

BLACKBERRY

2010

FRUIT AND NUT

PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2010-01

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.

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

2010 Budget Committees

Corn, Grain Sorghum, and Wheat

John Michael Riley, MSU-ES, Chairman
 John Byrd, MSU-ES
 Wayne Ebelhar, MAFES
 Eric Larson, MSU-ES/MAFES
 Larry Oldham, MSU-ES
 Glover Triplett, MAFES

Cotton

John Michael Riley, MSU-ES, Chairman
 Gordon Andrews, MSU-ES
 Jason Bond, MAFES
 Angus Catchot, MSU-ES
 Darrin Dodds, MSU-ES
 Dan Reynolds, MAFES

Peanuts

John Michael Riley, MSU-ES, Chairman
 John Black, MAFES
 Mike Howell, MSU-ES
 J. Mike Steede, MSU-ES

Rice

John Michael Riley, MSU-ES, Chairman
 Gordon Andrews, MSU-ES
 Nathan Buehring, MSU-ES
 Tim Walker, MAFES

Soybeans

Stan R. Spurlock, MAFES, Chairman
 Normie W. Buehring, MAFES
 Angus Catchot, MSU-ES
 Trey Koger, MSU-ES

Vegetables

Ken Hood, MSU-ES, Chairman
 Allen Henn, MSU-ES
 David Ingram, MAFES
 David H. Nagel, MSU-ES
 Blake Layton, MSU-ES

Fruit & Nut

Kim Morgan, MSU-ES, Chairman
 John Braswell, MSU-ES
 Frank Matta, MAFES
 David Ingram, MAFES
 Blake Layton, MSU-ES

Supporting Committees

Equipment

Ken Hood, MSU-ES, Chairman
 Stan R. Spurlock, MAFES
 Michael H. Willcutt, MSU-ES

Prices

Ken Hood, MSU-ES, Chairman
 Stan R. Spurlock, MAFES
 W. Gail Gillis, MAFES

Documentation and Data Processing

Ken Hood, MSU-ES, Chairman
 Stan R. Spurlock, MAFES
 W. Gail Gillis, MAFES

Publication Review

Ken Hood, MSU-ES, Chairman
 Stan R. Spurlock, MAFES
 W. Gail Gillis, MAFES

Table of Contents

	Page
Foreword.....	i
Acknowledgments.....	i
2010 Budget Committees.....	ii
2010 Planning Budgets	1
Budgets for Agricultural Enterprises.....	1
Methods and Procedures	1
Production Practices	1
Machinery.....	1
Estimates of Direct Costs.....	2
Estimates of Fixed Costs.....	2
Irrigation Costs	3
Estimates of Marketing & Grading Costs	3
Blackberry Production.....	3
Enterprise Budgets	
Table	
1 Blackberry, year 1, establishment Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape	6
2 Blackberry, year 2, 2,000 lb yield Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape	12
3 Blackberry, year 3, 6,000 lb yield Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape	15
4 Blackberry, year 4, 8,000 lb yield Irrigated, 12 ft spacing, 10gpm, 3630 row ft,drip tape	20
Appendix	
Table	
1 Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed costs per hour.....	26
2 Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed costs per hour.....	26
3 Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed costs per acre.....	27
4 Operating inputs: estimated prices.....	28
5 Estimated fuel prices and interest rates.....	30
6 Labor types, wage rates and unallocated labor multiplier.....	30
7 Drip tape irrigation system, 5 ft row spacing 20 gpm with 8,712 ft of drip tape.....	31
8 Drip tape irrigation system, 6 ft row spacing 16 gpm with 7,260 ft of drip tape.....	32
9 Drip tape irrigation system, 8 ft row spacing 12 gpm with 5,445 ft of drip tape.....	33

10	Micro sprinkler system w/oval hose, 40' 40 ft row spacing, approx. 10 gpm with 3,630 ft.....	34
11	Drip tape irrigation system w/intergrated emitters, 12' 12 ft row spacing, approx. 10 gpm with 1,089 row ft.....	35
12	Drip tape irrigation system w/intergrated emitters, 20' 20 ft row spacing, approx. 10 gpm with 2,178 row ft.....	36
Literature Cited		37

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 judgment 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 packaging costs as well.

Blackberry Production

The user should consider the following assumptions when using the blackberry 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 7 years. The planting pattern is 4 ft plant spacing with 12 feet from row center to row center. The varieties selected are erect and thornless and supported on a 2 wire trellis with 3 ft and 4 ft support cross bars. Drip irrigation is expected to contribute approximately 50 percent of the water needs.

Enterprise Budgets

Table 1.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 1, establishment
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----				
Mark of Rows				1.00	Nov											
Hand Labor	hour										1.00	8.92				8.92
Lime (Spread)	ton			1.00	Nov								1.0000	38.00	38.00	38.00
Sub-Soiler	1 shank	MFWD 50 hp	1.078	0.25	Nov	1.75	1.42	0.08	0.23	0.26	3.03					6.51
Sprayer (BC & Wand)	12 ft	MFWD 50 hp	0.500	1.00	Nov	3.26	2.63	0.06	0.35	0.50	5.62					11.92
Glyphosate 3lb a.e.	pt												4.0000	3.49	13.96	13.96
Chisel Plow	5 ft	MFWD 50 hp	0.220	1.00	Nov	1.43	1.16	0.22	0.43	0.22	2.47					5.71
Disk Harrow	6ft	MFWD 50 hp	0.330	1.00	Nov	2.15	1.74	0.20	0.48	0.33	3.71					8.28
Fert Appl (Liquid)	4R-6'	MFWD 50 hp	1.309	1.00	Nov	8.52	6.88	13.10	16.31	1.96	20.55					65.36
Telone II	gal												35.0000	14.96	523.60	523.60
Cultipacker	12 Ft	MFWD 50 hp	0.124	1.00	Nov	0.81	0.65	0.16	0.25	0.12	1.40					3.27
Mow between Rows				0.50	Mar											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Side Dresser	1R 3ft	MFWD 50 hp	0.846	0.50	Mar	2.75	2.22	1.06	4.51	0.42	4.75					15.29
Fert 10-10-10	cwt												6.0000	29.00	174.00	174.00
Sprayer (BC & Wand)	12 ft	MFWD 50 hp	0.500	0.25	Mar	0.81	0.66	0.01	0.09	0.12	1.40					2.97
Glyphosate 3lb a.e.	pt												2.0000	3.49	6.98	6.98
Disk Harrow	6ft	MFWD 50 hp	0.330	0.50	Mar	1.07	0.87	0.10	0.24	0.16	1.86					4.14
Chain Harrow	6 ft	MFWD 50 hp	0.343	0.50	Mar	1.12	0.90	0.01	0.78	0.17	1.93					4.74
Crown Gall Treatment				1.00	Mar											
Hand Labor	hour									6.00	53.52					53.52
Planter/Transplanter	1 Row	MFWD 50 hp	1.586	1.00	Mar	10.32	8.34	0.13	10.76	6.34	60.28					89.83
Blackberry Plants	each												908.0000	3.00	2724.00	2724.00
Trailer water	10 ft	MFWD 50 hp	0.600	1.00	Mar	3.90	3.15	0.27	0.87	0.60	6.74					14.93
Hand Labor	hour									1.00	8.92					8.92
Chain Harrow	6 ft	MFWD 50 hp	0.343	1.00	Mar	2.23	1.81	0.01	1.56	0.34	3.86					9.47
Cover Spray Fung				0.50	Mar											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Nova 40W	oz												1.0000	4.00	4.00	4.00
Kocide 101	lb												1.0000	2.60	2.60	2.60
Cultivate	2-Row	MFWD 50 hp	0.312	1.00	Apr	2.04	1.64	0.33	1.70	0.31	3.51					9.22
Hoeing				1.00	Apr											
Hand Labor	hour									10.00	89.20					89.20
Mow between Rows				0.50	Apr											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Early Bloom				0.50	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz												7.0000	4.16	29.12	29.12
Captan 50 WP	lb												2.0000	5.53	11.06	11.06
Nova 40W	oz												1.0000	4.00	4.00	4.00
Full Bloom				0.50	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz												11.5000	2.65	30.48	30.48

(continued)

Table 1.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 1, establishment
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----				
Petal Fall				0.50	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Irrigate & Check				1.00	Apr											
Irrigation Labor	hour									15.00	133.80					133.80
1/2 of water needed	100gal											272.0000	0.28	76.16		76.16
Cultivate	2-Row	MFWD 50 hp	0.312	1.00	May	2.04	1.64	0.33	1.70	0.31	3.51					9.22
Hoeing				1.00	May											
Hand Labor	hour									10.00	89.20					89.20
Mow between Rows				0.50	May											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Construct Trellis				1.00	May											
Hand Labor	hour									20.00	178.40					178.40
Wood Post 2.5" x 7'	each											36.0000	2.50	90.00		90.00
Brace Post 2.5" x 7'	each											36.0000	2.50	90.00		90.00
Wire - Blackberry	ft											15840.0000	0.02	316.80		316.80
Rebar Post w/2 bars	each											162.0000	4.48	725.76		725.76
Fabricate rebar post	post											162.0000	5.00	810.00		810.00
Labor rebar post mfg	hour											95.0000	8.26	784.70		784.70
Weed Control				0.33	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93					1.97
Surflan AS	qt											0.9900	16.00	15.84		15.84
Simazine 4L	qt											0.3300	5.80	1.91		1.91
Irrigate & Check				1.00	May											
Irrigation Labor	hour									15.50	138.26					138.26
1/2 of water needed	100gal											282.0000	0.28	78.96		78.96
Hoeing				1.00	Jun											
Hand Labor	hour									10.00	89.20					89.20
Side Dresser	1R 3ft	MFWD 50 hp	0.846	0.50	Jun	2.75	2.22	1.06	4.51	0.42	4.75					15.29
Amm Nitrate (34%)	cwt											5.5000	28.00	154.00		154.00
Mow between Rows				0.50	Jun											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Weed&Sucker Control				0.33	Jun											
Sprayer - Utility	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93					1.97
Gramoxone Inteon	pt											0.6600	4.00	2.64		2.64
Topping Blackberries				1.00	Jun											
Pruning labor	hour									4.00	35.68					35.68
Cover Spray Fung				0.50	Jun											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											11.5000	2.65	30.48		30.48
Irrigate & Check				1.00	Jun											
Irrigation Labor	hour									15.00	133.80					133.80
1/2 of water needed	100gal											272.0000	0.28	76.16		76.16

(continued)

Table 1.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 1, establishment
 Irrigated, 12ft spacing, 10gpm, 3,630 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	
between Rows				0.50	Jul	-----dollars-----				dollars		-----dollars-----			Mow
Rotary Cutter	6ft	MFWD 50 hp	0.572		Jul	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Weed&Sucker Control					Jul										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93				1.97
Gramoxone Inteon	pt											0.6600	4.00	2.64	2.64
Irrigate & Check					Jul										
Irrigation Labor	hour									15.50	138.26				138.26
1/2 of water needed	100gal											282.0000	0.28	78.96	78.96
Mow between Rows				0.50	Aug										
Rotary Cutter	6ft	MFWD 50 hp	0.572		Aug	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Hoeing					Aug										
Hand Labor	hour									10.00	89.20				89.20
Cane Removal					Aug										
Hand Labor	hour									5.00	44.60				44.60
Cover Spray Fung					Aug										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Pristine	oz											11.5000	2.65	30.48	30.48
Weed&Sucker Control					Aug										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93				1.97
Gramoxone Inteon	pt											0.6600	4.00	2.64	2.64
Irrigate & Check					Aug										
Irrigation Labor	hour									15.50	138.26				138.26
1/2 of water needed	100gal											282.0000	0.28	78.96	78.96
Side Dresser	1R 3ft	MFWD 50 hp	0.846	0.50	Sep	2.75	2.22	1.06	4.51	0.42	4.75				15.29
Amm Nitrate (34%)	cwt											5.5000	28.00	154.00	154.00
Mow between Rows					Sep										
Rotary Cutter	6ft	MFWD 50 hp	0.572		Sep	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Irrigate & Check					Sep										
Irrigation Labor	hour									15.00	133.80				133.80
1/2 of water needed	100gal											272.0000	0.28	76.16	76.16
Mow between Rows					Oct										
Rotary Cutter	6ft	MFWD 50 hp	0.572		Oct	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Crown Borer Spray					Oct										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Capture 2EC	oz											3.2000	1.50	4.80	4.80
TOTALS						72.49	58.57	24.78	55.19	185.05	1676.42			7272.97	9160.42
INTEREST ON OPERATING CAPITAL															168.46
UNALLOCATED LABOR															24.99
TOTAL SPECIFIED COST															9353.87

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
 Blackberry, year 1, establishment
 Irrigated, 12ft spacing, 10gpm, 3,630 row ft, drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM					
Labor rebar post mfg	hour	8.26	95.0000	784.70	_____
FERTILIZER					
Lime (Spread)	ton	38.00	1.0000	38.00	_____
Fert 10-10-10	cwt	29.00	6.0000	174.00	_____
Amm Nitrate (34%)	cwt	28.00	11.0000	308.00	_____
FUNGICIDE					
Telone II	gal	14.96	35.0000	523.60	_____
Nova 40W	oz	4.00	2.0000	8.00	_____
Kocide 101	lb	2.60	1.0000	2.60	_____
Switch	oz	4.16	14.0000	58.24	_____
Captan 50 WP	lb	5.53	2.0000	11.06	_____
Pristine	oz	2.65	34.5000	91.43	_____
HERBICIDE					
Glyphosate 3lb a.e.	pt	3.49	6.0000	20.94	_____
Surflan AS	qt	16.00	0.9900	15.84	_____
Simazine 4L	qt	5.80	0.3300	1.91	_____
Gramoxone Inteon	pt	4.00	1.9800	7.92	_____
INSECTICIDE					
Capture 2EC	oz	1.50	3.2000	4.80	_____
SEED/PLANTS					
Blackberry Plants	each	3.00	908.0000	2724.00	_____
OTHER					
Wood Post 2.5" x 7'	each	2.50	36.0000	90.00	_____
Brace Post 2.5" x 7'	each	2.50	36.0000	90.00	_____
Wire - Blackberry	ft	0.02	15840.0000	316.80	_____
Rebar Post w/2 bars	each	4.48	162.0000	725.76	_____
Fabricate rebar post	post	5.00	162.0000	810.00	_____
IRRIGATION SUPPLIES					
1/2 of water needed	100gal	0.28	1662.0000	465.36	_____
Operator Labor					
Tractors	hour	11.23	11.1374	125.10	_____
Planting Labor					
Implements	hour	8.92	4.7596	42.46	_____
Hand Labor					
Special Labor	hour	8.92	73.0000	651.16	_____
Implements	hour	8.92	0.6547	5.84	_____
Irrigation Labor					
Special Labor	hour	8.92	91.5000	816.18	_____
Pruning labor					
Special Labor	hour	8.92	4.0000	35.68	_____
UNALLOCATED LABOR	hour	11.21	2.2274	24.99	_____
DIESEL FUEL					
Tractors	gal	2.22	28.6632	63.63	_____
REPAIR & MAINTENANCE					
Implements	acre	24.78	1.0000	24.78	_____
Tractors	acre	8.86	1.0000	8.86	_____
INTEREST ON OP. CAP.	acre	168.46	1.0000	168.46	_____
TOTAL DIRECT EXPENSES				9240.11	_____
FIXED EXPENSES					
Implements	acre	55.19	1.0000	55.19	_____
Tractors	acre	58.57	1.0000	58.57	_____
TOTAL FIXED EXPENSES				113.76	_____
TOTAL SPECIFIED EXPENSES				9353.87	_____

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
 Blackberry, year 2, 2,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----				
Dormant Spray				0.50	Feb											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Liquid Lime Sulfur	gal											8.0000	11.41	91.28		91.28
Weed Control				0.33	Feb											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93					1.97
Gramoxone Inteon	pt											0.6600	4.00	2.64		2.64
Simazine 4L	qt											0.9900	5.80	5.74		5.74
Mow between Rows				0.50	Mar											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Cover Spray Fung				0.50	Mar											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											9.2500	2.65	24.51		24.51
Side Dresser	1R 3ft	MFWD 50 hp	0.846	0.50	Mar	2.75	2.22	1.06	4.51	0.42	4.75					15.29
Fert 10-10-10	cwt											6.0000	29.00	174.00		174.00
Crown Borer Spray				0.50	Mar											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Capture 2EC	oz											3.2000	1.50	4.80		4.80
Cover Spray Fung				0.50	Mar											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Nova 40W	oz											1.0000	4.00	4.00		4.00
Kocide 101	lb											1.0000	2.60	2.60		2.60
Mow between Rows				0.50	Apr											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Early Bloom				0.50	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Captan 50 WP	lb											2.0000	5.53	11.06		11.06
Nova 40W	oz											1.0000	4.00	4.00		4.00
Full Bloom				0.50	Apr											
Sprayer (BC & Wand)	4 ft	4 x 4	0.250			0.31	0.81	0.01	0.09	0.12	1.40					2.62
Pristine	oz											11.5000	2.65	30.48		30.48
Weed Control				0.33	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93					1.97
Poast Plus	pt											0.6600	8.49	5.60		5.60
Surfactant Non Ionic	pt											0.3300	1.55	0.51		0.51
Petal Fall				0.50	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Captan 50 WP	lb											2.0000	5.53	11.06		11.06
Nova 40W	oz											1.0000	4.00	4.00		4.00

(continued)

Table 2.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 2, 2,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----				
Irrigate & Check				1.00	Apr											
Irrigation Labor	hour									15.00	133.80					133.80
1/2 of water needed	100gal											545.0000	0.28	152.60		152.60
Mow between Rows				0.50	May											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											11.5000	2.65	30.48		30.48
Prophyt	pt											2.0000	4.40	8.80		8.80
Hoeing				1.00	May											
Hand Labor	hour									8.00	71.36					71.36
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Captan 50 WP	lb											2.0000	5.53	11.06		11.06
Nova 40W	oz											1.0000	4.00	4.00		4.00
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											11.5000	2.65	30.48		30.48
25% of Yield				1.00	May											
Harvest Labor	hour									22.00	196.24					196.24
Clamshell Package	each											667.0000	0.27	180.09		180.09
Fruit to Field Edge				3.00	May											
Trailer Fruit 4'x6'	trip	4 x 4	1.000			7.33	19.47	0.40	0.75	3.00	33.69					61.64
Irrigate & Check				1.00	May											
Irrigation Labor	hour									15.50	138.26					138.26
1/2 of water needed	100gal											563.0000	0.28	157.64		157.64
Hoeing				1.00	Jun											
Hand Labor	hour									8.00	71.36					71.36
Cover Spray Fung				0.50	Jun											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Mow between Rows				0.50	Jun											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Weed&Sucker Control				0.33	Jun											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93					1.97
Gramoxone Inteon	pt											0.6600	4.00	2.64		2.64
50% of Yield				1.00	Jun											
Harvest Labor	hour									44.00	392.48					392.48
Clamshell Package	each											1333.0000	0.27	359.91		359.91
Fruit to Field Edge				6.00	Jun											
Trailer Fruit 4'x6'	trip	4 x 4	1.000			14.65	38.94	0.80	1.50	6.00	67.38					123.27

(continued)

Table 2.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 2, 2,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----				
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	MFWD 50 hp	0.250	0.50	Jun	0.81	0.66	0.01	0.09	0.12	1.40				2.97
												11.5000	2.65	30.48	30.48
Topping Blackberries Pruning labor	hour			1.00	Jun					5.00	44.60				44.60
Vine Removal Brush Blade	7ft	MFWD 50 hp	0.500	1.00	Jun	3.26	2.63		0.95	0.50	5.62				12.46
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	MFWD 50 hp	0.250	0.50	Jun	0.81	0.66	0.01	0.09	0.12	1.40				2.97
												11.5000	2.65	30.48	30.48
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Jun					15.00	133.80				133.80
												545.0000	0.28	152.60	152.60
Cover Spray Fung Sprayer (BC & Wand) Switch	4 ft oz	MFWD 50 hp	0.250	0.50	Jul	0.81	0.66	0.01	0.09	0.12	1.40				2.97
												7.0000	4.16	29.12	29.12
Side Dresser Amm Nitrate (34%)	1R 3ft cwt	2WD 50 hp	0.846	0.50	Jul	2.70	1.87	1.06	4.51	0.42	4.75				14.89
												5.5000	28.00	154.00	154.00
Hoeing Hand Labor	hour			1.00	Jul					10.00	89.20				89.20
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Jul	1.87	1.51	0.81	0.63	0.28	3.22				8.04
25% of Yield Harvest Labor	hour			1.00	Jul					22.00	196.24				196.24
Clamshell Package Fruit to Field Edge	each			3.00	Jul							667.0000	0.27	180.09	180.09
Trailer Fruit 4'x6'	trip	4 x 4	1.000		Jul	7.33	19.47	0.40	0.75	3.00	33.69				61.64
Weed&Sucker Control Sprayer (BC & Wand) Gramoxone Inteon	4 ft pt	MFWD 50 hp	0.250	0.33	Jul	0.54	0.43	0.01	0.06	0.08	0.93				1.97
												0.6600	4.00	2.64	2.64
Cover Spray Fung Sprayer (BC & Wand) Prophyt	4 ft pt	MFWD 50 hp	0.250	0.50	Jul	0.81	0.66	0.01	0.09	0.12	1.40				2.97
												2.0000	4.40	8.80	8.80
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Jul					15.50	138.26				138.26
												563.0000	0.28	157.64	157.64
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Aug	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Cane Removal Hand Labor	hour			1.00	Aug					15.00	133.80				133.80
Vine Removal Brush Blade	7ft	MFWD 50 hp	0.500	1.00	Aug	3.26	2.63		0.95	0.50	5.62				12.46

(continued)

Table 2.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 2, 2,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----			
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	MFWD 50 hp	0.250	0.50	Aug	0.81	0.66	0.01	0.09	0.12	1.40				2.97
Weed&Sucker Control Sprayer (BC & Wand) Gramoxone Inteon	12 ft pt	MFWD 50 hp	0.500	0.33	Aug	1.07	0.87	0.02	0.11	0.16	1.85	11.5000	2.65	30.48	30.48
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Aug					15.50	138.26	563.0000	0.28	157.64	138.26
Side Dresser Amm Nitrate (34%)	1R 3ft cwt	MFWD 50 hp	0.846	0.50	Sep	2.75	2.22	1.06	4.51	0.42	4.75	5.5000	28.00	154.00	15.29
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Sep	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Sep					15.00	133.80	545.0000	0.28	152.60	133.80
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Oct	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Crown Borer Spray Sprayer (BC & Wand) Capture 2EC	4 ft oz	MFWD 50 hp	0.250	0.50	Oct	0.81	0.66	0.01	0.09	0.12	1.40	3.2000	1.50	4.80	4.80
Prorated Establish.	acre				Jan							1.0000			1705.50
Irrigation Setup	acre				Jan							1.0000			222.86
TOTALS						75.49	115.49	11.49	25.35	244.68	2226.84			2678.47	7061.49
INTEREST ON OPERATING CAPITAL															70.52
UNALLOCATED LABOR															43.06
TOTAL SPECIFIED COST															7175.07

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
 Blackberry, year 2, 2,000 yield
 Irrigated, 12ft spacing, 10gpm, 3,630 row ft,drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Liquid Lime Sulfur	gal	11.41	8.0000	91.28	_____
Fert 10-10-10	cwt	29.00	6.0000	174.00	_____
Amm Nitrate (34%)	cwt	28.00	11.0000	308.00	_____
FUNGICIDE					
Pristine	oz	2.65	78.2500	207.36	_____
Nova 40W	oz	4.00	4.0000	16.00	_____
Kocide 101	lb	2.60	1.0000	2.60	_____
Switch	oz	4.16	35.0000	145.60	_____
Captan 50 WP	lb	5.53	6.0000	33.18	_____
Prophyt	pt	4.40	4.0000	17.60	_____
HERBICIDE					
Gramoxone Inteon	pt	4.00	2.6400	10.56	_____
Simazine 4L	qt	5.80	0.9900	5.74	_____
Poast Plus	pt	8.49	0.6600	5.60	_____
INSECTICIDE					
Capture 2EC	oz	1.50	6.4000	9.60	_____
OTHER					
Surfactant Non Ionic	pt	1.55	0.3300	0.51	_____
Clamshell Package	each	0.27	2667.0000	720.09	_____
IRRIGATION SUPPLIES					
1/2 of water needed	100gal	0.28	3324.0000	930.72	_____
Operator Labor					
Tractors	hour	11.23	19.1809	215.38	_____
Harvest Labor					
Special Labor	hour	8.92	88.0000	784.96	_____
Hand Labor					
Special Labor	hour	8.92	41.0000	365.72	_____
Irrigation Labor					
Special Labor	hour	8.92	91.5000	816.18	_____
Pruning labor					
Special Labor	hour	8.92	5.0000	44.60	_____
UNALLOCATED LABOR	hour	11.22	3.8361	43.06	_____
DIESEL FUEL					
Tractors	gal	2.22	18.1590	40.28	_____
GASOLINE					
Tractors	gal	2.47	7.2750	17.98	_____
REPAIR & MAINTENANCE					
Implements	acre	11.49	1.0000	11.49	_____
Tractors	acre	17.23	1.0000	17.23	_____
INTEREST ON OP. CAP.	acre	70.52	1.0000	70.52	_____
TOTAL DIRECT EXPENSES				5105.87	_____
FIXED EXPENSES					
Implements	acre	25.35	1.0000	25.35	_____
Tractors	acre	115.49	1.0000	115.49	_____
Prorated Establish.	acre	1705.50	1.0000	1705.50	_____
Irrigation Setup	acre	222.86	1.0000	222.86	_____
TOTAL FIXED EXPENSES				2069.20	_____
TOTAL SPECIFIED EXPENSES				7175.07	_____

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
 Blackberry, year 3, 6,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----				
Dormant Spray				0.50	Feb											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Liquid Lime Sulfur	gal											8.0000	11.41	91.28		91.28
Weed Control				0.33	Feb											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93					1.97
Gramoxone Inteon	pt											0.6600	4.00	2.64		2.64
Simazine 4L	qt											0.9900	5.80	5.74		5.74
Mow between Rows				0.50	Mar											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Cover Spray Fung				0.50	Mar											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											9.2500	2.65	24.51		24.51
Side Dresser	1R 3ft	MFWD 50 hp	0.846	0.50	Mar	2.75	2.22	1.06	4.51	0.42	4.75					15.29
Fert 10-10-10	cwt											6.0000	29.00	174.00		174.00
Crown Borer Spray				0.50	Mar											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Capture 2EC	oz											3.2000	1.50	4.80		4.80
Cover Spray Fung				0.50	Mar											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Nova 40W	oz											1.0000	4.00	4.00		4.00
Kocide 101	lb											1.0000	2.60	2.60		2.60
Mow between Rows				0.50	Apr											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Early Bloom				0.50	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Captan 50 WP	lb											2.0000	5.53	11.06		11.06
Nova 40W	oz											1.0000	4.00	4.00		4.00
Full Bloom				0.50	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											11.5000	2.65	30.48		30.48
Weed Control				0.33	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93					1.97
Poast Plus	pt											0.6600	8.49	5.60		5.60
Surfactant Non Ionic	pt											0.3300	1.55	0.51		0.51
Petal Fall				0.50	Apr											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Captan 50 WP	lb											2.0000	5.53	11.06		11.06
Nova 40W	oz											1.0000	4.00	4.00		4.00

(continued)

Table 3.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 3, 6,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----				
Irrigate & Check				1.00	Apr											
Irrigation Labor	hour									15.00	133.80					133.80
1/2 of water needed	100gal											545.0000	0.28	152.60		152.60
Mow between Rows				0.50	May											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											11.5000	2.65	30.48		30.48
Prophyt	pt											2.0000	4.40	8.80		8.80
Hoeing				1.00	May											
Hand Labor	hour									8.00	71.36					71.36
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Captan 50 WP	lb											2.0000	5.53	11.06		11.06
Nova 40W	oz											1.0000	4.00	4.00		4.00
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											11.5000	2.65	30.48		30.48
25% of Yield				1.00	May											
Harvest Labor	hour									67.00	597.64					597.64
Clamshell Package	each											2000.0000	0.27	540.00		540.00
Fruit to Field Edge				8.00	May											
Trailer Fruit 4'x6'	trip	4 x 4	1.000			19.54	51.92	1.07	2.00	8.00	89.84					164.37
Irrigate & Check				1.00	May											
Irrigation Labor	hour									15.50	138.26					138.26
1/2 of water needed	100gal											563.0000	0.28	157.64		157.64
Hoeing				1.00	Jun											
Hand Labor	hour									8.00	71.36					71.36
Cover Spray Fung				0.50	Jun											
Sprayer (BC & Wand)	4 ft	4 x 4	0.250			0.31	0.81	0.01	0.09	0.12	1.40					2.62
Switch	oz											7.0000	4.16	29.12		29.12
Mow between Rows				0.50	Jun											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Weed&Sucker Control				0.33	Jun											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93					1.97
Gramoxone Inteon	pt											0.6600	4.00	2.64		2.64
50% of Yield				1.00	Jun											
Harvest Labor	hour									133.00	1186.36					1186.36
Clamshell Package	each											4000.0000	0.27	1080.00		1080.00
Fruit to Field Edge				17.00	Jun											
Trailer Fruit 4'x6'	trip	4 x 4	1.000			41.52	110.34	2.27	4.26	17.00	190.91					349.30

(continued)

Table 3.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 3, 6,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----			
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	MFWD 50 hp	0.250	0.50	Jun	0.81	0.66	0.01	0.09	0.12	1.40				2.97
												11.5000	2.65	30.48	30.48
Topping Blackberries Pruning labor	hour			1.00	Jun					8.00	71.36				71.36
Vine Removal Brush Blade	7ft	MFWD 50 hp	0.500	1.00	Jun	3.26	2.63		0.95	0.50	5.62				12.46
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	MFWD 50 hp	0.250	0.50	Jun	0.81	0.66	0.01	0.09	0.12	1.40				2.97
												11.5000	2.65	30.48	30.48
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Jun					15.00	133.80				133.80
												545.0000	0.28	152.60	152.60
Cover Spray Fung Sprayer (BC & Wand) Switch	4 ft oz	MFWD 50 hp	0.250	0.50	Jul	0.81	0.66	0.01	0.09	0.12	1.40				2.97
												7.0000	4.16	29.12	29.12
Side Dresser Amm Nitrate (34%)	1R 3ft cwt	2WD 50 hp	0.846	0.50	Jul	2.70	1.87	1.06	4.51	0.42	4.75				14.89
												5.5000	28.00	154.00	154.00
Hoeing Hand Labor	hour			1.00	Jul					8.00	71.36				71.36
Mow between Rows Rotary Cutter 25% of Yield	6ft	MFWD 50 hp	0.572	0.50	Jul	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Harvest Labor Clamshell Package	hour each			1.00	Jul					67.00	597.64				597.64
												2000.0000	0.27	540.00	540.00
Fruit to Field Edge Trailer Fruit 4'x6'	trip	4 x 4	1.000	8.00	Jul	19.54	51.92	1.07	2.00	8.00	89.84				164.37
Weed&Sucker Control Sprayer (BC & Wand) Gramoxone Inteon	4 ft pt	MFWD 50 hp	0.250	0.33	Jul	0.54	0.43	0.01	0.06	0.08	0.93				1.97
												0.6600	4.00	2.64	2.64
Cover Spray Fung Sprayer (BC & Wand) Prophyt	4 ft pt	MFWD 50 hp	0.250	0.50	Jul	0.81	0.66	0.01	0.09	0.12	1.40				2.97
												2.0000	4.40	8.80	8.80
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Jul					15.50	138.26				138.26
												563.0000	0.28	157.64	157.64
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Aug	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Cane Removal Hand Labor	hour			1.00	Aug					24.00	214.08				214.08
Vine Removal Brush Blade	7ft	MFWD 50 hp	0.500	1.00	Aug	3.26	2.63		0.95	0.50	5.62				12.46

(continued)

Table 3.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 3, 6,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----			
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	4 x 4	0.250	0.50	Aug	0.31	0.81	0.01	0.09	0.12	1.40				2.62
Weed&Sucker Control Sprayer (BC & Wand) Gramoxone Inteon	4 ft pt	MFWD 50 hp	0.250	0.33	Aug	0.54	0.43	0.01	0.06	0.08	0.93	11.5000	2.65	30.48	30.48
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Aug										138.26
Side Dresser Amm Nitrate (34%)	1R 3ft cwt	MFWD 50 hp	0.846	0.50	Sep	2.75	2.22	1.06	4.51	0.42	4.75	563.0000	0.28	157.64	157.64
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Sep	1.87	1.51	0.81	0.63	0.28	3.22				154.00
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Sep										133.80
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Oct	1.87	1.51	0.81	0.63	0.28	3.22	545.0000	0.28	152.60	152.60
Crown Borer Spray Sprayer (BC & Wand) Capture 2EC	4 ft oz	MFWD 50 hp	0.250	0.50	Oct	0.81	0.66	0.01	0.09	0.12	1.40				4.80
Prorated Establish.	acre				Jan							3.2000	1.50	4.80	4.80
Irrigation Setup	acre				Jan							1.0000			1705.50
												1.0000			222.86
TOTALS						125.75	251.50	14.29	30.56	454.59	4147.63			4118.38	10616.47
INTEREST ON OPERATING CAPITAL															188.70
UNALLOCATED LABOR															90.04
TOTAL SPECIFIED COST															10895.21

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
 Blackberry, year 3, 6,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 row ft,drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Liquid Lime Sulfur	gal	11.41	8.0000	91.28	_____
Fert 10-10-10	cwt	29.00	6.0000	174.00	_____
Amm Nitrate (34%)	cwt	28.00	11.0000	308.00	_____
FUNGICIDE					
Pristine	oz	2.65	78.2500	207.36	_____
Nova 40W	oz	4.00	4.0000	16.00	_____
Kocide 101	lb	2.60	1.0000	2.60	_____
Switch	oz	4.16	35.0000	145.60	_____
Captan 50 WP	lb	5.53	6.0000	33.18	_____
Prophyt	pt	4.40	4.0000	17.60	_____
HERBICIDE					
Gramoxone Inteon	pt	4.00	2.6400	10.56	_____
Simazine 4L	qt	5.80	0.9900	5.74	_____
Poast Plus	pt	8.49	0.6600	5.60	_____
INSECTICIDE					
Capture 2EC	oz	1.50	6.4000	9.60	_____
OTHER					
Surfactant Non Ionic	pt	1.55	0.3300	0.51	_____
Clamshell Package	each	0.27	8000.0000	2160.00	_____
IRRIGATION SUPPLIES					
1/2 of water needed	100gal	0.28	3324.0000	930.72	_____
Operator Labor					
Tractors	hour	11.23	40.0984	450.29	_____
Harvest Labor					
Special Labor	hour	8.92	267.0000	2381.64	_____
Hand Labor					
Special Labor	hour	8.92	48.0000	428.16	_____
Irrigation Labor					
Special Labor	hour	8.92	91.5000	816.18	_____
Pruning labor					
Special Labor	hour	8.92	8.0000	71.36	_____
UNALLOCATED LABOR	hour	11.22	8.0196	90.04	_____
DIESEL FUEL					
Tractors	gal	2.22	17.6250	39.10	_____
GASOLINE					
Tractors	gal	2.47	19.9500	49.29	_____
REPAIR & MAINTENANCE					
Implements	acre	14.29	1.0000	14.29	_____
Tractors	acre	37.36	1.0000	37.36	_____
INTEREST ON OP. CAP.	acre	188.70	1.0000	188.70	_____
TOTAL DIRECT EXPENSES				8684.79	_____
FIXED EXPENSES					
Implements	acre	30.56	1.0000	30.56	_____
Tractors	acre	251.50	1.0000	251.50	_____
Prorated Establish.	acre	1705.50	1.0000	1705.50	_____
Irrigation Setup	acre	222.86	1.0000	222.86	_____
TOTAL FIXED EXPENSES				2210.42	_____
TOTAL SPECIFIED EXPENSES				10895.21	_____

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
 Blackberry, year 4, 8,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----			
Dormant Spray				0.50	Feb										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Liquid Lime Sulfur	gal											8.0000	11.41	91.28	91.28
Weed Control				0.33	Feb										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93				1.97
Gramoxone Inteon	pt											0.6600	4.00	2.64	2.64
Simazine 4L	qt											0.9900	5.80	5.74	5.74
Mow between Rows				0.50	Mar										
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22				8.04
Cover Spray Fung				0.50	Mar										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Pristine	oz											9.2500	2.65	24.51	24.51
Side Dresser	1R 3ft	MFWD 50 hp	0.846	0.50	Mar	2.75	2.22	1.06	4.51	0.42	4.75				15.29
Fert 10-10-10	cwt											6.0000	29.00	174.00	174.00
Crown Borer Spray				0.50	Mar										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Capture 2EC	oz											3.2000	1.50	4.80	4.80
Cover Spray Fung				0.50	Mar										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Nova 40W	oz											1.0000	4.00	4.00	4.00
Kocide 101	lb											1.0000	2.60	2.60	2.60
Mow between Rows				0.50	Apr										
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22				8.04
Early Bloom				0.50	Apr										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Switch	oz											7.0000	4.16	29.12	29.12
Captan 50 WP	lb											2.0000	5.53	11.06	11.06
Nova 40W	oz											1.0000	4.00	4.00	4.00
Full Bloom				0.50	Apr										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Pristine	oz											11.5000	2.65	30.48	30.48
Weed Control				0.33	Apr										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.54	0.43	0.01	0.06	0.08	0.93				1.97
Poast Plus	pt											0.6600	8.49	5.60	5.60
Surfactant Non Ionic	pt											0.3300	1.55	0.51	0.51
Petal Fall				0.50	Apr										
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40				2.97
Switch	oz											7.0000	4.16	29.12	29.12
Captan 50 WP	lb											2.0000	5.53	11.06	11.06
Nova 40W	oz											1.0000	4.00	4.00	4.00

(continued)

Table 4.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 4, 8,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----				
Irrigate & Check				1.00	Apr											
Irrigation Labor	hour									15.00	133.80					133.80
1/2 of water needed	100gal												545.0000	0.28	152.60	152.60
Mow between Rows				0.50	May											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											11.5000	2.65	30.48		30.48
Prophyt	pt											2.0000	4.40	8.80		8.80
Hoeing				1.00	May											
Hand Labor	hour									8.00	71.36					71.36
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Switch	oz											7.0000	4.16	29.12		29.12
Captan 50 WP	lb											2.0000	5.53	11.06		11.06
Nova 40W	oz											1.0000	4.00	4.00		4.00
Cover Spray Fung				0.50	May											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											11.5000	2.65	30.48		30.48
25% of Yield				1.00	May											
Harvest Labor	hour									89.00	793.88					793.88
Clamshell Package	each											2667.0000	0.27	720.09		720.09
Fruit to Field Edge				11.00	May											
Trailer Fruit 4'x6'	trip	4 x 4	1.000			26.86	71.40	1.47	2.75	11.00	123.53					226.01
Irrigate & Check				1.00	May											
Irrigation Labor	hour									15.50	138.26					138.26
1/2 of water needed	100gal												563.0000	0.28	157.64	157.64
Hoeing				0.50	Jun											
Hand Labor	hour									4.00	35.68					35.68
Cover Spray Fung				0.50	Jun											
Sprayer (BC & Wand)	4 ft	MFWD 50 hp	0.250			0.81	0.66	0.01	0.09	0.12	1.40					2.97
Pristine	oz											7.0000	2.65	18.55		18.55
Mow between Rows				0.50	Jun											
Rotary Cutter	6ft	MFWD 50 hp	0.572			1.87	1.51	0.81	0.63	0.28	3.22					8.04
Weed&Sucker Control				0.33	Jun											
Sprayer (BC & Wand)	4 ft	2WD 50 hp	0.250			0.53	0.37	0.01	0.06	0.08	0.93					1.90
Gramoxone Inteon	pt											0.6600	4.00	2.64		2.64
50% of Yield				1.00	Jun											
Harvest Labor	hour									178.00	1587.76					1587.76
Clamshell Package	each											5333.0000	0.27	1439.91		1439.91
Fruit to Field Edge				22.00	Jun											
Trailer Fruit 4'x6'	trip	4 x 4	1.000			53.73	142.79	2.93	5.51	22.00	247.06					452.02

(continued)

Table 4.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 4, 8,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----			
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	MFWD 50 hp	0.250	0.50	Jun	0.81	0.66	0.01	0.09	0.12	1.40				2.97
Topping Blackberries Pruning labor	hour			1.00	Jun					8.00	71.36	11.5000	2.65	30.48	30.48
Vine Removal Brush Blade	7ft	MFWD 50 hp	0.500	1.00	Jun	3.26	2.63		0.95	0.50	5.62				12.46
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	MFWD 50 hp	0.250	0.50	Jun	0.81	0.66	0.01	0.09	0.12	1.40	11.5000	2.65	30.48	30.48
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Jun					15.00	133.80				133.80
Cover Spray Fung Sprayer (BC & Wand) Switch	4 ft oz	MFWD 50 hp	0.250	0.50	Jul	0.81	0.66	0.01	0.09	0.12	1.40	7.0000	4.16	29.12	29.12
Side Dresser Amm Nitrate (34%)	1R 3ft cwt	2WD 50 hp	0.846	0.50	Jul	2.70	1.87	1.06	4.51	0.42	4.75	5.5000	28.00	154.00	154.00
Hoeing Hand Labor	hour			1.00	Jul					8.00	71.36				71.36
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Jul	1.87	1.51	0.81	0.63	0.28	3.22				8.04
25% of Yield Harvest Labor Clamshell Package	hour each			1.00	Jul					89.00	793.88	2667.0000	0.27	720.09	720.09
Fruit to Field Edge Trailer Fruit 4'x6'	trip	4 x 4	1.000	11.00	Jul	26.86	71.40	1.47	2.75	11.00	123.53				226.01
Weed&Sucker Control Sprayer (BC & Wand) Gramoxone Inteon	4 ft pt	MFWD 50 hp	0.250	0.33	Jul	0.54	0.43	0.01	0.06	0.08	0.93	0.6600	4.00	2.64	2.64
Cover Spray Fung Sprayer (BC & Wand) Prophyt	4 ft pt	MFWD 50 hp	0.250	0.50	Jul	0.81	0.66	0.01	0.09	0.12	1.40	2.0000	4.40	8.80	8.80
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Jul					15.50	138.26	563.0000	0.28	157.64	157.64
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Aug	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Cane Removal Hand Labor	hour			1.00	Aug					24.00	214.08				214.08
Vine Removal Brush Blade	7ft	MFWD 50 hp	0.500	1.00	Aug	3.26	2.63		0.95	0.50	5.62				12.46

(continued)

Table 4.A Estimated resource use and costs for field operations, per acre
 Blackberry, year 4, 8,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 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-----			
Cover Spray Fung Sprayer (BC & Wand) Pristine	4 ft oz	MFWD 50 hp	0.250	0.50	Aug	0.81	0.66	0.01	0.09	0.12	1.40				2.97
Weed&Sucker Control Sprayer (BC & Wand) Gramoxone Inteon	4 ft pt	MFWD 50 hp	0.250	0.33	Aug	0.54	0.43	0.01	0.06	0.08	0.93	11.5000	2.65	30.48	30.48
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Aug					15.50	138.26	563.0000	0.28	157.64	138.26
Side Dresser Amm Nitrate (34%)	1R 3ft cwt	MFWD 50 hp	0.846	0.50	Sep	2.75	2.22	1.06	4.51	0.42	4.75	5.5000	28.00	154.00	15.29
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Sep	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Irrigate & Check Irrigation Labor 1/2 of water needed	hour 100gal			1.00	Sep					15.00	133.80	545.0000	0.28	152.60	133.80
Mow between Rows Rotary Cutter	6ft	MFWD 50 hp	0.572	0.50	Oct	1.87	1.51	0.81	0.63	0.28	3.22				8.04
Cover Spray Fung Sprayer (BC & Wand) Capture 2EC	4 ft oz	MFWD 50 hp	0.250	0.50	Oct	0.81	0.66	0.01	0.09	0.12	1.40	3.2000	1.50	4.80	4.80
Prorated Establish.	acre				Jan							1.0000			1705.50
Irrigation Setup	acre				Jan							1.0000			222.86
TOTALS						153.59	322.55	15.75	33.31	550.59	5029.36			4827.90	12310.82
INTEREST ON OPERATING CAPITAL															225.69
UNALLOCATED LABOR															114.75
TOTAL SPECIFIED COST															12651.26

Note: Cost of production estimates are based on 2009 input prices.
Fertilization decisions should be based on soil tests.
 Make sure all inputs are allowed by your licensing agency.

Table 4.B Estimated costs per acre
 Blackberry, year 4, 8,000 lb yield
 Irrigated, 12ft spacing, 10gpm, 3,630 row ft, drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Liquid Lime Sulfur	gal	11.41	8.0000	91.28	_____
Fert 10-10-10	cwt	29.00	6.0000	174.00	_____
Amm Nitrate (34%)	cwt	28.00	11.0000	308.00	_____
FUNGICIDE					
Pristine	oz	2.65	85.2500	225.91	_____
Nova 40W	oz	4.00	4.0000	16.00	_____
Kocide 101	lb	2.60	1.0000	2.60	_____
Switch	oz	4.16	28.0000	116.48	_____
Captan 50 WP	lb	5.53	6.0000	33.18	_____
Prophyt	pt	4.40	4.0000	17.60	_____
HERBICIDE					
Gramoxone Inteon	pt	4.00	2.6400	10.56	_____
Simazine 4L	qt	5.80	0.9900	5.74	_____
Poast Plus	pt	8.49	0.6600	5.60	_____
INSECTICIDE					
Capture 2EC	oz	1.50	6.4000	9.60	_____
OTHER					
Surfactant Non Ionic	pt	1.55	0.3300	0.51	_____
Clamshell Package	each	0.27	10667.0000	2880.09	_____
IRRIGATION SUPPLIES					
1/2 of water needed	100gal	0.28	3324.0000	930.72	_____
Operator Labor					
Tractors	hour	11.23	51.0984	573.82	_____
Harvest Labor					
Special Labor	hour	8.92	356.0000	3175.52	_____
Hand Labor					
Special Labor	hour	8.92	44.0000	392.48	_____
Irrigation Labor					
Special Labor	hour	8.92	91.5000	816.18	_____
Pruning labor					
Special Labor	hour	8.92	8.0000	71.36	_____
UNALLOCATED LABOR	hour	11.22	10.2196	114.75	_____
DIESEL FUEL					
Tractors	gal	2.22	18.2684	40.52	_____
GASOLINE					
Tractors	gal	2.47	26.4000	65.20	_____
REPAIR & MAINTENANCE					
Implements	acre	15.75	1.0000	15.75	_____
Tractors	acre	47.87	1.0000	47.87	_____
INTEREST ON OP. CAP.	acre	225.69	1.0000	225.69	_____
TOTAL DIRECT EXPENSES				10367.04	_____
FIXED EXPENSES					
Implements	acre	33.31	1.0000	33.31	_____
Tractors	acre	322.55	1.0000	322.55	_____
Prorated Establish.	acre	1705.50	1.0000	1705.50	_____
Irrigation Setup	acre	222.86	1.0000	222.86	_____
TOTAL FIXED EXPENSES				2284.22	_____
TOTAL SPECIFIED EXPENSES				12651.26	_____

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.

Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968."
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2010 Planning Budgets." Budget Report No. 2009-04, Department of Agricultural Economics, Mississippi State University, December 2009.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
10. "Cotton 2010 Planning Budgets." Budget Report No. 2009-02, Department of Agricultural Economics, Mississippi State University, December 2009.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2009 Planning Budgets." Budget Report No. 2008-1, Department of Agricultural Economics, Mississippi State University, September 2008.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Mississippi Agricultural Statistics." Mississippi Department of Agriculture and Commerce and Department of Agriculture, Mississippi Agriculture Statistical Service, Jackson, Mississippi.
16. "Rice 2010 Planning Budgets." Budget Report No. 2009-05, Department of Agricultural Economics, Mississippi State University, December 2009.
17. "Soybeans 2010 Planning Budgets." Budget Report No. 2009-03, Department of Agricultural Economics, Mississippi State University, December 2009.
18. "Vegetables 2010 Planning Budgets." Budget Report No. 2009-01, Department of Agricultural Economics, Mississippi State University December 2009.
19. "Peanuts 2010 Planning Budgets." Budget Report No. 2009-08, Department of Agricultural Economics, Mississippi State University, December 2009.



MISSISSIPPI STATE
UNIVERSITY™

Mark E. Keenum, President

Division of Agriculture, Forestry, and Veterinary Medicine
Gregory Bohach, Vice President

Department of Agricultural Economics
Steven C. Turner, Head

Discrimination based upon race, color, religion, sex, national origin, age, disability, or veteran's status is a violation of federal and state law and MSU policy and will not be tolerated. Discrimination based upon sexual orientation or group affiliation is a violation of MSU policy and will not be tolerated.