062	0.98	0.35	0.14	0.04	1.53	0.19	0.27	2.00
Sprayer (Band)	12'	MFWD 50 hp	597	200	5	0.352	3.95	2.01	0.04	0.27	6.29	0.24	1.85	8.39
Sprayer (BC & Wand)	12 ft	4 x 4	597	200	5	0.500	5.61	0.74	0.05	0.48	6.89	0.34	3.24	10.48
Sprayer (BC & Wand)	4 ft	4 x 4	597	200	5	0.250	2.80	0.37	0.02	0.24	3.44	0.17	1.62	5.24
Sprayer (Broadcast)	12 ft	4 x 4	597	200	5	0.500	5.61	0.74	0.05	0.48	6.89	0.34	3.24	10.48
Sprayer - Utility	4 ft	4 x 4	597	200	5	0.250	2.80	0.37	0.02	0.24	3.44	0.17	1.62	5.24
Sprayer A-B Orchard	16' 300gal	MFWD 50 hp	14,636	200	16	0.286	3.21	1.63	1.04	0.22	6.12	2.04	1.50	9.67
Sprayer Air Blast	16' 100gal	2WD 75 hp	7,376	12	16	0.245	2.75	2.10	7.54	0.23	12.64	14.71	1.54	28.90
Sprayer- Pull Type	12'	4 x 4	640	1	1	0.500	5.61	0.74	3.20	0.48	10.03337	6.60	3.24	350.88
Sub-Soiler	1 shank	2WD 75 hp	558	54	23	1.078	12.11	9.24	0.33	1.02	22.71	0.91	6.80	30.43
Sub-Soiler	2 Shank	2WD 75 hp	1,599	20	23	0.404	4.54	3.46	0.96	0.38	9.36	2.65	2.55	14.56
Take up Reel (Mulch)	1 Row	2WD 75 hp	995	42	10	0.588	6.60	5.04	0.41	0.55	12.62	1.79	3.71	18.12
Trailer BB Plants	10ft	2WD 75 hp	1,095	200	15	2.000	22.46	17.14	0.29	1.89	41.79	1.09	12.61	55.50
Trailer Fruit 4'x6'	trip	4 x 4	500	200	15	1.000	11.23	1.48	0.13	0.96	13.80	0.25	6.49	20.54
Trailer Utility	10 ft	2WD 50 hp	1,095	200	15	0.600	6.73	3.42	0.08	0.40	10.65	0.32	2.65	13.64
Trailer Utility Limb	10 ft	2WD 75 hp	1,095	200	15	4.000	44.92	34.28	0.58	3.79	83.58	2.19	25.23	111.01
Trailer water	10 ft	2WD 50 hp	1,691	150	10	0.600	6.73	3.42	0.27	0.40	10.83	0.86	2.65	14.36
Wagon (dump) Pecan	12 ft	2WD 50 hp	10,000	50	15	0.333	3.73	1.90	3.72	0.28	9.65	6.80	1.88	18.35

Notes:

Labor: Includes labor from Power unit plus additional labor from the implement.

Total Direct: Does not include interest on operating capital.

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2010

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANT			Simazine 4L	qt	5.80
Dormant Oil	gal	40.00	Solicam DF	lb	23.41
CUSTOM			Surflan AS	qt	16.00
Broker Fee S-Berries	flat	1.00	INSECTICIDE		
Custom Apply Fert	acre	8.50	Agri-Mek	oz	3.59
Labor rebar post mfg	hour	8.26	Asana XL	oz	0.71
Labor rebar posts	hour	0.00	Baythroid XL	oz	2.15
Pick Strawberries	flat	1.70	Brigade WSB	lb	20.73
Site Prep w/Dozer	acre	213.00	Capture 2EC	oz	1.50
FERTILIZER			Confirm 2F	oz	1.62
32% Liquid Nitrogen	qt	12.99	Danitol 2.4EC	oz	1.35
Amm Nitrate (34%)	cwt	28.00	Imidan 70 WSB	lb	9.28
Amm Nitrate (34%)	lb	0.28	Kelthane MF	pt	5.60
Amm. Sulfate (21%N)	lb	0.22	Lorsban 4E	pt	6.42
Boron (20% Sol)	lb	0.40	Malathion 57EC	pt	4.23
Calcium Nitrate	lb	0.20	Malathion 5E	pt	3.81
Elemental Sulfur	lbs	0.35	Sevin XLR Plus	qt	9.85
Fert 0-24-24	cwt	13.00	Warrior ZT	oz	2.54
Fert 10-10-10	lb	0.29	IRRIGATION SUPPLIES		
Fert 10-10-10	cwt	29.00	1/2 of water needed	100gal	0.28
Fert 13-13-13	cwt	12.00	12 Model R	each	65.47
Lime (Spread)	ton	38.00	24 Model R	each	70.65
Liquid Lime Sulfur	gal	11.41	3/4PVCIns Male Adapt	each	1.42
Phosphorus(46% P205)	cwt	46.00	Adapter 7mm & 16mm	each	0.54
Potash (60% K20)	cwt	44.00	Adapter(Reg to Head)	1 1/2"	1.56
Potassium Nitrate	lb	0.36	Barb Lock Sleeve	1/4"	0.50
Potassium Sulfate	lb	0.27	Connector(barbxbarb)	each	0.10
Sul-Po-Mag	lb	0.21	Coupler	5/8"	0.75
Sulfur - wetable	lb	0.18	Coupler 16mm	each	0.50
Triple Superphosphat	lb	0.46	Drip Tape	roll	156.00
Zinc Sulfate 31%	lb	0.60	Dual Goof Plug	each	0.06
FUNGICIDE			End Plug for Header	1 1/2"	1.55
Abound	oz	2.60	Feeder Tube	ft	0.07
Bravo Weather Stick	pt	7.74	Fertigation System	each	215.00
Captan 50 WP	lb	5.53	Figure 8	each	0.50
Captan 80WDG	lb	6.01	Flush Valve	each	1.09
Dithane F-45	qt	7.15	GD SS clamp	each	0.57
Dithane Rainshield	lb	2.54	Header Line 1 1/2"	ft	0.38
Elast 400F	gal	50.81	Hole Punch	1/4"	3.00
Elevate 50 WDG	lb	35.55	Hose 26mm	ft	0.20
Elite 45DF	lb	48.12	Hose Clamp	1 1/2"	0.57
Elite 50WP	oz	3.27	LE Autoflush end	each	1.50
Enable 2F	oz	1.64	Micro Sprinkler	each	0.76
Ferbam	lb	11.32	Micro Tubing	ft	0.06
Indar 2F	oz	1.80	MPT Flow Meter	each	67.50
Kocide 101	lb	2.60	MPT M Adptr	each	1.37
Nova 40W	oz	4.00	MPT Tagline Filter	each	17.00
Pristine	oz	2.65	MPT Tank Valve	each	2.00
Prophyt	pt	4.40	Oval Hose 1" 21PSI	ft	0.15
Rally	oz	3.59	Pocket Pressure Gage	each	5.00
Ridomil Gold EC	oz	5.95	Pr-Pmr 20 PSI	each	12.00
Rovral 4F	pt	17.83	PR-PMR 30 PSI	each	12.00
Super-Tin 80WP	oz	2.22	Pressure Regulator	12 PSI	35.00
Switch	oz	4.16	PVC Female Adaptor	1 1/2"	3.65
Telone II	gal	14.96	PVC Fitting (adpt)	1 1/2"	0.85
HERBICIDE			PVC Fitting (bush)	1 1/2"	1.38
Casaron 4G	lb	2.11	PVC Ins Male Adapt	each	0.55
Chateau WDG	oz	6.38	PVC insert plug	each	1.12
Dervinol 50DF	lb	8.72	PVC insert Tee	each	1.34
Fusilade DX	pt	22.88	Quick Punch	each	3.00
Glyphosate 3lb a.e.	pt	3.49	Rural Water	ac-in	118.28
Gramoxone Inteon	pt	4.00	Service Unit	each	45.00
Gramoxone Max	pt	4.97	Shrader Vlv Cap	each	3.00
Poast Plus	pt	8.49	Signature 18mm.42gph	ft	0.18
Princep 4L	gal	25.44	Signiture 18mm.55gph	ft	0.18
Propimax EC	oz	2.36	Stake, Micro-Spray	each	0.50
Prowl 3.3 EC	qt	8.38	Transfer Barb	1/4"	0.25
Roundup Weathermax	gal	71.84	Venturi Kit	each	85.00
Roundup Weathermax	pt	8.98			

(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2010

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Venturi Kit20'x10gph	each	70.00			
Y Filter	1"	17.00			
OTHER					
1 gal bucket	each	1.50	Strawberry Flat	each	0.64
Anchors	each	6.65	Strawberry Pint	each	0.03
Bag-secure row cover	each	0.10	Surfactant Non Ionic	pt	1.55
Bamboo Stakes	each	0.30	Tighteners	each	2.50
BB Mkting fee TN-Ark	lb	0.23	Tissue Sample SBerry	each	4.50
BBMktingFee MS,AL,La	lb	0.23	Wire - Blackberry	ft	0.02
Bee Hive	each	52.00	Wire - Wine Grape	ft	0.01
Brace Post 2.5" x 7'	each	2.50	Wire Links - W.Grape	each	2.15
Burlap bag	each	0.60	Wire Vises - W.Grape	each	1.65
Clamshell Package	each	0.27	Wood Post 2.5" x 7'	each	2.50
Crop oil Conc. (Veg)	pt	2.51	Wood Post 3" x 7'	each	3.00
Drip Tape (6000Ft)	Roll	156.00	SEED/PLANTS		
End Post Anchors	each	6.90	Blackberry Plants	each	3.00
End Post Wine Grapes	each	22.00	Blueberry Plants T-A	each	2.85
Fabricate rebar post	post	5.00	Blueberry Plts M,A,L	each	2.00
Grow Tubes	each	0.85	Fescue Seed	lb	1.40
Line Posts Metal	each	6.25	Fig Trees	each	4.50
Mulch - MS,AL,LA.	cu yd	10.00	Grass Seed BB	lb	4.70
Mulch - TN & ARK	cu yd	22.00	Lugs (grapes)	each	4.00
Mythl Bromide 67/33	lb	4.50	Millet	lb	0.50
Plastic Mulch 5ft	4000ft	162.00	Muscadine (lug)	12lb	4.25
Pruner (Hand)	each	45.00	Muscadine Vine	each	7.75
Refrigeration-chill	month	375.00	Peach Trees	each	6.64
Row Covers	roll	147.00	Pecan Seedlings	each	16.00
Soil Test	each	6.00	Soybeans (RR)	lb	0.74
Soil Test Probe	each	75.00	Strawberry Plants	100	8.00
			Wine Grape Vines	each	1.75

Appendix Table 5. Estimated fuel prices
and interest rates Mississippi, 2010

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	2.22
Gasoline	gal	2.47
LP Gas	gal	2.64
INTEREST RATES		
Short-term	%	4.50
Intermediate-term	%	6.50

Appendix Table 6. Labor names, units and wage rates,
Mississippi, 2010.

Item name	Unit	Wage Rate
Operator Labor	hour	11.23
Harvest Labor	hour	8.92
Planting Labor	hour	8.92
Hand Labor	hour	8.92
Fertigation Labor	hour	8.92
Refresh Stawberries	hour	8.92
SBerry Pallet Pkging	hour	8.92
Irrigation Labor	hour	8.92
Pruning labor	hour	8.92

Appendix Table 7. Estimated costs per acre
 Drip tape irrigation system, 5 ft row spacing
 20 gpm with 8,712 ft of drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Fertigation System	each	215.00	1.0000	215.00	_____
Barb Lock Sleeve	1/4"	0.50	45.0000	22.50	_____
Transfer Barb	1/4"	0.25	45.0000	11.25	_____
Feeder Tube	ft	0.07	50.0000	3.50	_____
Header Line 1 1/2"	ft	0.38	300.0000	114.00	_____
Adapter(Reg to Head)	1 1/2"	1.56	1.0000	1.56	_____
End Plug for Header	1 1/2"	1.55	1.0000	1.55	_____
Hose Clamp	1 1/2"	0.57	2.0000	1.14	_____
Pressure Regulator	12 PSI	35.00	1.0000	35.00	_____
PVC Female Adaptor	1 1/2"	3.65	1.0000	3.65	_____
Y Filter	1"	17.00	1.0000	17.00	_____
PVC Fitting (bush)	1 1/2"	1.38	1.0000	1.38	_____
PVC Fitting (adpt)	1 1/2"	0.85	1.0000	0.85	_____
Hole Punch	1/4"	3.00	1.0000	3.00	_____
Coupler	5/8"	0.75	4.0000	3.00	_____

TOTAL DIRECT EXPENSES				434.38	_____
TOTAL INTEREST				28.23	_____

TOTAL SPECIFIED EXPENSES				462.61	_____

Note: Cost of production estimates are based on 2009 input prices. These items are grouped together and listed as Irrigation Setup on the last line of Table A and also as a fixed expense on Table B in an irrigated budget. A capital recovery charge of \$462.61 will appear in the budget to represent the annual ownership cost of these items. Additional irrigation inputs (such as rural water, drip tape, and plastic mulch) are not included in this table, but are listed as individual inputs within each irrigated enterprise budget.

Appendix Table 8. Estimated costs per acre
 Drip tape irrigation system, 6 ft row spacing
 16 gpm with 7,260 ft of drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Fertigation System	each	215.00	1.0000	215.00	_____
Barb Lock Sleeve	1/4"	0.50	40.0000	20.00	_____
Transfer Barb	1/4"	0.25	40.0000	10.00	_____
Feeder Tube	ft	0.07	50.0000	3.50	_____
Header Line 1 1/2"	ft	0.38	300.0000	114.00	_____
Adapter(Reg to Head)	1 1/2"	1.56	1.0000	1.56	_____
End Plug for Header	1 1/2"	1.55	1.0000	1.55	_____
Hose Clamp	1 1/2"	0.57	2.0000	1.14	_____
Pressure Regulator	12 PSI	35.00	1.0000	35.00	_____
PVC Female Adaptor	1 1/2"	3.65	1.0000	3.65	_____
Y Filter	1"	17.00	1.0000	17.00	_____
PVC Fitting (bush)	1 1/2"	1.38	1.0000	1.38	_____
PVC Fitting (adpt)	1 1/2"	0.85	1.0000	0.85	_____
Hole Punch	1/4"	3.00	1.0000	3.00	_____
Coupler	5/8"	0.75	4.0000	3.00	_____

TOTAL DIRECT EXPENSES				430.63	_____
TOTAL INTEREST				28.00	_____

TOTAL SPECIFIED EXPENSES				458.63	_____

Note: Cost of production estimates are based on 2009 input prices.
 These items are grouped together and listed as Irrigation Setup on the last line of Table A and also as a fixed expense on Table B in an irrigated budget. A capital recovery charge of \$458.63 will appear in the budget to represent the annual ownership cost of these items. Additional irrigation inputs (such as rural water, drip tape, and plastic mulch) are not included in this table, but are listed as individual inputs within each irrigated enterprise budget.

Appendix Table 9. Estimated costs per acre
 Drip tape irrigation system, 8 ft row spacing
 12 gpm with 5,445 ft of drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Fertigation System	each	215.00	1.0000	215.00	_____
Barb Lock Sleeve	1/4"	0.50	30.0000	15.00	_____
Transfer Barb	1/4"	0.25	30.0000	7.50	_____
Feeder Tube	ft	0.07	50.0000	3.50	_____
Header Line 1 1/2"	ft	0.38	300.0000	114.00	_____
Adapter(Reg to Head)	1 1/2"	1.56	1.0000	1.56	_____
End Plug for Header	1 1/2"	1.55	1.0000	1.55	_____
Hose Clamp	1 1/2"	0.57	2.0000	1.14	_____
Pressure Regulator	12 PSI	35.00	1.0000	35.00	_____
PVC Female Adaptor	1 1/2"	3.65	1.0000	3.65	_____
Y Filter	1"	17.00	1.0000	17.00	_____
PVC Fitting (bush)	1 1/2"	1.38	1.0000	1.38	_____
PVC Fitting (adpt)	1 1/2"	0.85	1.0000	0.85	_____
Hole Punch	1/4"	3.00	1.0000	3.00	_____
Coupler	5/8"	0.75	4.0000	3.00	_____

TOTAL DIRECT EXPENSES				423.13	_____
TOTAL INTEREST				27.50	_____

TOTAL SPECIFIED EXPENSES				450.63	_____

Note: Cost of production estimates are based on 2009 input prices. These items are grouped together and listed as Irrigation Setup on the last line of Table A and also as a fixed expense on Table B in an irrigated budget. A capital recovery charge of \$450.63 will appear in the budget to represent the annual ownership cost of these items. Additional irrigation inputs (such as rural water, drip tape, and plastic mulch) are not included in this table, but are listed as individual inputs within each irrigated enterprise budget.

Appendix Table 10. Estimated costs per acre
 Micro sprinkler system w/oval hose, 40'
 40 ft row spacing, approx. 10 gpm, with 1,089 row ft,
 Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Oval Hose 1" 21PSI	ft	0.15	1660.0000	249.00	_____
Micro Tubing	ft	0.06	200.0000	12.00	_____
Stake, Micro-Spray	each	0.50	28.0000	14.00	_____
Connector(barbxbarb)	each	0.10	28.0000	2.80	_____
Micro Sprinkler	each	0.76	28.0000	21.28	_____
Dual Goof Plug	each	0.06	20.0000	1.20	_____
GD SS clamp	each	0.57	20.0000	11.40	_____
PVC insert Tee	each	1.34	4.0000	5.36	_____
3/4PVCIns Male Adapt	each	1.42	4.0000	5.68	_____
Flush Valve	each	1.09	4.0000	4.36	_____
MPT Tank Valve	each	2.00	2.0000	4.00	_____
Shrader Vlv Cap	each	3.00	1.0000	3.00	_____
MPT Flow Meter	each	67.50	1.0000	67.50	_____
Quick Punch	each	3.00	1.0000	3.00	_____
Pr-Pmr 20 PSI	each	12.00	1.0000	12.00	_____
PVC insert plug	each	1.12	1.0000	1.12	_____
PVC Ins Male Adapt	each	0.55	1.0000	0.55	_____
Venturi Kit	each	85.00	1.0000	85.00	_____
Service Unit	each	45.00	1.0000	45.00	_____
12 Model R	each	65.47	1.0000	65.47	_____
24 Model R	each	70.65	1.0000	70.65	_____
MPT Tagline Filter	each	17.00	1.0000	17.00	_____
Pocket Pressure Gage	each	5.00	1.0000	5.00	_____
TOTAL DIRECT EXPENSES (EVERY 10 YEARS)				706.37	_____
TOTAL INTEREST OVER 10 YEARS				276.23	_____
TOTAL SPECIFIED EXPENSES				982.60	_____

Note: Cost of production estimates are based on 2009 input prices.
 These items are grouped together and listed as Irrigation Setup on the last line of Table A and also as a fixed expense on Table B in an irrigated budget. A capital recovery charge of \$98.26 will appear in the budget to represent the annual ownership cost of these items over a 10 year period. Additional irrigation inputs (such as rural water, drip tape, and plastic mulch) are not included in this table, but are listed as individual inputs within each irrigated enterprise budget.

Appendix Table 11. Estimated costs per acre
 Drip tape irrigation system w/intergrated emitters, 12'
 12 ft row spacing, approx. 10 gpm, with 3,630 row ft,
 Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Signature 18mm.42gph	ft	0.18	4000.0000	720.00	_____
Hose 26mm	ft	0.20	250.0000	50.00	_____
LE Autoflush end	each	1.50	20.0000	30.00	_____
Adapter 7mm & 16mm	each	0.54	20.0000	10.80	_____
Dual Goof Plug	each	0.06	20.0000	1.20	_____
Coupler 16mm	each	0.50	5.0000	2.50	_____
MPT Tank Valve	each	2.00	2.0000	4.00	_____
MPT Tagline Filter	each	17.00	1.0000	17.00	_____
PR-PMR 30 PSI	each	12.00	1.0000	12.00	_____
MPT M Adptr	each	1.37	1.0000	1.37	_____
Figure 8	each	0.50	1.0000	0.50	_____
MPT Flow Meter	each	67.50	1.0000	67.50	_____
Pocket Pressure Gage	each	5.00	1.0000	5.00	_____
Shrader Vlv Cap	each	3.00	1.0000	3.00	_____
Venturi Kit	each	85.00	1.0000	85.00	_____
Service Unit	each	45.00	1.0000	45.00	_____
12 Model R	each	65.47	1.0000	65.47	_____
24 Model R	each	70.65	1.0000	70.65	_____
INTEREST ON OP. CAP.	acre	31.27	1.0000	31.27	_____

TOTAL DIRECT EXPENSES (EVERY 7 YEARS)				1222.26	_____
TOTAL INTEREST OVER 7 YEARS				337.69	_____

TOTAL SPECIFIED EXPENSES				1559.95	_____

Note: Cost of production estimates are based on 2009 input prices.
 These items are grouped together and listed as Irrigation Setup on
 the last line of Table A and also as a fixed expense on Table B in
 an irrigated budget. A capital recovery charge of \$222.85 will
 appear in the budget to represent the annual ownership cost of these
 items over a 7 year period. Additional irrigation inputs (such as rural
 water, drip tape, and plastic mulch) are not included in this table, but
 are listed as individual inputs within each irrigated enterprise budget.

Appendix Table 12. Estimated costs per acre
 Drip tape irrigation system w/intergrated emitters, 20'
 20 ft row spacing, approx. 10 gpm, with 2,178 row ft,
 Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Signiture 18mm.55gph	ft	0.18	3000.0000	555.00	_____
Hose 26mm	ft	0.20	250.0000	50.00	_____
LE Autoflush end	each	1.50	12.0000	18.00	_____
Adapter 7mm & 16mm	each	0.54	12.0000	6.48	_____
Dual Goof Plug	each	0.06	20.0000	1.20	_____
Coupler 16mm	each	0.50	5.0000	2.50	_____
MPT Tank Valve	each	2.00	2.0000	4.00	_____
MPT Tagline Filter	each	17.00	1.0000	17.00	_____
PR-PMR 30 PSI	each	12.00	1.0000	12.00	_____
MPT M Adptr	each	1.37	1.0000	1.37	_____
Figure 8	each	0.50	1.0000	0.50	_____
MPT Flow Meter	each	67.50	1.0000	67.50	_____
Pocket Pressure Gage	each	5.00	1.0000	5.00	_____
Shrader Vlv Cap	each	3.00	1.0000	3.00	_____
Venturi Kit20'x10gph	each	70.00	1.0000	70.00	_____
Service Unit	each	45.00	1.0000	45.00	_____
12 Model R	each	65.47	1.0000	65.47	_____
24 Model R	each	70.65	1.0000	70.65	_____

TOTAL DIRECT EXPENSES (EVERY & YEARS)				994.67	_____
TOTAL INTEREST OVER 7 YEARS				274.85	_____

TOTAL SPECIFIED EXPENSES				1269.52	_____

Note: Cost of production estimates are based on 2009 input prices.
 These items are grouped together and listed as Irrigation Setup on
 the last line of Table A and also as a fixed expense on Table B in
 an irrigated budget. A capital recovery charge of \$181.36 will
 appear in the budget to represent the annual ownership cost of these
 items over a 7 year period. Additional irrigation inputs (such as rural
 water, drip tape, and plastic mulch) are not included in this table, but
 are listed as individual inputs within each irrigated enterprise budget.

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