STRAWBERRY

2010
FRUIT AND NUT
PLANNING BUDGETS

Mississippi State University
Department of Agricultural Economics
Budget Report 2010-07

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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Table of Contents

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:

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

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

where:

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

Direct costs include an estimate of fuel cost based on average fuel consumption per hour of use for the power unit. Other components of direct costs include quantities of materials used in production multiplied by the price per unit of these inputs, custom rates, hourly wage rates, and interest charges on 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

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

where:

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

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

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

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

where:

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

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.

Strawberry Production

The user should consider the following assumptions when using the strawberry production enterprise budgets. These assumptions are based on the growing conditions and environment which best represent current production systems. To reduce site preparation costs, the planting site is established on previously cleared land. The planting rate is 1,780 plants per acre. Various (*Fragaria spp*) cultivars may be selected, including Earligrow, Chandler, Earlibrite, Cardinal, and Sweet Charlie. Drip irrigation is expected to contribute 50 percent of the water needs, with rainfall supplying the balance.

Enterprise Budgets

Table 1.A Estimated resource use and costs for field operations, per acre
Strawberry, fresh market
Irrigated, 5 ft spacing, 20gpm, 8712 ft of drip tape, Mississippi, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	PRICE	COST	TOTAL COST
						dollars					dollars			dollars	
Disk Harrow	10 Ft	2WD 75 hp	0.198	1.00	Jun	1.89	1.25	0.43	1.02	0.19	2.23				6.82
Custom Apply Fert	acre			1.00	Jun							1.0000	8.50	8.50	8.50
Lime (Spread)	ton											1.0000	38.00	38.00	38.00
Fert Sprd Pull Type	10 ft	2WD 75 hp	0.235	1.00	Jun	2.24	1.49	2.37	10.11	0.23	2.65				18.86
Fert 10-10-10	lb											300.0000	0.29	87.00	87.00
Fert Sprd Pull Type	10 ft	2WD 75 hp	0.235	1.00	Jun	2.24	1.49	2.37	10.11	0.23	2.65				18.86
Millet	lb											40.0000	0.50	20.00	20.00
Soybeans (RR)	lb											80.0000	0.74	59.20	59.20
Disk Harrow	10 Ft	2WD 75 hp	0.198	1.00	Aug	1.89	1.25	0.43	1.02	0.19	2.23				6.82
Chisel Plow	8 Ft	2WD 75 hp	0.220	2.00	Aug	4.20	2.78	1.19	2.31	0.44	4.95				15.43
Sub-Soiler	1 shank	2WD 75 hp	1.078	1.00	Aug	10.26	6.80	0.33	0.92	1.07	12.11				30.42
Disk Harrow	10 Ft	2WD 75 hp	0.198	1.00	Aug	1.89	1.25	0.43	1.02	0.19	2.23				6.82
Chisel Plow	8 Ft	2WD 75 hp	0.220	1.00	Sep	2.10	1.39	0.59	1.15	0.22	2.47				7.70
Fert Sprd Pull Type	10 ft	2WD 75 hp	0.235	1.00	Sep	2.24	1.49	2.37	10.11	0.23	2.65				18.86
Amm Nitrate (34%)	lb											175.0000	0.28	49.00	49.00
Potassium Sulfate	lb											120.0000	0.27	32.40	32.40
Triple Superphosphat	lb											100.0000	0.46	46.00	46.00
BS,L,T,Fung S Berry	6ftctr	2WD 75 hp	1.078	1.00	Sep	10.26	6.80	3.77	12.06	4.31	40.97				73.86
Plastic Mulch 5ft	4000ft											4.0000	162.00	648.00	648.00
Drip Tape (6000Ft)	Roll											2.0000	156.00	312.00	312.00
Planter/Transplanter	1 Row	2WD 75 hp	1.586	1.00	Sep	15.11	10.01	0.13	10.76	6.34	60.28				96.29
Hand Labor	hour									30.00	267.60				267.60
Strawberry Plants	100											175.0000	8.00	1400.00	1400.00
Cultipacker	12 Ft	2WD 75 hp	0.124	1.00	Sep	1.22	0.97	0.16	0.25	0.12	1.40				4.00
Irrigation				1.00	Sep										
1/2 of water needed	100gal											810.0000	0.28	226.80	226.80
Replant Strawberries				1.00	Oct										
Hand Labor	hour									1.00	8.92				8.92
Strawberry Plants	100											3.0000	8.00	24.00	24.00
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Oct	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Brigade WSB	lb											3.2000	20.73	66.34	66.34
Monitor Nitrates				1.00	Oct										
Hand Labor	hour									0.25	2.23				2.23
Tissue Sample SBerry	each											1.0000	4.50	4.50	4.50
Irrigation				1.00	Oct										
Irrigation Labor	hour									2.00	17.84				17.84
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Nov	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Brigade WSB	lb											3.2000	20.73	66.34	66.34
Row Covers S.Berry				1.00	Nov										
Hand Labor	hour									4.00	35.68				35.68
Row Covers	roll											7.0000	147.00	1029.00	1029.00
Secure Row Covers				1.00	Nov										
Hand Labor	hour									2.00	17.84				17.84

(continued)

Table 1.A Estimated resource use and costs for field operations, per acre
Strawberry, fresh market
Irrigated, 5 ft spacing, 20gpm, 8712 ft of drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Bag-secure row cover	each											2500.0000	0.10	250.00	250.00
Row Covers S.Berry				1.00	Dec										
Hand Labor	hour									6.00	53.52				53.52
Weed and Clean				1.00	Dec										
Hand Labor	hour									24.00	214.08				214.08
Row Covers S.Berry				1.00	Dec										
Hand Labor	hour									6.00	53.52				53.52
Row Covers S.Berry				1.00	Jan										
Hand Labor	hour									6.00	53.52				53.52
Rotary Cutter	7 ft	2WD 75 hp	0.169	1.00	Jan	1.61	1.07	0.56	0.43	0.16	1.90				5.57
Hand Labor	hour									12.00	107.04				107.04
Weed and Clean				1.00	Jan										
Hand Labor	hour									40.00	356.80				356.80
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Jan	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Captan 50 WP	lb											4.0000	5.53	22.12	22.12
Pest scouting SBerry				4.00	Feb										
Hand Labor	hour									4.00	35.68				35.68
Replant Strawberries				1.00	Feb										
Hand Labor	hour									15.00	133.80				133.80
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Feb	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Gramoxone Max	pt											0.2500	4.97	1.24	1.24
Crop oil Conc. (Veg)	pt											2.0000	2.51	5.02	5.02
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Feb	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Brigade WSB	lb											3.2000	20.73	66.34	66.34
Irrigation				1.00	Feb										
Irrigation Labor	hour									0.20	1.78				1.78
Ridomil Gold EC	oz											16.0000	5.95	95.20	95.20
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Feb	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Lorsban 4E	pt											2.0000	6.42	12.84	12.84
Monitor Nitrates				2.00	Mar										
Hand Labor	hour									0.50	4.46				4.46
Tissue Sample SBerry	each											2.0000	4.50	9.00	9.00
Weed and Clean				1.00	Mar										
Hand Labor	hour									10.00	89.20				89.20
Fertigation				1.00	Mar										
Fertigation Labor	hour									0.20	1.78				1.78
32% Liquid Nitrogen	qt											12.9200	12.99	167.83	167.83
Sul-Po-Mag	lb											10.0000	0.21	2.10	2.10
Boron (20% Sol)	lb											0.6300	0.40	0.25	0.25
Row Covers S.Berry				1.00	Mar										
Hand Labor	hour									6.00	53.52				53.52

(continued)

Table 1.A Estimated resource use and costs for field operations, per acre
Strawberry, fresh market
Irrigated, 5 ft spacing, 20gpm, 8712 ft of drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Row Covers S.Berry				1.00	Mar										
Hand Labor	hour									6.00	53.52				53.52
Pest scouting SBerry				2.00	Mar										
Hand Labor	hour									2.00	17.84				17.84
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Mar	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Brigade WSB	lb											3.2000	20.73	66.34	66.34
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Mar	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Captan 50 WP	lb											4.0000	5.53	22.12	22.12
Row Covers S.Berry				1.00	Mar										
Hand Labor	hour									6.00	53.52				53.52
Row Covers S.Berry				1.00	Mar										
Hand Labor	hour									6.00	53.52				53.52
Irrigation				1.00	Mar										
Irrigation Labor	hour									0.20	1.78				1.78
Ridomil Gold EC	oz											16.0000	5.95	95.20	95.20
Pollination Bees				1.00	Mar										
Bee Hive	each											2.0000	52.00	104.00	104.00
Fertigation				1.00	Mar										
Fertigation Labor	hour									0.20	1.78				1.78
32% Liquid Nitrogen	qt											12.9200	12.99	167.83	167.83
Sul-Po-Mag	lb											10.0000	0.21	2.10	2.10
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Mar	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Elevate 50 WDG	lb											1.5000	35.55	53.33	53.33
Fertigation				1.00	Apr										
Fertigation Labor	hour									0.20	1.78				1.78
Sul-Po-Mag	lb											10.0000	0.21	2.10	2.10
Calcium Nitrate	lb											67.7400	0.20	13.55	13.55
Monitor Nitrates				1.00	Apr										
Hand Labor	hour									0.25	2.23				2.23
Tissue Sample SBerry	each											1.0000	4.50	4.50	4.50
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Apr	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Agri-Mek	oz											16.0000	3.59	57.44	57.44
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Apr	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Elevate 50 WDG	lb											1.5000	35.55	53.33	53.33
Nova 40W	oz											5.0000	4.00	20.00	20.00
Fertigation				1.00	Apr										
Fertigation Labor	hour									0.25	2.23				2.23
Potassium Nitrate	lb											53.8500	0.36	19.39	19.39
Harvest Strawberries				1.00	Apr										
Refresh Strawberries	hour									9.00	80.28				80.28
Pick Strawberries	flat											180.0000	1.70	306.00	306.00
Strawberry Flat	each											180.0000	0.64	115.20	115.20
Strawberry Pint	each											2160.0000	0.03	64.80	64.80

(continued)

Table 1.A Estimated resource use and costs for field operations, per acre
Strawberry, fresh market
Irrigated, 5 ft spacing, 20gpm, 8712 ft of drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Post Harvest S-Berry				1.00	Apr										
SBerry Pallet Pkging	hour									1.00	8.92				8.92
Broker Fee S-Berries	flat											180.0000	1.00	180.00	180.00
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	Apr	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Captan 50 WP	lb											4.0000	5.53	22.12	22.12
Agri-Mek	oz											16.0000	3.59	57.44	57.44
Harvest Strawberries				1.00	Apr										
Refresh Strawberries	hour									14.00	124.88				124.88
Pick Strawberries	flat											270.0000	1.70	459.00	459.00
Strawberry Flat	each											270.0000	0.64	172.80	172.80
Strawberry Pint	each											3240.0000	0.03	97.20	97.20
Post Harvest S-Berry				1.00	Apr										
SBerry Pallet Pkging	hour									2.00	17.84				17.84
Broker Fee S-Berries	flat											270.0000	1.00	270.00	270.00
Monitor Nitrates				1.00	May										
Hand Labor	hour									0.25	2.23				2.23
Tissue Sample SBerry	each											1.0000	4.50	4.50	4.50
Fertigation				1.00	May										
Fertigation Labor	hour									0.20	1.78				1.78
Potassium Nitrate	lb											53.8500	0.36	19.39	19.39
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	May	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Elevate 50 WDG	lb											1.5000	35.55	53.33	53.33
Rally	oz											5.0000	3.59	17.95	17.95
Harvest Strawberries				1.00	May										
Refresh Strawberries	hour									18.00	160.56				160.56
Pick Strawberries	flat											360.0000	1.70	612.00	612.00
Strawberry Flat	each											360.0000	0.64	230.40	230.40
Strawberry Pint	each											4320.0000	0.03	129.60	129.60
Post Harvest S-Berry				1.00	May										
SBerry Pallet Pkging	hour									2.00	17.84				17.84
Broker Fee S-Berries	flat											360.0000	1.00	360.00	360.00
Fertigation				1.00	May										
Fertigation Labor	hour									0.20	1.78				1.78
Calcium Nitrate	lb											45.1600	0.20	9.03	9.03
Harvest Strawberries				1.00	May										
Refresh Strawberries	hour									23.00	205.16				205.16
Pick Strawberries	flat											450.0000	1.70	765.00	765.00
Strawberry Flat	each											450.0000	0.64	288.00	288.00
Strawberry Pint	each											5400.0000	0.03	162.00	162.00
Post Harvest S-Berry				1.00	May										
SBerry Pallet Pkging	hour									2.50	22.30				22.30
Broker Fee S-Berries	flat											450.0000	1.00	450.00	450.00

(continued)

Table 1.A Estimated resource use and costs for field operations, per acre
Strawberry, fresh market
Irrigated, 5 ft spacing, 20gpm, 8712 ft of drip tape, Mississippi, 2010, continued

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Harvest Strawberries				1.00	May										
Refresh Strawberries	hour									18.00	160.56				160.56
Pick Strawberries	flat											360.0000	1.70	612.00	612.00
Strawberry Flat	each											360.0000	0.64	230.40	230.40
Strawberry Pint	each											4320.0000	0.03	129.60	129.60
Post Harvest S-Berry				1.00	May										
SBerry Pallet Pkging	hour									2.00	17.84				17.84
Broker Fee S-Berries	flat											360.0000	1.00	360.00	360.00
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	May	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Elevate 50 WDG	lb											1.5000	35.55	53.33	53.33
Nova 40W	oz											5.0000	4.00	20.00	20.00
Harvest Strawberries				1.00	May										
Refresh Strawberries	hour									9.00	80.28				80.28
Pick Strawberries	flat											180.0000	1.70	306.00	306.00
Strawberry Flat	each											180.0000	0.64	115.20	115.20
Strawberry Pint	each											2160.0000	0.03	64.80	64.80
Post Harvest S-Berry				1.00	May										
SBerry Pallet Pkging	hour									1.00	8.92				8.92
Broker Fee S-Berries	flat											180.0000	1.00	180.00	180.00
Mulch Lifter	1 Row	2WD 75 hp	0.589	1.00	May	5.61	3.72	0.13	2.78	0.58	6.62				18.86
Take up Reel (Mulch	1 Row	2WD 75 hp	0.588	1.00	May	5.60	3.71	0.42	1.79	0.58	6.61				18.13
Hand Labor	hour									6.00	53.52				53.52
Spray (Broadcast)	27'	2WD 50 hp	0.062	1.00	May	0.40	0.28	0.15	0.20	0.09	0.98				2.01
Gramoxone Max	pt											1.5000	4.97	7.46	7.46
Irrigation Setup	acre				Jan							1.0000			462.61
TOTALS						74.36	49.67	17.93	68.84	314.98	2828.35			12354.80	15856.56
INTEREST ON OPERATING CAPITAL															231.42
UNALLOCATED LABOR															18.22
TOTAL SPECIFIED COST															16106.20

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
Strawberry, fresh market
Irrigated, 5 ft spacing, 20gpm, 8712 ft of drip tape, Mississippi, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM					
Custom Apply Fert	acre	8.50	1.0000	8.50	
Pick Strawberries	flat	1.70	1800.0000	3060.00	
Broker Fee S-Berries	flat	1.00	1800.0000	1800.00	
FERTILIZER					
Lime (Spread)	ton	38.00	1.0000	38.00	
Fert 10-10-10	lb	0.29	300.0000	87.00	
Amm Nitrate (34%)	lb	0.28	175.0000	49.00	
Potassium Sulfate	lb	0.27	120.0000	32.40	
Triple Superphosphat	lb	0.46	100.0000	46.00	
32% Liquid Nitrogen	qt	12.99	25.8400	335.66	
Sul-Po-Mag	lb	0.21	30.0000	6.30	
Boron (20% Sol)	lb	0.40	0.6300	0.25	
Calcium Nitrate	lb	0.20	112.9000	22.58	
Potassium Nitrate	lb	0.36	107.7000	38.77	
FUNGICIDE					
Captan 50 WP	lb	5.53	12.0000	66.36	
Ridomil Gold EC	oz	5.95	32.0000	190.40	
Elevate 50 WDG	lb	35.55	6.0000	213.30	
Nova 40W	oz	4.00	10.0000	40.00	
Rally	oz	3.59	5.0000	17.95	
HERBICIDE					
Gramoxone Max	pt	4.97	1.7500	8.70	
INSECTICIDE					
Brigade WSB	lb	20.73	12.8000	265.34	
Lorsban 4E	pt	6.42	2.0000	12.84	
Agri-Mek	oz	3.59	32.0000	114.88	
SEED/PLANTS					
Millet	lb	0.50	40.0000	20.00	
Soybeans (RR)	lb	0.74	80.0000	59.20	
Strawberry Plants	100	8.00	178.0000	1424.00	
OTHER					
Plastic Mulch 5ft	4000ft	162.00	4.0000	648.00	
Drip Tape (6000Ft)	Roll	156.00	2.0000	312.00	
Tissue Sample SBerry	each	4.50	5.0000	22.50	
Row Covers	roll	147.00	7.0000	1029.00	
Bag-secure row cover	each	0.10	2500.0000	250.00	
Crop oil Conc. (Veg)	pt	2.51	2.0000	5.02	
Bee Hive	each	52.00	2.0000	104.00	
Strawberry Flat	each	0.64	1800.0000	1152.00	
Strawberry Pint	each	0.03	21600.0000	648.00	
IRRIGATION SUPPLIES					
1/2 of water needed	100gal	0.28	810.0000	226.80	
Operator Labor					
Tractors	hour	11.23	8.1180	91.13	
Planting Labor					
Implements	hour	8.92	7.9949	71.32	
Hand Labor					
Special Labor	hour	8.92	193.2500	1723.79	
Implements	hour	8.92	0.4701	4.20	
Fertigation Labor					
Special Labor	hour	8.92	1.2500	11.13	
Refresh Strawberries					
Special Labor	hour	8.92	91.0000	811.72	
SBerry Pallet Pkging					
Special Labor	hour	8.92	10.5000	93.66	

(continued)

Table 1.B Estimated costs per acre
Strawberry, fresh market
Irrigated, 5 ft spacing, 20gpm, 8712 ft of drip tape, Mississippi, 2010, continued

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
Irrigation Labor					
Special Labor	hour	8.92	2.4000	21.40	_____
UNALLOCATED LABOR	hour	11.22	1.6236	18.22	_____
DIESEL FUEL					
Tractors	gal	2.22	30.1290	66.92	_____
REPAIR & MAINTENANCE					
Implements	acre	17.93	1.0000	17.93	_____
Tractors	acre	7.44	1.0000	7.44	_____
INTEREST ON OP. CAP.	acre	231.42	1.0000	231.42	_____

TOTAL DIRECT EXPENSES				15525.08	_____
FIXED EXPENSES					
Implements	acre	68.84	1.0000	68.84	_____
Tractors	acre	49.67	1.0000	49.67	_____
Irrigation Setup	acre	462.61	1.0000	462.61	_____

TOTAL FIXED EXPENSES				581.12	_____

TOTAL SPECIFIED EXPENSES				16106.20	_____

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---- Imp.	P.U.	Total Direct	--Fixed--- Imp.	P.U.	Total Cost
			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	10.03	337.60	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			Strawberry Flat	each	0.64
1 gal bucket	each	1.50	Strawberry Pint	each	0.03
Anchors	each	6.65	Surfactant Non Ionic	pt	1.55
Bag-secure row cover	each	0.10	Tighteners	each	2.50
Bamboo Stakes	each	0.30	Tissue Sample SBerry	each	4.50
BB Mkting fee TN-Ark	lb	0.23	Wire - Blackberry	ft	0.02
BBMktingFee MS,AL,La	lb	0.23	Wire - Wine Grape	ft	0.01
Bee Hive	each	52.00	Wire Links - W.Grape	each	2.15
Brace Post 2.5" x 7'	each	2.50	Wire Vises - W.Grape	each	1.65
Burlap bag	each	0.60	Wood Post 2.5" x 7'	each	2.50
Clamshell Package	each	0.27	Wood Post 3" x 7'	each	3.00
Crop oil Conc. (Veg)	pt	2.51	SEED/PLANTS		
Drip Tape (6000Ft)	Roll	156.00	Blackberry Plants	each	3.00
End Post Anchors	each	6.90	Blueberry Plants T-A	each	2.85
End Post Wine Grapes	each	22.00	Blueberry Plts M,A,L	each	2.00
Fabricate rebar post	post	5.00	Fescue Seed	lb	1.40
Grow Tubes	each	0.85	Fig Trees	each	4.50
Line Posts Metal	each	6.25	Grass Seed BB	lb	4.70
Mulch - MS,AL,LA.	cu yd	10.00	Lugs (grapes)	each	4.00
Mulch - TN & ARK	cu yd	22.00	Millet	lb	0.50
Mythl Bromide 67/33	lb	4.50	Muscadine (lug)	12lb	4.25
Plastic Mulch 5ft	4000ft	162.00	Muscadine Vine	each	7.75
Pruner (Hand)	each	45.00	Peach Trees	each	6.64
Refrigeration-chill	month	375.00	Pecan Seedlings	each	16.00
Row Covers	roll	147.00	Soybeans (RR)	lb	0.74
Soil Test	each	6.00	Strawberry Plants	100	8.00
Soil Test Probe	each	75.00	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 Strawberries	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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