

Traditional Vegetables 2018 Planning Budgets



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This report is designed to provide necessary planning data to farmers, research and Extension staffs, lending agencies, and others in agriculture. Readers are cautioned that returns presented are labeled “Returns Above Specified Expenses.” Estimated costs for land, management, and general farm overhead are not included in this report. The exception is unallocated labor, which is included. “Returns Above Direct Expenses” should be used in making 2018 planning decisions. This would be a 1-year short-run decision. Decisions beyond 1 year, or long-run decisions, should be based on “Returns Above Specified Expenses.”

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.

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We acknowledge 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 specific commercial product does not imply its endorsement, recommendation, or favoring by MSU Extension, MAFES, or USDA over other products not named, nor does the omission imply they are not satisfactory. References to commercial products in this publication are for budgeting purposes only. Please contact your local Extension office or Extension specialist for information about pest control and spray schedules.

The intent of this planning budget is that it be used as a guide. Make sure to adjust this budget based on the specific information from your operation.

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2018 Planning Budgets

Budgets for Agricultural Enterprises

This publication provides economic and technical information in the form of enterprise budgets for vegetable crops produced by Mississippi farmers. A multidisciplinary approach involving researchers and Extension personnel was used to determine production practices and input quantities, and to estimate costs and returns for each enterprise (14). The purpose of this section is to present the methods and procedures used to calculate costs and returns 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 to provide educational programs to farmers,
- by lenders as a basis for credit,
- to provide basic data for research, and
- to inform nonfarmers 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 and returns, which will need to be adjusted for specific situations. You 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 or incomes to reflect your specific situation.

Income is not included in the vegetable planning budgets due to the volatile nature of prices in the fresh produce market. Budgets reflect the cost of production per acre planted. The budgets allow the producer to determine the breakeven price needed for the vegetable grown. A sensitivity table reflecting different yields per acre compared to different market prices received for vegetables allows producers to estimate potential net returns.

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 budgeted 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 2017. (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, and 13). The hours of annual use have been modified based on information collected from the cited studies (3, 4, 6, and 7). Repairs and maintenance as a percentage of new cost are estimated for the life of the equipment and include oil and lubricants (1, 4, and 6).

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

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

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

It is difficult to estimate crop yields that may be expected for a particular production system in a given year. Fresh vegetable prices are volatile and change daily. Because of this, no estimates of expected returns are provided. Budget Table D shows breakeven price above total expenses and net returns for price/yield combinations on a per-acre basis.

Estimates of Irrigation Costs

Generally, irrigation is recommended for vegetable production. Irrigation costs for the most commonly used irrigation systems are presented in Appendix Tables 7, 8, and 9. Each appendix table lists all annual supplies, their prices, and quantities needed.

A nonirrigated vegetable budget can be converted to an irrigated budget by adding the desired irrigation system costs to the nonirrigated vegetable budget. 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.

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Enterprise Budgets

Table 1.A Estimated resource use and costs for field operations, per acre
Bell pepper, fresh market, irrigated
6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018

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	
-----dollars-----														
Lime (Spread)	ton			1.00	Sep							0.3300	46.00	15.18
Disk Harrow	10'	2WD 75 hp	0.198	1.00	Sep	1.59	1.23	0.56	1.18	0.19	2.68			7.24
Disk Harrow	10'	2WD 75 hp	0.198	1.00	Oct	1.59	1.23	0.56	1.18	0.19	2.68			7.24
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	1.00	Oct	0.67	0.52	0.08	0.30	0.08	1.14			2.71
Fert 13-13-13	cwt											9.0000	21.58	194.22
Disk Bed	4-Row	2WD 75 hp	0.140	2.00	Oct	2.25	1.76	0.62	1.64	0.28	3.81			10.08
BS, Lay/Tape BPepper	Bed 6'cntr	2WD 75 hp	1.078	1.00	Oct	8.61	6.71	2.75	7.80	1.07	14.57			40.44
Plastic Mulch	roll											1.8000	285.00	513.00
Drip Tape	roll											1.2000	173.70	208.44
Spray (Broadcast)	27'	2WD 75 hp	0.062	0.50	Nov	0.27	0.29	0.08	0.09	0.04	0.58			1.31
Goal 2XL	pt											1.2500	9.89	12.36
Spray (Broadcast)	27'	2WD 75 hp	0.062	1.00	Mar	0.54	0.58	0.16	0.19	0.09	1.18			2.65
Gramoxone SL 2.0	oz											32.0000	0.15	4.80
Trailer Utility	10'	2WD 75 hp	0.600	1.00	Mar	5.09	5.56	0.09	0.32	0.60	8.11			19.17
Pepper Plants	100plt											170.0000	11.04	1876.80
Contract Plt BPepper	1000pl											17.0000	13.75	233.75
Irrigation				1.00	Mar							6.0000	110.97	665.82
Rural Water	ac-in													
Fertigate CAN03/KN03	hour			2.00	Mar					5.00	51.90			51.90
FERTIGATION LABOR	hour											100.0000	0.29	29.00
Calcium Nitrate	lb													
Spray (Broadcast)	27'	2WD 75 hp	0.062	1.00	Apr	0.54	0.58	0.16	0.19	0.09	1.18			2.65
Acephate	lb											1.0000	7.43	7.43
Kocide 2000	lb											1.5000	6.27	9.40
Quadris	oz											6.2000	2.14	13.27
Fertigate CAN03/KN03	hour			2.00	Apr					5.00	51.90			51.90
FERTIGATION LABOR	hour											100.0000	0.29	29.00
Calcium Nitrate	lb									0.60	8.11			19.17
Trailer Utility	10'	2WD 75 hp	0.600	1.00	Apr	5.09	5.56	0.09	0.32	15.00	155.70			155.70
HAND LABOR	hour											36.0000	73.00	2628.00
Wood Stakes	100													
Spray (Broadcast)	27'	2WD 75 hp	0.062	1.00	Apr	0.54	0.58	0.16	0.19	0.09	1.18			2.65
Quadris	oz											6.2000	2.14	13.27
Kocide 2000	lb											1.5000	6.27	9.40
Fertigate CAN03/KN03	hour			2.00	Apr					5.00	51.90			51.90
FERTIGATION LABOR	hour											100.0000	0.29	29.00
Calcium Nitrate	lb									0.09	1.18			2.65
Spray (Broadcast)	27'	2WD 75 hp	0.062	1.00	May	0.54	0.58	0.16	0.19	0.09	1.18			13.27
Quadris	oz											6.2000	2.14	13.27
Kocide 2000	lb											1.5000	6.27	9.40
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	1.00	May	1.55	1.21	0.20	0.52	0.29	3.63			7.11
Gramoxone SL 2.0	oz											32.0000	0.15	4.80

(continued)

Table 1.A Estimated resource use and costs for field operations, per acre
 Bell pepper, fresh market, irrigated
 6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018 (continued)

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR HOURS	LABOR COST	OPERATING/DURABLE INPUT		TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED			AMOUNT	PRICE	
-----dollars-----														
Fertigate CAN03/KN03	hour			2.00	May					5.00	51.90			51.90
FERTIGATION LABOR	lb											100.0000	0.29	29.00
Calcium Nitrate	hour			1.00	May					8.00	83.04			83.04
1st Tying DB String	6000'											7.0000	10.50	73.50
HAND LABOR	hour													
Plastic string	hour			2.00	May					5.00	51.90			51.90
Fertigate CAN03/KN03	lb											100.0000	0.29	29.00
FERTIGATION LABOR	oz			1.00	May	0.54	0.58	0.16	0.19	0.09	1.18			2.65
Calcium Nitrate	oz	2WD 75 hp	0.062	1.00	May	0.54	0.58	0.16	0.19	0.09	1.18			2.65
Spray (Broadcast)	oz	2WD 75 hp	0.062	1.00	May	0.54	0.58	0.16	0.19	0.09	1.18			2.65
Radiant ISC	oz													
Spray (Broadcast)	oz			1.00	Jun					5.00	51.90			51.90
Mustang Max	hour											5.0000	10.50	52.50
2nd Tying DB String	6000'									0.15	2.10			5.51
HAND LABOR	4-Row			1.00	Jun	1.24	0.97	0.33	0.87	0.60	8.11			19.17
Plastic string	10'			1.00	Jun	5.09	5.56	0.09	0.32	8.00	83.04			83.04
Cultivate	hour											1800.0000	0.90	1620.00
Trailer Utility	hour											25.0000	27.75	693.75
HAND LABOR	bu											16.0000	20.30	324.80
Harvest Labor Pepper	each			1.00	Jun									
1.75bu tub Bell Pepp	each													
Bins/Stacking 25bu	hour													
Pack Line B. Peppers	hour													
GRADE & PACK LABOR	each									80.00	830.40			830.40
Boxes-Waxed	7'			1.00	Jul	1.36	1.05	0.64	0.45	0.16	2.29			3276.00
Rotary Cutter	1-Row			1.00	Jul	4.70	3.66	0.59	2.32	0.58	7.95			5.79
Take Up Reel (Mulch)	hour									12.00	124.56			19.22
HAND LABOR	acre			1.00	Jul	1.59	1.23	0.56	1.18	0.19	2.68			124.56
Disk Harrow	acre				Mar							1.0000		7.24
Irrigation Setup	acre													311.46
-----dollars-----														
TOTALS						43.93	40.02	8.20	19.63	158.65	1663.66		12678.08	14764.98
INTEREST ON OPERATING CAPITAL														204.70
UNALLOCATED LABOR														14.47
TOTAL SPECIFIED COST														14984.15

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.
 Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.



Table 1.B Estimated costs per acre
 Bell pepper, fresh market, irrigated
 6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM					
Contract Plt BPepper	1000pl	13.75	17.0000	233.75	_____
FERTILIZER					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
Fert 13-13-13	cwt	21.58	9.0000	194.22	_____
Calcium Nitrate	lb	0.29	500.0000	145.00	_____
FUNGICIDE					
Kocide 2000	lb	6.27	4.5000	28.21	_____
Quadris	oz	2.14	18.6000	39.80	_____
HERBICIDE					
Goal 2XL	pt	9.89	1.2500	12.36	_____
Gramoxone SL 2.0	oz	0.15	64.0000	9.60	_____
INSECTICIDE					
Acephate	lb	7.43	1.0000	7.43	_____
Radiant 1SC	oz	6.82	8.0000	54.56	_____
Mustang Max	oz	1.34	4.0000	5.36	_____
SEED/PLANTS					
Pepper Plants	100plt	11.04	170.0000	1876.80	_____
OTHER					
Plastic Mulch	roll	285.00	1.8000	513.00	_____
Wood Stakes	100	73.00	36.0000	2628.00	_____
Plastic string	6000'	10.50	12.0000	126.00	_____
Harvest Labor Pepper	bu	0.90	1800.0000	1620.00	_____
1.75bu tub Bell Pepp	each	27.75	25.0000	693.75	_____
Bins/Stacking 25bu	each	20.30	16.0000	324.80	_____
Boxes-Waxed	each	1.82	1800.0000	3276.00	_____
IRRIGATION SUPPLIES					
Drip Tape	roll	173.70	1.2000	208.44	_____
Rural Water	ac-in	110.97	6.0000	665.82	_____
OPERATOR LABOR					
Tractors	hour	13.51	5.3534	72.37	_____
GRADE & PACK LABOR					
Special Labor	hour	10.38	80.0000	830.40	_____
HAND LABOR					
Special Labor	hour	10.38	48.0000	498.24	_____
Implements	hour	10.38	0.3006	3.15	_____
FERTIGATION LABOR					
Special Labor	hour	10.38	25.0000	259.50	_____
UNALLOCATED LABOR	hour	13.51	1.0706	14.47	_____
DIESEL FUEL					
Tractors	gal	1.80	20.6664	37.24	_____
REPAIR & MAINTENANCE					
Implements	acre	8.20	1.0000	8.20	_____
Tractors	acre	6.69	1.0000	6.69	_____
INTEREST ON OP. CAP.	acre	204.70	1.0000	204.70	_____
TOTAL DIRECT EXPENSES				14613.04	_____
FIXED EXPENSES					
Implements	acre	19.63	1.0000	19.63	_____
Tractors	acre	40.02	1.0000	40.02	_____
Irrigation Setup	acre	311.46	1.0000	311.46	_____
TOTAL FIXED EXPENSES				371.11	_____
TOTAL SPECIFIED EXPENSES				14984.15	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 1.C Estimated monthly income and expense flows per acre
 Bell pepper, fresh market, irrigated
 6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018

ITEM	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
CUSTOM	0.00	0.00	0.00	0.00	0.00	0.00	233.75	0.00	0.00	0.00	0.00	0.00
FERTILIZER	15.18	194.22	0.00	0.00	0.00	0.00	29.00	58.00	58.00	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.34	22.67	0.00	0.00	0.00
HERBICIDE	0.00	0.00	12.36	0.00	0.00	0.00	4.80	0.00	4.80	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.43	59.92	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	1876.80	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	513.00	0.00	0.00	0.00	0.00	0.00	2628.00	73.50	5967.05	0.00	0.00
IRRIGATION SUPPLIES	0.00	208.44	0.00	0.00	0.00	0.00	665.82	0.00	0.00	0.00	0.00	0.00
LABOR	3.22	26.64	0.66	0.00	0.00	0.00	62.98	271.93	195.04	977.59	140.07	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.38	11.41	0.22	0.00	0.00	0.00	4.61	5.05	2.67	5.25	6.65	0.00
REPAIR & MAINTENANCE	0.77	5.72	0.13	0.00	0.00	0.00	1.27	1.53	1.18	1.50	2.79	0.00
INTEREST ON OP. CAP.	0.89	37.97	0.48	0.00	0.00	0.00	57.00	47.78	4.95	55.04	0.59	0.00
TOTAL DIRECT EXPENSES	21.44	997.40	13.85	0.00	0.00	0.00	2936.03	3065.06	422.73	7006.43	150.10	0.00
NET INCOME	-21.44	-997.40	-13.85	0.00	0.00	0.00	-2936.03	-3065.06	-422.73	-7006.43	-150.10	0.00
NET INCOME TO DATE	-21.44	-1018.84	-1032.69	-1032.69	-1032.69	-1032.69	-3968.72	-7033.78	-7456.51	-14462.94	-14613.04	-14613.04

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.
 * Lease costs are based on hourly usage costs.

Table 1.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Bell pepper, fresh market, irrigated
 6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018

Bell Pepper	BREAKEVEN PRICE										
	6.46	6.72	7.03	7.39	7.81	8.32	8.94	9.72	10.71	12.04	13.90
PERCENT YIELD UNIT	-----dollars-----										
50 900.00 Bu	-6328	-6089	-5813	-5491	-5110	-4653	-4095	-3397	-2500	-1303	371
	-6699	-6460	-6184	-5862	-5481	-5024	-4466	-3768	-2871	-1674	0
60 1080.00 Bu	-5658	-5371	-5040	-4653	-4196	-3648	-2978	-2141	-1064	371	2380
	-6029	-5742	-5411	-5024	-4567	-4019	-3349	-2512	-1435	0	2009
70 1260.00 Bu	-4988	-4653	-4267	-3816	-3283	-2643	-1862	-885	371	2046	4390
	-5359	-5024	-4638	-4187	-3654	-3014	-2233	-1256	0	1674	4019
80 1440.00 Bu	-4318	-3935	-3494	-2978	-2369	-1638	-745	371	1806	3720	6400
	-4689	-4306	-3865	-3349	-2740	-2009	-1116	0	1435	3349	6029
90 1620.00 Bu	-3648	-3217	-2721	-2141	-1456	-633	371	1627	3242	5395	8410
	-4019	-3589	-3092	-2512	-1827	-1004	0	1256	2871	5024	8039
100 1800.00 Bu	-2978	-2500	-1947	-1303	-542	371	1487	2883	4677	7070	10420
	-3349	-2871	-2319	-1674	-913	0	1116	2512	4306	6699	10049
110 1980.00 Bu	-2308	-1782	-1174	-466	371	1376	2604	4139	6113	8745	12430
	-2679	-2153	-1546	-837	0	1004	2233	3768	5742	8374	12059
120 2160.00 Bu	-1638	-1064	-401	371	1284	2380	3720	5395	7549	10420	14440
	-2009	-1435	-773	0	913	2009	3349	5024	7178	10049	14069
130 2340.00 Bu	-968	-346	371	1208	2198	3385	4837	6651	8984	12095	16450
	-1339	-717	0	837	1827	3014	4466	6280	8613	11724	16079
140 2520.00 Bu	-298	371	1144	2046	3111	4390	5954	7908	10420	13770	18459
	-669	0	773	1674	2740	4019	5582	7537	10049	13399	18088
150 2700.00 Bu	371	1088	1917	2883	4025	5395	7070	9164	11856	15445	20469
	0	717	1546	2512	3654	5024	6699	8793	11485	15074	20098

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 2.A Estimated resource use and costs for field operations, per acre
 Broccoli, fall, fresh market
 Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST	
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE		COST
-----dollars-----														
Lime (Spread)	ton		0.33	Jul							0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	1.00	Aug	1.76	1.37	0.39	0.68	0.22				7.18
Disk Harrow	10'	2WD 75 hp	0.198	2.00	Aug	3.17	2.47	1.11	2.35	0.39				14.46
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	1.00	Aug	0.67	0.52	0.08	0.30	0.08				2.71
Fert 13-13-13	cwt										8.0000	21.58	172.64	172.64
Disk + Incorporate	10'	2WD 75 hp	0.206	1.00	Aug	1.64	1.28	0.95	1.68	0.30				9.41
Treflan	pt										1.5000	3.52	5.28	5.28
Plntr/H2O Wheel	2-Row	2WD 75 hp	1.473	1.00	Aug	11.76	9.17	5.52	8.95	8.83				131.76
PLANTING LABOR	hour									30.00				311.40
Broccoli Plants	thous										18.0000	40.32	725.76	725.76
Cultivate+App Ins	4-Row	2WD 75 hp	0.193	1.00	Aug	1.55	1.21	0.20	0.52	0.29				7.11
Bravo Weather Stick	pt										1.5000	6.56	9.84	9.84
Admire Pro	oz										8.0000	1.70	13.60	13.60
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Sep	1.96	1.53	10.08	17.49	0.24				34.38
Bravo Weather Stick	pt										1.5000	6.56	9.84	9.84
Radiant ISC	oz										8.0000	6.82	54.56	54.56
Cultivate+Sidedress	4-Row	2WD 75 hp	0.193	1.00	Sep	1.55	1.21	0.84	3.70	0.29				10.93
AMM Sulfate 33%	cwt										2.3000	22.50	51.75	51.75
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	2.00	Sep	3.92	3.06	20.15	34.97	0.49				68.73
Avaunt 30 WDG	oz										6.0000	6.89	41.34	41.34
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Sep	1.96	1.53	10.08	17.49	0.24				34.38
Bravo Weather Stick	pt										1.5000	6.56	9.84	9.84
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Oct	1.96	1.53	10.08	17.49	0.24				34.38
Radiant ISC	oz										8.0000	6.82	54.56	54.56
Trailer - Vegetables	16'													3.56
HARVEST & PACK LABOR	hour									125.00				1297.50
Boxes-Waxed	each										300.0000	1.82	546.00	546.00
Ice + Cooling	box										300.0000	1.38	414.00	414.00
-----dollars-----														
TOTALS						32.62	25.44	59.53	105.70	166.83		2131.78		4099.67
INTEREST ON OPERATING CAPITAL														34.75
UNALLOCATED LABOR														11.03
TOTAL SPECIFIED COST														4145.45

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 2.B Estimated costs per acre
 Broccoli, fall, fresh market
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	8.0000	172.64	_____
AMM Sulfate 33%	cwt	22.50	2.3000	51.75	_____
FUNGICIDE					
Bravo Weather Stick	pt	6.56	4.5000	29.52	_____
HERBICIDE					
Treflan	pt	3.52	1.5000	5.28	_____
INSECTICIDE					
Admire Pro	oz	1.70	8.0000	13.60	_____
Radiant 1SC	oz	6.82	16.0000	109.12	_____
Avaunt 30 WDG	oz	6.89	6.0000	41.34	_____
SEED/PLANTS					
Broccoli Plants	thous	40.32	18.0000	725.76	_____
OTHER					
Boxes-Waxed	each	1.82	300.0000	546.00	_____
Ice + Cooling	box	1.38	300.0000	414.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	4.0859	55.22	_____
PLANTING LABOR					
Special Labor	hour	10.38	30.0000	311.40	_____
HAND LABOR					
Implements	hour	10.38	7.7530	80.48	_____
HARVEST & PACK LABOR					
Special Labor	hour	10.38	125.0000	1297.50	_____
UNALLOCATED LABOR	hour	13.49	0.8171	11.03	_____
DIESEL FUEL					
Tractors	gal	1.80	15.7735	28.41	_____
REPAIR & MAINTENANCE					
Implements	acre	59.53	1.0000	59.53	_____
Tractors	acre	4.21	1.0000	4.21	_____
INTEREST ON OP. CAP.	acre	34.75	1.0000	34.75	_____
TOTAL DIRECT EXPENSES				4014.31	_____
FIXED EXPENSES					
Implements	acre	105.70	1.0000	105.70	_____
Tractors	acre	25.44	1.0000	25.44	_____
TOTAL FIXED EXPENSES				131.14	_____
TOTAL SPECIFIED EXPENSES				4145.45	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 2.C Estimated monthly income and expense flows per acre
 Broccoli, fall, fresh market
 Mississippi, 2018

ITEM	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	172.64	51.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	9.84	19.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	5.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	13.60	95.90	54.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	725.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	431.69	20.07	3.98	1299.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	17.89	8.18	1.71	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.00	10.91	42.36	10.33	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.45	21.96	2.83	0.56	8.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	23.22	1409.57	240.77	71.14	2269.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-23.22	-1409.57	-240.77	-71.14	-2269.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-23.22	-1432.79	-1673.56	-1744.70	-4014.31	-4014.31	-4014.31	-4014.31	-4014.31	-4014.31	-4014.31	-4014.31

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 2.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Broccoli, fall, fresh market
 Mississippi, 2018

PERCENT YIELD	UNIT	BREAKEVEN PRICE											
		10.28	10.78	11.37	12.05	12.85	13.81	14.99	16.46	18.36	20.88	24.42	
50	150.00 211b	-1989 -2121	-1914 -2045	-1826 -1957	-1724 -1855	-1604 -1735	-1459 -1590	-1282 -1414	-1061 -1193	-777 -909	-399 -530	131 0	
60	180.00 211b	-1777 -1908	-1686 -1818	-1582 -1713	-1459 -1590	-1315 -1446	-1141 -1272	-929 -1060	-664 -795	-323 -454	131 0	767 636	
70	210.00 211b	-1565 -1696	-1459 -1590	-1337 -1468	-1194 -1325	-1025 -1156	-823 -954	-575 -707	-266 -397	131 0	661 530	1403 1272	
80	240.00 211b	-1353 -1484	-1232 -1363	-1092 -1223	-929 -1060	-736 -867	-505 -636	-222 -353	131 0	585 454	1191 1060	2040 1908	
90	270.00 211b	-1141 -1272	-1005 -1136	-847 -978	-664 -795	-447 -578	-187 -318	131 0	528 397	1040 909	1721 1590	2676 2545	
100	300.00 211b	-929 -1060	-777 -909	-603 -734	-399 -530	-158 -289	131 0	484 353	926 795	1494 1363	2252 2121	3312 3181	
110	330.00 211b	-717 -848	-550 -681	-358 -489	-133 -265	131 0	449 318	838 707	1324 1193	1949 1818	2782 2651	3949 3817	
120	360.00 211b	-505 -636	-323 -454	-113 -244	131 0	420 289	767 636	1191 1060	1721 1590	2403 2272	3312 3181	4585 4454	
130	390.00 211b	-293 -424	-96 -227	131 0	396 265	709 578	1085 954	1545 1414	2119 1988	2858 2727	3843 3711	5221 5090	
140	420.00 211b	-80 -212	131 0	375 244	661 530	998 867	1403 1272	1898 1767	2517 2386	3312 3181	4373 4242	5858 5726	
150	450.00 211b	131 0	358 227	620 489	926 795	1288 1156	1721 1590	2252 2121	2915 2783	3767 3636	4903 4772	6494 6363	

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 3.A Estimated resource use and costs for field operations, per acre
Cabbage, spring, hand harvest
Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	
-----dollars-----													
Lime (Spread)	ton		0.33	Jan									22.77
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	Feb	0.67	0.52	0.08	0.30	0.08	1.14	0.4950	46.00	22.77
Fert 13-13-13	cwt		1.00								8.0000	21.58	172.64
Chisel Plow	7'	2WD 75 hp	0.220	Feb	1.76	1.37	0.39	0.68	0.22	2.98			7.18
Disk Harrow	10'	2WD 75 hp	0.198	Feb	1.59	1.23	0.56	1.18	0.19	2.68			7.24
Disk Bed	2-Row	2WD 75 hp	0.284	Feb	2.26	1.77	0.25	0.97	0.28	3.84			9.09
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	Feb	1.55	1.21	0.20	0.52	0.29	3.63			7.11
Treflan	pt		1.00								2.0000	3.52	7.04
Plntr/H2O Wheel	2-Row	2WD 75 hp	1.473	Feb	11.76	9.17	5.52	8.95	8.83	96.36			131.76
PLANTING LABOR	hour		1.00						30.00	311.40			311.40
Cabbage Plants	thous										13.2000	35.61	470.05
Cultivate	4-Row	2WD 75 hp	0.155	Mar	3.71	2.90	0.99	2.61	0.46	6.29			16.50
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Mar	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Bravo Weather Stick	pt		1.00								1.5000	6.56	9.84
Kocide 2000	lb		1.00								2.0000	6.27	12.54
Cultivate+Sidedress	4-Row	2WD 75 hp	0.193	Mar	1.55	1.21	0.84	3.70	0.29	3.63			12.54
AMM Sulfate 33%	cwt		1.00								1.0000	22.50	22.50
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Apr	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Radiant 1SC	oz		1.00								8.0000	6.82	54.56
Fert-Side Dresser	2R 6'	2WD 75 hp	0.423	Apr	3.38	2.63	2.82	11.06	0.42	5.72			25.61
AMM Sulfate 33%	cwt		1.00								1.0000	22.50	22.50
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Radiant 1SC	oz		1.00								8.0000	6.82	54.56
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Avaunt 30 WDG	oz		1.00								3.0000	6.89	20.67
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Avaunt 30 WDG	oz		1.00								3.0000	6.89	20.67
Trailer - Vegetables	16'	2WD 75 hp	0.090	Jun	0.72	0.56	0.05	0.08	0.18	2.15			3.56
Harv.Labor S.Cabbage box	box		1.00	Jun							600.0000	1.75	1050.00
Grd & Pack S.Cabbage box	box		1.00	Jun							600.0000	1.81	1086.00
Box Cabbage	each		1.00	Jun							600.0000	2.69	1614.00
Marketing Fee	box		1.00	Jun							600.0000	1.00	600.00
CoolingBox S.Cabbage box	box		1.00	Jun							600.0000	1.37	822.00
TOTALS					38.75	30.22	62.10	117.50	42.50	456.42		6062.34	6767.33
INTEREST ON OPERATING CAPITAL													46.57
UNALLOCATED LABOR													13.10
TOTAL SPECIFIED COST													6827.00

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 3.B Estimated costs per acre
Cabbage, spring, hand harvest
Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	8.0000	172.64	_____
AMM Sulfate 33%	cwt	22.50	2.0000	45.00	_____
FUNGICIDE					
Bravo Weather Stick	pt	6.56	1.5000	9.84	_____
Kocide 2000	lb	6.27	2.0000	12.54	_____
HERBICIDE					
Treflan	pt	3.52	2.0000	7.04	_____
INSECTICIDE					
Radiant 1SC	oz	6.82	16.0000	109.12	_____
Avaunt 30 WDG	oz	6.89	6.0000	41.34	_____
SEED/PLANTS					
Cabbage Plants	thous	35.61	13.2000	470.05	_____
OTHER					
Harv.Labor S.Cabbage	box	1.75	600.0000	1050.00	_____
Grd & Pack S.Cabbage	box	1.81	600.0000	1086.00	_____
Box Cabbage	each	2.69	600.0000	1614.00	_____
Marketing Fee	box	1.00	600.0000	600.00	_____
CoolingBox S.Cabbage	box	1.37	600.0000	822.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	4.8538	65.61	_____
PLANTING LABOR					
Special Labor	hour	10.38	30.0000	311.40	_____
HAND LABOR					
Implements	hour	10.38	7.6498	79.41	_____
UNALLOCATED LABOR					
Tractors	hour	13.49	0.9707	13.10	_____
DIESEL FUEL					
Tractors	gal	1.80	18.7377	33.75	_____
REPAIR & MAINTENANCE					
Implements	acre	62.10	1.0000	62.10	_____
Tractors	acre	5.00	1.0000	5.00	_____
INTEREST ON OP. CAP.	acre	46.57	1.0000	46.57	_____
TOTAL DIRECT EXPENSES				6679.28	_____
FIXED EXPENSES					
Implements	acre	117.50	1.0000	117.50	_____
Tractors	acre	30.22	1.0000	30.22	_____
TOTAL FIXED EXPENSES				147.72	_____
TOTAL SPECIFIED EXPENSES				6827.00	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 3.C Estimated monthly income and expense flows per acre
Cabbage, spring, hand harvest
Mississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	172.64	22.50	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	22.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	7.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.00	54.56	95.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	470.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	0.00	0.00	5172.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	428.67	15.68	10.84	11.94	2.39	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	17.05	6.29	4.65	5.13	0.63	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.00	9.54	12.84	13.59	30.99	0.14	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.54	21.87	1.26	1.27	1.14	20.49	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	23.31	1126.86	80.95	107.41	145.10	5195.65	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-23.31	-1126.86	-80.95	-107.41	-145.10	-5195.65	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-23.31	-1150.17	-1231.12	-1338.53	-1483.63	-6679.28	-6679.28	-6679.28	-6679.28	-6679.28	-6679.28	-6679.28

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 3.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
Cabbage, spring, hand harvest
Mississippi, 2018

Cabbage	BREAKEVEN PRICE												
	10.47	10.59	10.74	10.92	11.13	11.37	11.68	12.05	12.54	13.19	14.10		
PERCENT YIELD UNIT	-dollars-												
50	300.00	50lb	-941	-903	-858	-805	-743	-669	-578	-465	-319	-124	147
			-1089	-1050	-1005	-953	-891	-817	-726	-612	-467	-272	0
60	360.00	50lb	-832	-786	-732	-669	-595	-506	-397	-260	-85	147	474
			-980	-934	-880	-817	-742	-653	-544	-408	-233	0	326
70	420.00	50lb	-724	-669	-606	-533	-446	-342	-215	-56	147	420	801
			-871	-817	-754	-681	-594	-490	-363	-204	0	272	653
80	480.00	50lb	-615	-552	-480	-397	-298	-179	-33	147	381	692	1128
			-762	-700	-628	-544	-445	-326	-181	0	233	544	980
90	540.00	50lb	-506	-436	-355	-260	-149	-15	147	352	614	964	1455
			-653	-583	-502	-408	-297	-163	0	204	467	817	1307
100	600.00	50lb	-397	-319	-229	-124	-0	147	329	556	848	1237	1782
			-544	-467	-377	-272	-148	0	181	408	700	1089	1634
110	660.00	50lb	-288	-202	-103	11	147	311	510	760	1081	1509	2109
			-435	-350	-251	-136	0	163	363	612	934	1362	1961
120	720.00	50lb	-179	-85	21	147	296	474	692	964	1315	1782	2436
			-326	-233	-125	0	148	326	544	817	1167	1634	2288
130	780.00	50lb	-70	30	147	283	444	638	874	1169	1548	2054	2762
			-217	-116	0	136	297	490	726	1021	1401	1906	2615
140	840.00	50lb	38	147	273	420	593	801	1055	1373	1782	2327	3089
			-108	0	125	272	445	653	908	1225	1634	2179	2942
150	900.00	50lb	147	264	399	556	742	964	1237	1577	2015	2599	3416
			0	116	251	408	594	817	1089	1430	1868	2451	3269

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2017 input prices.

Table 4.A Estimated resource use and costs for field operations, per acre
 Cucumbers, slicers, irrigated
 5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST	
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE		COST
-----dollars-----														
Lime (Spread)	ton		0.33	Mar							0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	Mar	1.76	1.37	0.39	0.68	0.22	2.98			7.18	7.18
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	Mar	0.67	0.52	0.08	0.30	0.08	1.14			2.71	2.71
Fert 13-13-13	cwt										6.0000	21.58	129.48	129.48
Disk Harrow	10'	2WD 75 hp	0.198	Mar	1.59	1.23	0.56	1.18	0.19	2.68			7.24	7.24
Disk + Incorporate	10'	2WD 75 hp	0.206	Apr	1.64	1.28	0.95	1.68	0.30	3.86			9.41	9.41
Admire Pro	oz										8.0000	1.70	13.60	13.60
BS,Lay/Tape/Cucumber	Bed 4'cntr	2WD 75 hp	1.617	Apr	12.91	10.07	2.75	7.80	1.61	21.85			55.38	55.38
Plastic Mulch	roll													
Drip Tape	roll													
Plntr/H2O Cucumber	1R 4'cntr	2WD 75 hp	2.578	Apr	20.58	16.05	2.56	4.14	10.31	115.11			627.00	627.00
Cucumber - Hybrid	lb										3.0000	194.00	582.00	158.44
Irrigation														
Rural Water	ac-in			Apr										
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Apr	1.96	1.53	10.08	17.49	0.24	3.32			665.82	665.82
Mustang Max	oz										4.0000	1.34	5.36	34.38
Fertigate CAN03/KN03	hour			Apr										
FERTIGATION LABOR														
Calcium Nitrate	lb	2WD 75 hp	0.062	Apr	0.50	0.39	0.16	0.19	0.09	1.18			20.76	20.76
Spray (Broadcast)	27'													
Sandea	oz													
Select MAX	oz													
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Apr	1.96	1.53	10.08	17.49	0.24	3.32			14.50	14.50
Bravo Weather Stick	pt													
Fertigate CAN03/KN03	hour			May										
FERTIGATION LABOR														
Calcium Nitrate	lb	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			19.95	19.95
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			4.74	4.74
Bravo Weather Stick	pt													
Mustang Max	oz													
Fertigate CAN03/KN03	hour			May										
FERTIGATION LABOR														
Calcium Nitrate	lb	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			9.84	9.84
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			5.36	5.36
Bravo Weather Stick	pt													
Mustang Max	oz													
Fertigate CAN03/KN03	hour			May										
FERTIGATION LABOR														
Calcium Nitrate	lb	2WD 75 hp	0.245	Jun	1.96	1.53	10.08	17.49	0.24	3.32			20.76	20.76
Fertigate CAN03/KN03	hour			Jun										
FERTIGATION LABOR														
Calcium Nitrate	lb	2WD 75 hp	0.245	Jun	1.96	1.53	10.08	17.49	0.24	3.32			14.50	14.50
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Jun	1.96	1.53	10.08	17.49	0.24	3.32			7.25	7.25
Bravo Weather Stick	pt													
Mustang Max	oz													
Fertigate CAN03/KN03	hour			Jun										
FERTIGATION LABOR														
Calcium Nitrate	lb	2WD 75 hp	0.245	Jun	1.96	1.53	10.08	17.49	0.24	3.32			5.36	5.36
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Jun	1.96	1.53	10.08	17.49	0.24	3.32			7.25	7.25
Bravo Weather Stick	pt													
Trailer - Vegetables	16'	2WD 75 hp	0.090	Jun	0.72	0.56	0.05	0.08	0.18	2.15			19.68	19.68

(continued)

Table 4.A Estimated resource use and costs for field operations, per acre
 Cucumbers, slicers, irrigated
 5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018 (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	
						dollars		dollars		dollars		dollars		
HARVEST LABOR	hour			1.00	Jun			120.00	1245.60					1245.60
5-Gal Bucket	each											200.0000	4.00	800.00
Labor (Packing)	each											300.0000	1.00	300.00
Boxes-Waxed	each											300.0000	1.82	546.00
Plastic Clean Up														
Mulch Lifter	1-Row	2WD 75 hp	0.589	1.00	Jun	4.70	3.67	0.15	2.67	0.58	7.96			19.15
Labor Clean up	acre											1.0000	160.00	160.00
Irrigation Setup	acre				Apr							1.0000		315.50
TOTALS														
INTEREST ON OPERATING CAPITAL						54.87	42.79	58.05	106.17	142.83	1504.15			6326.88
UNALLOCATED LABOR														45.04
TOTAL SPECIFIED COST														18.57
														6390.49

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 4.B Estimated costs per acre
 Cucumbers, slicers, irrigated
 5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	6.0000	129.48	_____
Calcium Nitrate	lb	0.29	200.0000	58.00	_____
FUNGICIDE					
Bravo Weather Stick	pt	6.56	6.0000	39.36	_____
HERBICIDE					
Sandea	oz	39.90	0.5000	19.95	_____
Select MAX	oz	0.79	6.0000	4.74	_____
INSECTICIDE					
Admire Pro	oz	1.70	8.0000	13.60	_____
Mustang Max	oz	1.34	12.0000	16.08	_____
SEED/PLANTS					
Cucumber - Hybrid	lb	194.00	3.0000	582.00	_____
OTHER					
Plastic Mulch	roll	285.00	2.2000	627.00	_____
5-Gal Bucket	each	4.00	200.0000	800.00	_____
Labor(Packing)	each	1.00	300.0000	300.00	_____
Boxes-Waxed	each	1.82	300.0000	546.00	_____
Labor Clean up	acre	160.00	1.0000	160.00	_____
IRRIGATION SUPPLIES					
Drip Tape	roll	173.70	1.5000	260.55	_____
Rural Water	ac-in	110.97	6.0000	665.82	_____
OPERATOR LABOR					
Tractors	hour	13.51	6.8745	92.90	_____
HARVEST LABOR					
Special Labor	hour	10.38	120.0000	1245.60	_____
HAND LABOR					
Implements	hour	10.38	7.9588	82.61	_____
FERTIGATION LABOR					
Special Labor	hour	10.38	8.0000	83.04	_____
UNALLOCATED LABOR	hour	13.50	1.3749	18.57	_____
DIESEL FUEL					
Tractors	gal	1.80	26.5383	47.78	_____
REPAIR & MAINTENANCE					
Implements	acre	58.05	1.0000	58.05	_____
Tractors	acre	7.09	1.0000	7.09	_____
INTEREST ON OP. CAP.	acre	45.04	1.0000	45.04	_____

TOTAL DIRECT EXPENSES				5926.03	_____
FIXED EXPENSES					
Implements	acre	106.17	1.0000	106.17	_____
Tractors	acre	42.79	1.0000	42.79	_____
Irrigation Setup	acre	315.50	1.0000	315.50	_____

TOTAL FIXED EXPENSES				464.46	_____

TOTAL SPECIFIED EXPENSES				6390.49	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.
 Irrigation implies 6 acre inches applied as needed over the
 production period for both fertigation and water needs.

Table 4.C Estimated monthly income and expense flows per acre
 Cucumbers, slicers, irrigated
 5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018

ITEM	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES	152.25	14.50	29.00	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZER	0.00	9.84	9.84	19.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	24.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	18.96	5.36	5.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	582.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	627.00	0.00	1806.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	926.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	8.17	182.79	45.50	1286.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	3.49	34.44	1.71	8.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.56	31.69	10.33	21.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	2.62	29.12	0.79	12.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.												
TOTAL DIRECT EXPENSES	168.09	2481.40	102.53	3174.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-168.09	-2481.40	-102.53	-3174.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-168.09	-2649.49	-2752.02	-5926.03	-5926.03	-5926.03	-5926.03	-5926.03	-5926.03	-5926.03	-5926.03	-5926.03

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

* Lease costs are based on hourly usage costs.

Table 4.D Breakeven price above total expenses and net returns for price/yield combinations, per acre Cucumbers, slicers, irrigated 5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018

Cucumbers	-----BREAKEVEN PRICE-----															
	15.14	16.02	17.03	18.22	19.62	21.30	23.35	25.91	29.21	33.61	39.77					
PERCENT YIELD	-----dollars-----															
UNIT																
50	150.00	551b	-3229	-3097	-2945	-2767	-2557	-2306	-1998	-1613	-1118	-459	464			
			-3694	-3562	-3409	-3232	-3022	-2770	-2462	-2077	-1583	-923	0			
60	180.00	551b	-2860	-2701	-2519	-2306	-2054	-1751	-1382	-920	-327	464	1572			
			-3324	-3166	-2983	-2770	-2518	-2216	-1847	-1385	-791	0	1108			
70	210.00	551b	-2490	-2306	-2092	-1844	-1550	-1197	-766	-228	464	1387	2680			
			-2955	-2770	-2557	-2308	-2014	-1662	-1231	-692	0	923	2216			
80	240.00	551b	-2121	-1910	-1666	-1382	-1046	-643	-151	464	1256	2311	3789			
			-2585	-2374	-2131	-1847	-1511	-1108	-615	0	791	1847	3324			
90	270.00	551b	-1751	-1514	-1240	-920	-543	-89	464	1157	2047	3235	4897			
			-2216	-1978	-1704	-1385	-1007	-554	0	692	1583	2770	4432			
100	300.00	551b	-1382	-1118	-814	-459	-39	464	1080	1849	2839	4158	6005			
			-1847	-1583	-1278	-923	-503	0	615	1385	2374	3694	5541			
110	330.00	551b	-1013	-722	-388	2	464	1018	1695	2542	3630	5082	7113			
			-1477	-1187	-852	-461	0	554	1231	2077	3166	4617	6649			
120	360.00	551b	-643	-327	38	464	968	1572	2311	3235	4422	6005	8222			
			-1108	-791	-426	0	503	1108	1847	2770	3957	5541	7757			
130	390.00	551b	-274	68	464	926	1471	2126	2927	3927	5214	6929	9330			
			-738	-395	0	461	1007	1662	2462	3463	4749	6464	8865			
140	420.00	551b	95	464	890	1387	1975	2680	3542	4620	6005	7852	10438			
			-369	0	426	923	1511	2216	3078	4155	5541	7388	9974			
150	450.00	551b	464	860	1316	1849	2479	3235	4158	5312	6797	8776	11546			
			0	395	852	1385	2014	2770	3694	4848	6332	8311	11082			

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2017 input prices.

Table 5.A Estimated resource use and costs for field operations, per acre
 Greens (turnip, mustard, collards), fresh market
 Mississippi, 2018

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-----															
Lime (Spread)	ton			0.33	Jan							0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	1.00	Aug	1.76	1.37	0.39	0.68	0.22	2.98				7.18
Disk Harrow	10'	2WD 75 hp	0.198	2.00	Aug	3.17	2.47	1.11	2.35	0.39	5.36				14.46
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	1.00	Aug	0.67	0.52	0.08	0.30	0.08	1.14				2.71
Fert 13-13-13	cwt											6.0000	21.58	129.48	129.48
Disk + Incorporate	10'	2WD 75 hp	0.206	1.00	Aug	1.64	1.28	0.95	1.68	0.30	3.86				9.41
Treflan	pt											1.5000	3.52	5.28	5.28
Cultipacker	12'	2WD 75 hp	0.124	1.00	Aug	0.99	0.77	0.20	0.28	0.12	1.68				3.92
Plntr - Vacuum+Ins	2R 30-40	2WD 75 hp	0.396	1.00	Sep	3.17	2.47	9.91	15.76	0.39	5.36				36.67
Greens - Hybrid	lb											3.3000	119.00	392.70	392.70
Admire Pro	oz											8.0000	1.70	13.60	13.60
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	1.00	Sep	0.67	0.52	0.08	0.30	0.08	1.14				2.71
AMM Sulfate 33%	cwt											1.0000	22.50	22.50	22.50
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Sep	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Kocide 2000	lb											1.5000	6.27	9.40	9.40
Quadris	oz											15.4000	2.14	32.96	32.96
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Sep	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Mustang Max	oz											4.0000	1.34	5.36	5.36
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Sep	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Avaunt 30 WDG	oz											3.0000	6.89	20.67	20.67
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Oct	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Radiant ISC	oz											5.0000	6.82	34.10	34.10
Trailer - Vegetables	16'	2WD 75 hp	0.090	1.00	Oct	0.72	0.56	0.05	0.08	0.18	2.15				3.56
Bins/Stacking	25bu each											20.0000	20.30	406.00	406.00
HARVEST & PACK LABOR	hour									175.00	1816.50				1816.50
Boxes-Waxed	each											500.0000	1.82	910.00	910.00
Cooling Box - Greens box												500.0000	1.37	685.00	685.00
TOTALS						20.63	16.08	53.09	91.39	177.77	1853.45				4724.46
INTEREST ON OPERATING CAPITAL															22.65
UNALLOCATED LABOR															6.98
TOTAL SPECIFIED COST															4754.09

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 5.B Estimated costs per acre
 Greens (turnip, mustard, collards), fresh market
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	6.0000	129.48	_____
AMM Sulfate 33%	cwt	22.50	1.0000	22.50	_____
FUNGICIDE					
Kocide 2000	lb	6.27	1.5000	9.40	_____
Quadris	oz	2.14	15.4000	32.96	_____
HERBICIDE					
Treflan	pt	3.52	1.5000	5.28	_____
INSECTICIDE					
Admire Pro	oz	1.70	8.0000	13.60	_____
Mustang Max	oz	1.34	4.0000	5.36	_____
Avaunt 30 WDG	oz	6.89	3.0000	20.67	_____
Radiant 1SC	oz	6.82	5.0000	34.10	_____
SEED/PLANTS					
Greens - Hybrid	lb	119.00	3.3000	392.70	_____
OTHER					
Bins/Stacking 25bu	each	20.30	20.0000	406.00	_____
Boxes-Waxed	each	1.82	500.0000	910.00	_____
Cooling Box - Greens	box	1.37	500.0000	685.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	2.5848	34.95	_____
HAND LABOR					
Implements	hour	10.38	0.1931	2.00	_____
HARVEST & PACK LABOR					
Special Labor	hour	10.38	175.0000	1816.50	_____
UNALLOCATED LABOR	hour	13.50	0.5169	6.98	_____
DIESEL FUEL					
Tractors	gal	1.80	9.9783	17.97	_____
REPAIR & MAINTENANCE					
Implements	acre	53.09	1.0000	53.09	_____
Tractors	acre	2.66	1.0000	2.66	_____
INTEREST ON OP. CAP.	acre	22.65	1.0000	22.65	_____
TOTAL DIRECT EXPENSES				4646.62	_____
FIXED EXPENSES					
Implements	acre	91.39	1.0000	91.39	_____
Tractors	acre	16.08	1.0000	16.08	_____
TOTAL FIXED EXPENSES				107.47	_____
TOTAL SPECIFIED EXPENSES				4754.09	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 5.C Estimated monthly income and expense flows per acre
 Greens (turnip, mustard, collards), fresh market
 Mississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	0.00	0.00	0.00	0.00	0.00	0.00	129.48	22.50	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.36	0.00	0.00	0.00
HERBICIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.63	34.10	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	392.70	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2001.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.82	19.74	1822.87	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.16	8.47	2.34	0.00	0.00
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80	41.48	10.47	0.00	0.00
INTEREST ON OP. CAP.	0.90	0.00	0.00	0.00	0.00	0.00	0.00	1.95	4.49	15.31	0.00	0.00
TOTAL DIRECT EXPENSES	23.67	0.00	0.00	0.00	0.00	0.00	0.00	165.49	571.37	3886.09	0.00	0.00
NET INCOME	-23.67	0.00	0.00	0.00	0.00	0.00	0.00	-165.49	-571.37	-3886.09	0.00	0.00
NET INCOME TO DATE	-23.67	-23.67	-23.67	-23.67	-23.67	-23.67	-23.67	-189.16	-760.53	-4646.62	-4646.62	-4646.62

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.
 * Lease costs are based on hourly usage costs.

Table 5.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Greens (turnip, mustard, collards), fresh market
 Mississippi, 2018

Greens (25lb)	BREAKEVEN PRICE													
	7.40	7.70	8.05	8.45	8.93	9.50	10.20	11.08	12.21	13.71	15.81			
PERCENT YIELD UNIT	-dollars-													
50 250.00 2doz	-1994 -2101	-1919 -2026	-1832 -1940	-1731 -1839	-1612 -1719	-1468 -1576	-1293 -1401	-1074 -1182	-793 -900	-417 -525	107 0			
60 300.00 2doz	-1784 -1891	-1694 -1801	-1590 -1697	-1468 -1576	-1325 -1433	-1153 -1261	-943 -1050	-680 -788	-342 -450	107 0	738 630			
70 350.00 2doz	-1574 -1681	-1468 -1576	-1347 -1455	-1206 -1313	-1038 -1146	-838 -945	-593 -700	-286 -394	107 0	632 525	1368 1261			
80 400.00 2doz	-1363 -1471	-1243 -1351	-1105 -1212	-943 -1050	-752 -859	-523 -630	-242 -350	107 0	557 450	1158 1050	1999 1891			
90 450.00 2doz	-1153 -1261	-1018 -1125	-862 -970	-680 -788	-465 -573	-207 -315	107 0	501 394	1008 900	1683 1576	2629 2522			
100 500.00 2doz	-943 -1050	-793 -900	-620 -727	-417 -525	-179 -286	107 0	457 350	895 788	1458 1351	2209 2101	3260 3152			
110 550.00 2doz	-733 -840	-568 -675	-377 -485	-155 -262	107 0	422 315	808 700	1289 1182	1909 1801	2734 2627	3890 3783			
120 600.00 2doz	-523 -630	-342 -450	-135 -242	107 0	394 286	738 630	1158 1050	1683 1576	2359 2251	3260 3152	4521 4413			
130 650.00 2doz	-312 -420	-117 -225	107 0	370 262	680 573	1053 945	1508 1401	2077 1970	2809 2702	3785 3678	5151 5044			
140 700.00 2doz	-102 -210	107 0	349 242	632 525	967 859	1368 1261	1859 1751	2472 2364	3260 3152	4311 4203	5782 5675			
150 750.00 2doz	107 0	332 225	592 485	895 788	1253 1146	1683 1576	2209 2101	2866 2758	3710 3603	4836 4729	6413 6305			

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 6.A Estimated resource use and costs for field operations, per acre
 Lima/butter beans, hand harvest
 Mississippi, 2018

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	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST				
															dollars			dollars		
Lime (Spread)	ton			0.33	Jan									0.4950	46.00	22.77	22.77			
Chisel Plow	7'	2WD 75 hp	0.220	1.00	Jan	1.76	1.37	0.39	0.68	0.22	2.98						7.18			
Disk Harrow	10'	2WD 75 hp	0.198	1.00	Mar	1.59	1.23	0.56	1.18	0.19	2.68						7.24			
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	1.00	Mar	1.13	0.88	0.45	1.19	0.21	2.63						6.28			
AMM Sulfate 33%	cwt														22.50	33.75	33.75			
Phosphorus (46% P205) cwt															18.75	29.25	29.25			
Potash (60% K2O) cwt															22.20	26.64	26.64			
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	1.00	Apr	1.55	1.21	0.20	0.52	0.29	3.63						7.11			
Treflan	pt														3.52	5.28	5.28			
Plntr - Vacuum	2-Row	2WD 75 hp	0.396	1.00	Apr	3.17	2.47	7.41	11.78	0.39	5.36						30.19			
Lima Bean - Hybrid	lb														4.02	120.60	120.60			
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	May	1.96	1.53	10.08	17.49	0.24	3.32						34.38			
Mustang Max	oz														1.34	5.36	5.36			
Cultivate+sidedress	4-Row	2WD 75 hp	0.193	1.00	May	1.55	1.21	0.84	3.70	0.29	3.63						10.93			
AMM Sulfate 33%	cwt														22.50	22.50	22.50			
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	May	1.96	1.53	10.08	17.49	0.24	3.32						34.38			
Kocide 2000	lb														6.27	9.40	9.40			
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	May	1.96	1.53	10.08	17.49	0.24	3.32						34.38			
Mustang Max	oz														1.34	5.36	5.36			
HARVEST LABOR	hour			1.00	Jun					136.00	1411.68						1411.68			
5-Gal Bucket	each														4.00	160.00	160.00			
Sheller Lima Beans	each			1.00	Jun			0.25	6.20	9.00	93.42						6.20			
107/10 lb by L/Bean acre																	93.67			
R.B.Convey LimaBeans each				1.00	Jun				2.79								2.79			
Rot.PakTable L-Beans each				1.00	Jun				2.62								2.62			
Application 1	acre							0.15		5.00	51.90						52.05			
Bag Sealer LimaBeans each				1.00	Jun				39.67								39.67			
Application 1	acre								28.73	0.12	1.25						29.98			
TOTALS						16.63	12.96	69.22	122.80	152.46	1589.12				440.91		2251.64			
INTEREST ON OPERATING CAPITAL																	11.70			
UNALLOCATED LABOR																	5.61			
TOTAL SPECIFIED COST																	2268.95			

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 6.B Estimated costs per acre
 Lima/butter beans, hand harvest
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
AMM Sulfate 33%	cwt	22.50	2.5000	56.25	_____
Phosphorus (46% P2O5)	cwt	18.75	1.5600	29.25	_____
Potash (60% K2O)	cwt	22.20	1.2000	26.64	_____
FUNGICIDE					
Kocide 2000	lb	6.27	1.5000	9.40	_____
HERBICIDE					
Treflan	pt	3.52	1.5000	5.28	_____
INSECTICIDE					
Mustang Max	oz	1.34	8.0000	10.72	_____
SEED/PLANTS					
Lima Bean - Hybrid	lb	4.02	30.0000	120.60	_____
OTHER					
5-Gal Bucket	each	4.00	40.0000	160.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	2.0805	28.12	_____
HARVEST LABOR					
Special Labor	hour	10.38	136.0000	1411.68	_____
HAND LABOR					
Implements	hour	10.38	0.2643	2.75	_____
GRD LABORLIMA BEANS					
Bag Sealer LimaBeans	hour	10.38	0.1200	1.25	_____
Rot.PakTable L-Beans	hour	10.38	5.0000	51.90	_____
Sheller Lima Beans	hour	10.38	9.0000	93.42	_____
UNALLOCATED LABOR					
	hour	13.48	0.4161	5.61	_____
DIESEL FUEL					
Tractors	gal	1.80	8.0318	14.48	_____
REPAIR & MAINTENANCE					
Implements	acre	40.09	1.0000	40.09	_____
Tractors	acre	2.15	1.0000	2.15	_____
Bag Sealer LimaBeans	acre	28.73	1.0000	28.73	_____
Rot.PakTable L-Beans	acre	0.15	1.0000	0.15	_____
Sheller Lima Beans	acre	0.25	1.0000	0.25	_____
INTEREST ON OP. CAP.	acre	11.70	1.0000	11.70	_____
TOTAL DIRECT EXPENSES				2133.19	_____
FIXED EXPENSES					
Implements	acre	71.52	1.0000	71.52	_____
Tractors	acre	12.96	1.0000	12.96	_____
Bag Sealer LimaBeans	each	1983.52	0.0200	39.67	_____
R.B.Convey LimaBeans	each	139.54	0.0200	2.79	_____
Rot.PakTable L-Beans	each	130.87	0.0200	2.62	_____
Sheller Lima Beans	each	309.85	0.0200	6.20	_____
TOTAL FIXED EXPENSES				135.76	_____
TOTAL SPECIFIED EXPENSES				2268.95	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 6.C Estimated monthly income and expense flows per acre
 Lima/butter beans, hand harvest
 Mississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	0.00	89.64	0.00	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	0.00	0.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.00	0.00	10.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	120.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	0.00	0.00	160.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	6.23	10.58	16.09	1558.25	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.53	0.00	2.36	4.11	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.62	0.00	1.37	8.22	32.03	29.13	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.68	0.00	1.57	1.76	0.77	6.92	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	29.18	0.00	101.17	150.55	97.99	1754.30	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-29.18	0.00	-101.17	-150.55	-97.99	-1754.30	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-29.18	-29.18	-130.35	-280.90	-378.89	-2133.19	-2133.19	-2133.19	-2133.19	-2133.19	-2133.19	-2133.19

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 6.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Lima/butter beans, hand harvest
 Mississippi, 2018

		-----BREAKEVEN PRICE-----														
		14.13	15.14	16.31	17.67	19.27	21.20	23.56	26.50	30.29	35.34	42.41				
PERCENT	YIELD UNIT	-----dollars-----														
50	53.50 10lb	-1376	-1322	-1260	-1187	-1101	-998	-872	-715	-512	-242	135				
		-1512	-1458	-1396	-1323	-1237	-1134	-1008	-850	-648	-378	0				
60	64.20 10lb	-1225	-1160	-1085	-998	-895	-771	-620	-431	-188	135	589				
		-1361	-1296	-1221	-1134	-1031	-907	-756	-567	-324	0	453				
70	74.90 10lb	-1074	-998	-911	-809	-689	-544	-368	-147	135	513	1043				
		-1210	-1134	-1047	-945	-825	-680	-504	-283	0	378	907				
80	85.60 10lb	-923	-836	-736	-620	-483	-318	-116	135	459	892	1497				
		-1058	-972	-872	-756	-618	-453	-252	0	324	756	1361				
90	96.30 10lb	-771	-674	-562	-431	-276	-91	135	419	784	1270	1950				
		-907	-810	-698	-567	-412	-226	0	283	648	1134	1815				
100	107.00 10lb	-620	-512	-387	-242	-70	135	387	702	1108	1648	2404				
		-756	-648	-523	-378	-206	0	252	567	972	1512	2268				
110	117.70 10lb	-469	-350	-213	-53	135	362	639	986	1432	2026	2858				
		-605	-486	-349	-189	0	226	504	850	1296	1890	2722				
120	128.40 10lb	-318	-188	-38	135	342	589	892	1270	1756	2404	3312				
		-453	-324	-174	0	206	453	756	1134	1620	2268	3176				
130	139.10 10lb	-166	-26	135	324	548	816	1144	1553	2080	2782	3766				
		-302	-162	0	189	412	680	1008	1418	1944	2647	3630				
140	149.80 10lb	-15	135	310	513	754	1043	1396	1837	2404	3161	4219				
		-151	0	174	378	618	907	1260	1701	2268	3025	4084				
150	160.50 10lb	135	297	484	702	960	1270	1648	2121	2728	3539	4673				
		0	162	349	567	825	1134	1512	1985	2593	3403	4537				

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 7.A Estimated resource use and costs for field operations, per acre
 Lima/butter beans, mechanical harvest
 Mississippi, 2018

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-----															
Lime (Spread)	ton			0.33	Jan							0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	1.00	Jan	1.76	1.37	0.39	0.68	0.22	2.98				7.18
Disk Harrow	10'	2WD 75 hp	0.198	1.00	Mar	1.59	1.23	0.56	1.18	0.19	2.68				7.24
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	1.00	Mar	1.13	0.88	0.45	1.19	0.21	2.63				6.28
AMM Sulfate 33%	cwt											1.5000	22.50	33.75	33.75
Phosphorus (46% P205)	cwt											1.5600	18.75	29.25	29.25
Potash (60% K2O)	cwt											1.2000	22.20	26.64	26.64
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	1.00	Apr	1.55	1.21	0.20	0.52	0.29	3.63				7.11
Treflan	pt											1.5000	3.52	5.28	5.28
Plntr - Vacuum	2-Row	2WD 75 hp	0.396	1.00	Apr	3.17	2.47	7.41	11.78	0.39	5.36				30.19
Lima Bean - Hybrid	lb											30.0000	4.02	120.60	120.60
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	May	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Mustang Max	oz											4.0000	1.34	5.36	5.36
Cultivate+Sidedress	4-Row	2WD 75 hp	0.193	1.00	May	1.55	1.21	0.84	3.70	0.29	3.63				10.93
AMM Sulfate 33%	cwt											1.0000	22.50	22.50	22.50
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	May	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Kocide 2000	lb											1.5000	6.27	9.40	9.40
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	May	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Mustang Max	oz											4.0000	1.34	5.36	5.36
Picker Beans/Peas	1-Row	2WD 75 hp	3.571	1.00	Jun	28.51	22.23	60.06	42.90	10.71	122.39				276.09
Trailer-Lima/B. Bean	16'	2WD 75 hp	3.571	1.00	Jun	28.51	22.23	2.17	3.63	7.14	85.32				141.86
LABOR BEAN TRAILER	hour									3.58	37.16				37.16
Sheller Lima Beans	each			1.00	Jun			0.25	6.20			0.0200			6.20
65/10 lb bg L/BBeans	acre									9.00	93.42				93.67
R.B.Convey LimaBeans	each			1.00	Jun			2.79	2.79			0.0200			2.79
Rot.PakTable L-Beans	each			1.00	Jun				2.62			0.0200			2.62
Application 1	acre							0.15		5.00	51.90				52.05
Bag Sealer LimaBeans	each			1.00	Jun			28.73	39.67			0.0200			39.67
Application 1	acre									0.12	1.25				29.98
-----dollars-----															
TOTALS						73.65	57.42	131.45	169.33	37.90	422.31			280.91	1135.07
INTEREST ON OPERATING CAPITAL															7.00
UNALLOCATED LABOR															24.91
TOTAL SPECIFIED COST															1166.98

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 7.B Estimated costs per acre
 Lima/butter beans, mechanical harvest
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
AMM Sulfate 33%	cwt	22.50	2.5000	56.25	_____
Phosphorus (46% P2O5)	cwt	18.75	1.5600	29.25	_____
Potash (60% K2O)	cwt	22.20	1.2000	26.64	_____
FUNGICIDE					
Kocide 2000	lb	6.27	1.5000	9.40	_____
HERBICIDE					
Treflan	pt	3.52	1.5000	5.28	_____
INSECTICIDE					
Mustang Max	oz	1.34	8.0000	10.72	_____
SEED/PLANTS					
Lima Bean - Hybrid	lb	4.02	30.0000	120.60	_____
OPERATOR LABOR					
Tractors	hour	13.51	9.2234	124.62	_____
HAND LABOR					
Implements	hour	10.38	10.9786	113.96	_____
LABOR BEAN TRAILER					
Special Labor	hour	10.38	3.5800	37.16	_____
GRD LABORLIMA BEANS					
Bag Sealer LimaBeans	hour	10.38	0.1200	1.25	_____
Rot.PakTable L-Beans	hour	10.38	5.0000	51.90	_____
Sheller Lima Beans	hour	10.38	9.0000	93.42	_____
UNALLOCATED LABOR	hour	13.50	1.8446	24.91	_____
DIESEL FUEL					
Tractors	gal	1.80	35.6061	64.12	_____
REPAIR & MAINTENANCE					
Implements	acre	102.32	1.0000	102.32	_____
Tractors	acre	9.53	1.0000	9.53	_____
Bag Sealer LimaBeans	acre	28.73	1.0000	28.73	_____
Rot.PakTable L-Beans	acre	0.15	1.0000	0.15	_____
Sheller Lima Beans	acre	0.25	1.0000	0.25	_____
INTEREST ON OP. CAP.	acre	7.00	1.0000	7.00	_____
TOTAL DIRECT EXPENSES				940.23	_____
FIXED EXPENSES					
Implements	acre	118.05	1.0000	118.05	_____
Tractors	acre	57.42	1.0000	57.42	_____
Bag Sealer LimaBeans	each	1983.52	0.0200	39.67	_____
R.B.Convey LimaBeans	each	139.54	0.0200	2.79	_____
Rot.PakTable L-Beans	each	130.87	0.0200	2.62	_____
Sheller Lima Beans	each	309.85	0.0200	6.20	_____
TOTAL FIXED EXPENSES				226.75	_____
TOTAL SPECIFIED EXPENSES				1166.98	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 7.C Estimated monthly income and expense flows per acre
Lima/butter beans, mechanical harvest
Mississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	0.00	89.64	0.00	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	0.00	0.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	0.00	0.00	5.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.00	0.00	10.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	120.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	0.00	6.23	10.58	16.09	410.74	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.53	0.00	2.36	4.11	6.48	49.64	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.62	0.00	1.37	8.22	32.03	98.74	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.68	0.00	1.57	1.76	0.77	2.22	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	29.18	0.00	101.17	150.55	97.99	561.34	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-29.18	0.00	-101.17	-150.55	-97.99	-561.34	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-29.18	-29.18	-130.35	-280.90	-378.89	-940.23	-940.23	-940.23	-940.23	-940.23	-940.23	-940.23

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 7.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Lima/butter beans, mechanical harvest
 Mississippi, 2018

		-----BREAKEVEN PRICE-----										
		11.96	12.82	13.81	14.96	16.32	17.95	19.94	22.44	25.64	29.92	35.90
PERCENT	YIELD UNIT	-----dollars-----										
50	32.50 10lb	-551 -777	-523 -750	-491 -718	-453 -680	-409 -636	-356 -583	-291 -518	-210 -437	-106 -333	32 -194	226 0
60	39.00 10lb	-473 -700	-440 -666	-401 -628	-356 -583	-303 -530	-240 -466	-162 -388	-64 -291	60 -166	226 0	460 233
70	45.50 10lb	-395 -622	-356 -583	-311 -538	-259 -486	-197 -424	-123 -350	-32 -259	80 -145	226 0	421 194	693 466
80	52.00 10lb	-317 -544	-273 -500	-222 -448	-162 -388	-91 -318	-6 -233	97 -129	226 0	393 166	615 388	926 700
90	58.50 10lb	-240 -466	-190 -416	-132 -359	-64 -291	14 -212	110 -116	226 0	372 145	560 333	810 583	1160 933
100	65.00 10lb	-162 -388	-106 -333	-42 -269	32 -194	120 -106	226 0	356 129	518 291	726 500	1004 777	1393 1166
110	71.50 10lb	-84 -311	-23 -250	47 -179	129 -97	226 0	343 116	486 259	664 437	893 666	1199 972	1627 1400
120	78.00 10lb	-6 -233	60 -166	136 -89	226 0	332 106	460 233	615 388	810 583	1060 833	1393 1166	1860 1633
130	84.50 10lb	71 -155	143 -83	226 0	323 97	438 212	576 350	745 518	956 729	1227 1000	1588 1361	2093 1867
140	91.00 10lb	148 -77	226 0	316 89	421 194	545 318	693 466	875 648	1101 875	1393 1166	1782 1555	2327 2100
150	97.50 10lb	226 0	310 83	406 179	518 291	651 424	810 583	1004 777	1247 1021	1560 1333	1977 1750	2560 2333

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 8.A Estimated resource use and costs for field operations, per acre
Okra, fresh market
Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST	
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE		COST
-----dollars-----														
Lime (Spread)	ton		0.33	Mar							0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	Mar	1.76	1.37	0.39	0.68	0.22	2.98				7.18
Disk Harrow	10'	2WD 75 hp	0.198	Mar	3.17	2.47	1.11	2.35	0.39	5.36				14.46
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	Apr	1.13	0.88	0.45	1.19	0.21	2.63				6.28
AMM Sulfate 33%	cwt										0.7000	22.50	15.75	15.75
Phosphorus (46% P205)	cwt										1.5600	18.75	29.25	29.25
Potash (60% K2O)	cwt										1.2000	22.20	26.64	26.64
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	Apr	1.55	1.21	0.20	0.52	0.29	3.63				7.11
Treflan	pt										1.5000	3.52	5.28	5.28
Plntr - Vacuum	2-Row	2WD 75 hp	0.396	Apr	3.17	2.47	7.41	11.78	0.39	5.36				30.19
Okra - Hybrid	lb										8.8000	205.00	1804.00	1804.00
Cultivate+Sidedress	4-Row	2WD 75 hp	0.193	Apr	1.55	1.21	0.84	3.70	0.29	3.63				10.93
AMM Sulfate 33%	cwt										1.0000	22.50	22.50	22.50
Cultivate	4-Row	2WD 75 hp	0.155	May	2.48	1.93	0.66	1.74	0.31	4.19				11.00
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	3.92	3.06	20.15	34.97	0.49	6.63				68.73
xxProvado 1.6	oz										7.6000	1.03	7.83	7.83
Cultivate+Sidedress	4-Row	2WD 75 hp	0.193	May	1.55	1.21	0.84	3.70	0.29	3.63				10.93
AMM Sulfate 33%	cwt										1.0000	22.50	22.50	22.50
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Jun	5.88	4.59	30.23	52.46	0.73	9.95				103.11
Mustang Max	oz										12.0000	1.34	16.08	16.08
Trailer - Vegetables	16'	2WD 75 hp	0.090	Jun	8.62	6.72	0.59	0.98	2.16	25.80				42.71
HARVEST LABOR	hour								300.00	3114.00				3114.00
5-Gal Bucket	each										200.0000	4.00	800.00	800.00
GRADE & PACK LABOR	hour										400.0000	1.82	728.00	728.00
Boxes-Waxed	each													
TOTALS					34.78	27.12	62.87	114.07	335.79	3499.19			3500.60	7238.63
INTEREST ON OPERATING CAPITAL													44.24	
UNALLOCATED LABOR													11.76	
TOTAL SPECIFIED COST													7294.63	

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 8.B Estimated costs per acre
Okra, fresh market
Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
AMM Sulfate 33%	cwt	22.50	2.7000	60.75	_____
Phosphorus (46% P205)	cwt	18.75	1.5600	29.25	_____
Potash (60% K20)	cwt	22.20	1.2000	26.64	_____
HERBICIDE					
Treflan	pt	3.52	1.5000	5.28	_____
INSECTICIDE					
xxProvado 1.6	oz	1.03	7.6000	7.83	_____
Mustang Max	oz	1.34	12.0000	16.08	_____
SEED/PLANTS					
Okra - Hybrid	lb	205.00	8.8000	1804.00	_____
OTHER					
5-Gal Bucket	each	4.00	200.0000	800.00	_____
Boxes-Waxed	each	1.82	400.0000	728.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	4.3539	58.82	_____
HARVEST LABOR					
Special Labor	hour	10.38	300.0000	3114.00	_____
GRADE & PACK LABOR					
Special Labor	hour	10.38	30.0000	311.40	_____
HAND LABOR					
Implements	hour	10.38	1.4412	14.97	_____
UNALLOCATED LABOR					
	hour	13.50	0.8707	11.76	_____
DIESEL FUEL					
Tractors	gal	1.80	16.8080	30.27	_____
REPAIR & MAINTENANCE					
Implements	acre	62.87	1.0000	62.87	_____
Tractors	acre	4.51	1.0000	4.51	_____
INTEREST ON OP. CAP.	acre	44.24	1.0000	44.24	_____

TOTAL DIRECT EXPENSES				7153.44	_____
FIXED EXPENSES					
Implements	acre	114.07	1.0000	114.07	_____
Tractors	acre	27.12	1.0000	27.12	_____

TOTAL FIXED EXPENSES				141.19	_____

TOTAL SPECIFIED EXPENSES				7294.63	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 8.C Estimated monthly income and expense flows per acre
Okra, fresh market
Mississippi, 2018

ITEM	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	94.14	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	5.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	7.83	16.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	1804.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	1528.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	10.01	17.74	17.14	3466.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.29	6.44	6.92	12.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	2.14	9.86	22.68	32.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.62	23.01	0.60	20.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	39.83	1960.47	77.67	5075.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-39.83	-1960.47	-77.67	-5075.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-39.83	-2000.30	-2077.97	-7153.44	-7153.44	-7153.44	-7153.44	-7153.44	-7153.44	-7153.44	-7153.44	-7153.44

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 8.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
Okra, fresh market
Mississippi, 2018

PERCENT YIELD UNIT	BREAKEVEN PRICE										
	12.76	13.54	14.44	15.50	16.74	18.23	20.05	22.33	25.26	29.17	34.64
Okra (US Fancy)	12.76	13.54	14.44	15.50	16.74	18.23	20.05	22.33	25.26	29.17	34.64
50 200.00 30lb	-4234 -4375	-4078 -4219	-3898 -4039	-3687 -3828	-3439 -3580	-3140 -3281	-2776 -2917	-2320 -2461	-1734 -1875	-952 -1093	141 0
60 240.00 30lb	-3797 -3938	-3609 -3750	-3393 -3534	-3140 -3281	-2842 -2983	-2484 -2625	-2046 -2187	-1499 -1640	-796 -937	141 0	1453 1312
70 280.00 30lb	-3359 -3500	-3140 -3281	-2888 -3029	-2593 -2734	-2245 -2386	-1827 -1969	-1317 -1458	-679 -820	141 0	1235 1093	2766 2625
80 320.00 30lb	-2921 -3063	-2671 -2813	-2383 -2524	-2046 -2187	-1648 -1790	-1171 -1312	-588 -729	141 0	1078 937	2329 2187	4079 3938
90 360.00 30lb	-2484 -2625	-2203 -2344	-1878 -2019	-1499 -1640	-1052 -1193	-515 -656	141 0	961 820	2016 1875	3423 3281	5392 5251
100 400.00 30lb	-2046 -2187	-1734 -1875	-1373 -1514	-952 -1093	-455 -596	141 0	870 729	1782 1640	2954 2813	4517 4375	6704 6563
110 440.00 30lb	-1609 -1750	-1265 -1406	-868 -1009	-405 -546	141 0	797 656	1599 1458	2602 2461	3891 3750	5610 5469	8017 7876
120 480.00 30lb	-1171 -1312	-796 -937	-363 -504	141 0	737 596	1453 1312	2329 2187	3423 3281	4829 4688	6704 6563	9330 9189
130 520.00 30lb	-733 -875	-327 -468	141 0	688 546	1334 1193	2110 1969	3058 2917	4243 4102	5767 5626	7798 7657	10643 10502
140 560.00 30lb	-296 -437	141 0	646 504	1235 1093	1931 1790	2766 2625	3787 3646	5064 4922	6704 6563	8892 8751	11955 11814
150 600.00 30lb	141 0	610 468	1150 1009	1782 1640	2528 2386	3423 3281	4517 4375	5884 5743	7642 7501	9986 9845	13268 13127

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2017 input prices.

Table 9.A Estimated resource use and costs for field operations, per acre
Pumpkin, freshmarket, irrigated
8 ft row spacing, 12 gpm with 5,445 ft of drip tape, Mississippi, 2018

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	
-----dollars-----dollars-----dollars-----														
100/10 lb bg S. Peas				0.33	May							0.1633	46.00	7.51
Lime (Spread)	ton													7.51
Chisel Plow	7'	2WD 75 hp	0.220	1.00	May	1.76	1.37	0.39	0.68	0.22	2.98			7.18
Disk Harrow	10'	2WD 75 hp	0.198	2.00	Jun	3.17	2.47	1.11	2.35	0.39	5.36			14.46
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	1.00	Jun	1.13	0.88	0.45	1.19	0.21	2.63			6.28
Fert 13-13-13	cwt											9.0000	21.58	194.22
BS, Lay/Tape/Pumpkin	Bed 8'cntr	2WD 75 hp	0.080	1.00	Jun	0.64	0.50	0.28	0.79	0.08	1.09	1.4000	285.00	399.00
Plastic Mulch	roll											0.9000	173.70	156.33
Drip Tape	roll													111.55
Plntr/H20/pnch/seed	1-Row	2WD 75 hp	2.578	1.00	Jul	20.58	16.05	5.09	8.24	5.15	61.59	1.5000	109.00	163.50
Pumpkin Seed Hybrid	lb													665.82
Irrigation				1.00	Jul									
Rural Water	ac-in													
Fertigate CAN03/KN03	hour			1.00	Jul					1.00	10.38			10.38
FERTIGATION LABOR	hour											25.0000	0.29	7.25
Calcium Nitrate	lb									0.24	3.32			34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Jul	1.96	1.53	10.08	17.49	0.24	2.79	4.0000	1.34	5.36
Mustang Max	oz													6.08
Disk Harrow	5'	2WD 75 hp	0.412	0.50	Jul	1.64	1.28	0.12	0.25	0.20	2.79			10.38
Fertigate CAN03/KN03	hour			1.00	Jul									7.25
FERTIGATION LABOR	hour											25.0000	0.29	7.25
Calcium Nitrate	lb									0.24	3.32			34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Jul	1.96	1.53	10.08	17.49	0.24	3.32	4.0000	1.34	5.36
Mustang Max	oz													10.38
Fertigate CAN03/KN03	hour			1.00	Jul					1.00	10.38			7.25
FERTIGATION LABOR	hour											25.0000	0.29	7.25
Calcium Nitrate	lb									0.24	3.32			34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Aug	1.96	1.53	10.08	17.49	0.24	3.32	11.0000	2.14	23.54
Quadris	oz											2.0000	6.56	13.12
Bravo Weather Stick	pt													31.14
Fertigate CAN03/KN03	hour			3.00	Aug					3.00	31.14			21.75
FERTIGATION LABOR	hour											75.0000	0.29	21.75
Calcium Nitrate	lb									0.24	3.32			34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Aug	1.96	1.53	10.08	17.49	0.24	3.32	6.0000	6.89	41.34
Avaunt 30 WDG	oz													34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Aug	1.96	1.53	10.08	17.49	0.24	3.32	2.0000	6.56	13.12
Bravo Weather Stick	pt													10.38
Fertigate CAN03/KN03	hour			1.00	Sep					1.00	10.38			7.25
FERTIGATION LABOR	hour											25.0000	0.29	7.25
Calcium Nitrate	lb									0.24	3.32			34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Sep	1.96	1.53	10.08	17.49	0.24	3.32	6.0000	0.74	4.44
Brigade 2EC	oz													4.44

(continued)

Table 9.A Estimated resource use and costs for field operations, per acre
Pumpkin, freshmarket, irrigated
8 ft row spacing, 12 gpm with 5,445 ft of drip tape, Mississippi, 2018 (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	
														-----dollars-----
Fertigate CAN03/KN03				3.00	Sep									
FERTIGATION LABOR	hour									3.00	31.14			31.14
Calcium Nitrate	lb													21.75
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Sep	1.96	1.53	10.08	17.49	0.24	3.32	75.0000	0.29	21.75
Brigade 2EC	oz											6.0000	0.74	4.44
Quadris	oz											11.0000	2.14	23.54
Fertigate CAN03/KN03				1.00	Oct									
FERTIGATION LABOR	hour									1.00	10.38			10.38
Calcium Nitrate	lb													7.25
Trailer - Vegetables	16'	2WD 75 hp	0.090	3.00	Oct	2.16	1.68	0.15	0.25	0.54	6.45	25.0000	0.29	7.25
HARVEST LABOR	hour									90.00	934.20			10.69
Pallet Crates-1350lb each												123.0000	20.66	2541.18
Mulch Lifter	1-Row	2WD 75 hp	0.589	1.00	Nov	4.70	3.67	0.15	2.67	0.58	7.96			19.15
LABOR MULCH CLEANUP	hour									15.00	155.70			155.70
Irrigation Setup	acre				Jul							1.0000		303.38
TOTALS						49.50	38.61	78.30	138.85	125.11	1318.17		4341.57	6268.38
INTEREST ON OPERATING CAPITAL														71.91
UNALLOCATED LABOR														16.74
TOTAL SPECIFIED COST														6357.03

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 9.B Estimated costs per acre
Pumpkin, freshmarket, irrigated
8 ft row spacing, 12 gpm with 5,445 ft of drip tape, Mississi

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.1633	7.51	_____
Fert 13-13-13	cwt	21.58	9.0000	194.22	_____
Calcium Nitrate	lb	0.29	275.0000	79.75	_____
FUNGICIDE					
Quadris	oz	2.14	22.0000	47.08	_____
Bravo Weather Stick	pt	6.56	4.0000	26.24	_____
INSECTICIDE					
Mustang Max	oz	1.34	8.0000	10.72	_____
Avaunt 30 WDG	oz	6.89	6.0000	41.34	_____
Brigade 2EC	oz	0.74	12.0000	8.88	_____
SEED/PLANTS					
Pumpkin Seed Hybrid	lb	109.00	1.5000	163.50	_____
OTHER					
Plastic Mulch	roll	285.00	1.4000	399.00	_____
Pallet Crates-1350lb	each	20.66	123.0000	2541.18	_____
IRRIGATION SUPPLIES					
Drip Tape	roll	173.70	0.9000	156.33	_____
Rural Water	ac-in	110.97	6.0000	665.82	_____
OPERATOR LABOR					
Tractors	hour	13.51	6.2012	83.80	_____
HARVEST LABOR					
Special Labor	hour	10.38	90.0000	934.20	_____
HAND LABOR					
Implements	hour	10.38	2.9186	30.29	_____
FERTIGATION LABOR					
Special Labor	hour	10.38	11.0000	114.18	_____
LABOR MULCH CLEANUP					
Special Labor	hour	10.38	15.0000	155.70	_____
UNALLOCATED LABOR					
	hour	13.49	1.2402	16.74	_____
DIESEL FUEL					
Tractors	gal	1.80	23.9393	43.11	_____
REPAIR & MAINTENANCE					
Implements	acre	78.30	1.0000	78.30	_____
Tractors	acre	6.39	1.0000	6.39	_____
INTEREST ON OP. CAP.	acre	71.91	1.0000	71.91	_____
TOTAL DIRECT EXPENSES				5876.19	_____
FIXED EXPENSES					
Implements	acre	138.85	1.0000	138.85	_____
Tractors	acre	38.61	1.0000	38.61	_____
Irrigation Setup	acre	303.38	1.0000	303.38	_____
TOTAL FIXED EXPENSES				480.84	_____
TOTAL SPECIFIED EXPENSES				6357.03	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 9.C Estimated monthly income and expense flows per acre
Pumpkin, freshmarket, irrigated
8 ft row spacing, 12 gpm with 5,445 ft of drip tape, Mississippi, 2018

ITEM	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	7.51	194.22	21.75	21.75	29.00	7.25	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	0.00	49.78	23.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	10.72	41.34	8.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	163.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	399.00	0.00	0.00	0.00	2541.18	0.00	0.00	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	156.33	665.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	10.75	111.01	43.08	49.48	951.76	165.25	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.53	4.30	22.76	5.13	3.42	1.88	4.09	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.62	2.48	28.75	30.99	20.66	0.43	0.76	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.37	18.21	20.29	3.02	1.60	27.74	0.68	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	13.61	785.29	1044.60	195.09	136.58	3530.24	170.78	0.00	0.00	0.00	0.00	0.00
NET INCOME	-13.61	-785.29	-1044.60	-195.09	-136.58	-3530.24	-170.78	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-13.61	-798.90	-1843.50	-2038.59	-2175.17	-5705.41	-5876.19	-5876.19	-5876.19	-5876.19	-5876.19	-5876.19

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.
* Lease costs are based on hourly usage costs.

Table 9.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
Pumpkin, freshmarket, irrigated
8 ft row spacing, 12 gpm with 5,445 ft of drip tape, Mississippi, 2018

Pumpkin	-----BREAK-EVEN PRICE-----													
	0.10	0.11	0.11	0.11	0.12	0.12	0.14	0.15	0.17	0.19	0.22	0.25	0.31	
PERCENT YIELD UNIT	-----dollars-----													
50 20500.00 lb	-3757	-3605	-3431	-3227	-2986	-2697	-2344	-1903	-1335	-578	480			
	-4238	-4086	-3912	-3708	-3467	-3178	-2825	-2383	-1816	-1059	0			
60 24600.00 lb	-3333	-3151	-2942	-2697	-2408	-2061	-1638	-1108	-427	480	1752			
	-3814	-3632	-3423	-3178	-2889	-2542	-2119	-1589	-908	0	1271			
70 28700.00 lb	-2909	-2697	-2453	-2167	-1830	-1426	-931	-313	480	1540	3023			
	-3390	-3178	-2934	-2648	-2311	-1907	-1412	-794	0	1059	2542			
80 32800.00 lb	-2485	-2243	-1964	-1638	-1252	-790	-225	480	1388	2599	4295			
	-2966	-2724	-2445	-2119	-1733	-1271	-706	0	908	2119	3814			
90 36900.00 lb	-2061	-1789	-1475	-1108	-674	-154	480	1275	2297	3659	5566			
	-2542	-2270	-1956	-1589	-1155	-635	0	794	1816	3178	5085			
100 41000.00 lb	-1638	-1335	-986	-578	-97	480	1187	2070	3205	4718	6837			
	-2119	-1816	-1467	-1059	-577	0	706	1589	2724	4238	6357			
110 45100.00 lb	-1214	-881	-497	-48	480	1116	1893	2864	4113	5778	8109			
	-1695	-1362	-978	-529	0	635	1412	2383	3632	5297	7628			
120 49200.00 lb	-790	-427	-8	480	1058	1752	2599	3659	5021	6837	9380			
	-1271	-908	-489	0	577	1271	2119	3178	4540	6357	8899			
130 53300.00 lb	-366	26	480	1010	1636	2387	3306	4453	5929	7897	10652			
	-847	-454	0	529	1155	1907	2825	3973	5448	7416	10171			
140 57400.00 lb	57	480	969	1540	2214	3023	4012	5248	6837	8956	11923			
	-423	0	489	1059	1733	2542	3531	4767	6357	8476	11442			
150 61500.00 lb	480	934	1458	2070	2792	3659	4718	6043	7746	10016	13194			
	0	454	978	1589	2311	3178	4238	5562	7265	9535	12714			

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2017 input prices.

Table 10.A Estimated resource use and costs for field operations, per acre
 Snap beans, fresh market, hand harvest
 Mississippi, 2018

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-----															
Lime (Spread)	ton			0.33	Feb							0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	1.00	Feb	1.76	1.37	0.39	0.68	0.22	2.98				7.18
Disk Harrow	10'	2WD 75 hp	0.198	2.00	Feb	3.17	2.47	1.11	2.35	0.39	5.36				14.46
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	1.00	Feb	1.13	0.88	0.45	1.19	0.21	2.63				6.28
Fert 13-13-13	cwt											6.0000	21.58	129.48	129.48
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	1.00	Feb	1.55	1.21	0.20	0.52	0.29	3.63				7.11
Treflan	pt											2.0000	3.52	7.04	7.04
Plntr - Vacuum	2-Row	2WD 75 hp	0.396	1.00	Mar	3.17	2.47	7.41	11.78	0.39	5.36				30.19
Snap Beans - Hybrid	lb											70.0000	5.77	403.90	403.90
Blocker 10G	lb											13.7500	1.24	17.05	17.05
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	2.00	Mar	3.92	3.06	20.15	34.97	0.49	6.63				68.73
Mustang Max	oz											8.0000	1.34	10.72	10.72
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	2.00	Apr	3.92	3.06	20.15	34.97	0.49	6.63				68.73
Kocide 2000	lb											3.0000	6.27	18.81	18.81
Cultivate+Sidedress	4-Row	2WD 75 hp	0.193	1.00	Apr	1.55	1.21	0.84	3.70	0.29	3.63				10.93
AMM Sulfate 33%	cwt											0.7500	22.50	16.88	16.88
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	2.00	Apr	3.92	3.06	20.15	34.97	0.49	6.63				68.73
Mustang Max	oz											8.0000	1.34	10.72	10.72
Trailer - Vegetables	16'	2WD 75 hp	0.090	1.00	May	0.72	0.56	0.05	0.08	0.18	2.15				3.56
HARVEST LABOR	hour									150.00	1557.00				1557.00
Bushel Box	each											200.0000	1.50	300.00	300.00
Load Conveyor S Bean	hour									20.00	207.60				207.60
GRD LABORS - BEANS	hour											200.0000	1.37	274.00	274.00
Cooling Snap Beans	bu box											0.0200			2.79
R.B.ConveySnapBeans	each							79.68	2.79	40.00	415.20				494.88
Application 1	bu											0.0200			2.62
Rot.Pk Table S Beans	each							7.58	2.62	2.00	20.76				28.34
Application 1	bu											200.0000			28.34
TOTALS						24.81	19.35	158.16	130.62	215.45	2246.19			1211.37	3790.50
INTEREST ON OPERATING CAPITAL															20.89
UNALLOCATED LABOR															8.39
TOTAL SPECIFIED COST															3819.78

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 10.B Estimated costs per acre
 Snap beans, fresh market, hand harvest
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	6.0000	129.48	_____
AMM Sulfate 33%	cwt	22.50	0.7500	16.88	_____
FUNGICIDE					
Blocker 10G	lb	1.24	13.7500	17.05	_____
Kocide 2000	lb	6.27	3.0000	18.81	_____
HERBICIDE					
Treflan	pt	3.52	2.0000	7.04	_____
INSECTICIDE					
Mustang Max	oz	1.34	16.0000	21.44	_____
SEED/PLANTS					
Snap Beans - Hybrid	lb	5.77	70.0000	403.90	_____
OTHER					
Bushel Box	each	1.50	200.0000	300.00	_____
Cooling Snap Beans	bu box	1.37	200.0000	274.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	3.1054	41.95	_____
HARVEST LABOR					
Special Labor	hour	10.38	150.0000	1557.00	_____
HAND LABOR					
Implements	hour	10.38	0.3543	3.68	_____
GRD LABORS. BEANS					
Special Labor	hour	10.38	20.0000	207.60	_____
R.B.ConveySnapBeans	hour	10.38	40.0000	415.20	_____
Rot.Pk Table S Beans	hour	10.38	2.0000	20.76	_____
UNALLOCATED LABOR	hour	13.50	0.6210	8.39	_____
DIESEL FUEL					
Tractors	gal	1.80	11.9884	21.59	_____
REPAIR & MAINTENANCE					
Implements	acre	70.90	1.0000	70.90	_____
Tractors	acre	3.22	1.0000	3.22	_____
R.B.ConveySnapBeans	bu	0.39	200.0000	79.68	_____
Rot.Pk Table S Beans	bu	0.03	200.0000	7.58	_____
INTEREST ON OP. CAP.	acre	20.89	1.0000	20.89	_____
TOTAL DIRECT EXPENSES				3669.81	_____
FIXED EXPENSES					
Implements	acre	125.21	1.0000	125.21	_____
Tractors	acre	19.35	1.0000	19.35	_____
R.B.ConveySnapBeans	each	139.54	0.0200	2.79	_____
Rot.Pk Table S Beans	each	130.87	0.0200	2.62	_____
TOTAL FIXED EXPENSES				149.97	_____
TOTAL SPECIFIED EXPENSES				3819.78	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 10.C Estimated monthly income and expense flows per acre
 Snap beans, fresh market, hand harvest
 Mississippi, 2018

ITEM	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	152.25	0.00	16.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	17.05	18.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	7.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	10.72	10.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	403.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	574.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	17.17	14.39	20.07	2202.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	6.62	6.17	8.17	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	3.14	28.48	42.36	87.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	2.94	5.71	0.91	11.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	189.16	486.42	117.92	2876.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-189.16	-486.42	-117.92	-2876.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-189.16	-675.58	-793.50	-3669.81	-3669.81	-3669.81	-3669.81	-3669.81	-3669.81	-3669.81	-3669.81	-3669.81

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 10.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Snap beans, fresh market, hand harvest
 Mississippi, 2018

Snap Beans	BREAKEVEN PRICE													
	13.69	14.46	15.35	16.39	17.62	19.09	20.90	23.15	26.04	29.91	35.31			
PERCENT YIELD	UNIT													
	-dollars-													
50	100.00	301b	-2012 -2162	-1935 -2085	-1846 -1996	-1742 -1892	-1619 -1769	-1471 -1621	-1291 -1441	-1066 -1216	-776 -926	-390 -540	149 0	
60	120.00	301b	-1796 -1946	-1703 -1853	-1596 -1746	-1471 -1621	-1324 -1474	-1147 -1297	-931 -1081	-660 -810	-313 -463	149 0	798 648	
70	140.00	301b	-1579 -1729	-1471 -1621	-1347 -1497	-1201 -1351	-1029 -1179	-823 -973	-570 -720	-255 -405	149 0	690 540	1447 1297	
80	160.00	301b	-1363 -1513	-1240 -1390	-1097 -1247	-931 -1081	-734 -884	-498 -648	-210 -360	149 0	613 463	1231 1081	2096 1946	
90	180.00	301b	-1147 -1297	-1008 -1158	-848 -998	-660 -810	-439 -589	-174 -324	149 0	555 405	1076 926	1771 1621	2744 2594	
100	200.00	301b	-931 -1081	-776 -926	-598 -748	-390 -540	-144 -294	149 0	510 360	960 810	1540 1390	2312 2162	3393 3243	
110	220.00	301b	-714 -864	-545 -695	-349 -499	-120 -270	149 0	474 324	870 720	1366 1216	2003 1853	2852 2702	4042 3892	
120	240.00	301b	-498 -648	-313 -463	-99 -249	149 0	444 294	798 648	1231 1081	1771 1621	2466 2316	3393 3243	4690 4540	
130	260.00	301b	-282 -432	-81 -231	149 0	420 270	739 589	1123 973	1591 1441	2177 2027	2930 2780	3934 3784	5339 5189	
140	280.00	301b	-66 -216	149 0	399 249	690 540	1034 884	1447 1297	1951 1801	2582 2432	3393 3243	4474 4324	5988 5838	
150	300.00	301b	149 0	381 231	648 499	960 810	1329 1179	1771 1621	2312 2162	2988 2838	3856 3706	5015 4865	6636 6487	

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 11.A Estimated resource use and costs for field operations, per acre
 Snap beans, fresh market, mechanical harvest
 Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST			EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST		
-----dollars-----															
Lime (Spread)	ton		0.33	Feb								0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	Feb	1.76	1.37	0.39	0.68	0.22	2.98					7.18
Disk Harrow	10'	2WD 75 hp	0.198	Feb	3.17	2.47	1.11	2.35	0.39	5.36					14.46
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	Feb	1.13	0.88	0.45	1.19	0.21	2.63					6.28
Fert 13-13-13	cwt											6.0000	21.58	129.48	129.48
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	Feb	1.55	1.21	0.20	0.52	0.29	3.63					7.11
Treflan	pt											2.0000	3.52	7.04	7.04
Plntr - Vacuum	2-Row	2WD 75 hp	0.396	Mar	3.17	2.47	7.41	11.78	0.39	5.36					30.19
Snap Beans - Hybrid	lb											70.0000	5.77	403.90	403.90
Blocker 10G	lb											13.7500	1.24	17.05	17.05
Sprayer Air Blast	16', 100 ga	2WD 75 hp	0.245	Mar	3.92	3.06	20.15	34.97	0.49	6.63					68.73
Mustang Max	oz											8.0000	1.34	10.72	10.72
Sprayer Air Blast	16', 100 ga	2WD 75 hp	0.245	Apr	3.92	3.06	20.15	34.97	0.49	6.63					68.73
Kocide 2000	lb											3.0000	6.27	18.81	18.81
Cultivate+Sidedress	2-Row	2WD 75 hp	0.390	Apr	3.11	2.43	0.46	2.04	0.58	7.31					15.35
AMM Sulfate 33%	cwt											0.7500	22.50	16.88	16.88
Sprayer Air Blast	16', 100 ga	2WD 75 hp	0.245	Apr	3.92	3.06	20.15	34.97	0.49	6.63					68.73
Mustang Max	oz											8.0000	1.34	10.72	10.72
Picker Beans/Peas	1-Row	2WD 75 hp	3.571	May	28.51	22.23	60.06	42.90	10.71	122.39					276.09
Bushel Box	each											150.0000	1.50	225.00	225.00
Trailer - Snap Bean	16'	2WD 75 hp	3.571	May	28.51	22.23	2.17	3.63	7.14	85.32					141.86
Load Conveyor S Bean	hour														207.60
GRD LABORS. BEANS	bu box										20.00				205.50
Cooling Snap Beans	each											0.0200			2.79
R.B.ConveySnapBeans	each											150.0000			371.16
Application 1	bu											0.0200			2.62
Rot.Pk Table S Beans	each											150.0000			21.26
Application 1	bu														
TOTALS					82.67	64.47	198.15	175.41	72.93	789.44					2378.01
INTEREST ON OPERATING CAPITAL															15.04
UNALLOCATED LABOR															27.99
TOTAL SPECIFIED COST															2421.04

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 11.B Estimated costs per acre
 Snap beans, fresh market, mechanical harvest
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	6.0000	129.48	_____
AMM Sulfate 33%	cwt	22.50	0.7500	16.88	_____
FUNGICIDE					
Blocker 10G	lb	1.24	13.7500	17.05	_____
Kocide 2000	lb	6.27	3.0000	18.81	_____
HERBICIDE					
Treflan	pt	3.52	2.0000	7.04	_____
INSECTICIDE					
Mustang Max	oz	1.34	16.0000	21.44	_____
SEED/PLANTS					
Snap Beans - Hybrid	lb	5.77	70.0000	403.90	_____
OTHER					
Bushel Box	each	1.50	150.0000	225.00	_____
Cooling Snap Beans	bu box	1.37	150.0000	205.50	_____
OPERATOR LABOR					
Tractors	hour	13.51	10.3551	139.89	_____
HAND LABOR					
Implements	hour	10.38	11.0770	114.98	_____
GRD LABORS. BEANS					
Special Labor	hour	10.38	20.0000	207.60	_____
R.B.ConveySnapBeans	hour	10.38	30.0000	311.40	_____
Rot.Pk Table S Beans	hour	10.38	1.5000	15.57	_____
UNALLOCATED LABOR	hour	13.51	2.0710	27.99	_____
DIESEL FUEL					
Tractors	gal	1.80	39.9749	71.96	_____
REPAIR & MAINTENANCE					
Implements	acre	132.70	1.0000	132.70	_____
Tractors	acre	10.71	1.0000	10.71	_____
R.B.ConveySnapBeans	bu	0.39	150.0000	59.76	_____
Rot.Pk Table S Beans	bu	0.03	150.0000	5.69	_____
INTEREST ON OP. CAP.	acre	15.04	1.0000	15.04	_____
TOTAL DIRECT EXPENSES				2181.16	_____
FIXED EXPENSES					
Implements	acre	170.00	1.0000	170.00	_____
Tractors	acre	64.47	1.0000	64.47	_____
R.B.ConveySnapBeans	each	139.54	0.0200	2.79	_____
Rot.Pk Table S Beans	each	130.87	0.0200	2.62	_____
TOTAL FIXED EXPENSES				239.88	_____
TOTAL SPECIFIED EXPENSES				2421.04	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 11.C Estimated monthly income and expense flows per acre
 Snap beans, fresh market, mechanical harvest
 Mississippi, 2018

ITEM	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	152.25	0.00	16.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	17.05	18.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	7.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	10.72	10.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	403.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	430.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	17.17	14.39	24.29	761.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	6.62	6.17	9.53	49.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	3.14	28.48	42.18	135.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	2.94	5.71	0.95	5.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	189.16	486.42	123.36	1382.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-189.16	-486.42	-123.36	-1382.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-189.16	-675.58	-798.94	-2181.16	-2181.16	-2181.16	-2181.16	-2181.16	-2181.16	-2181.16	-2181.16	-2181.16

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 11.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Snap beans, fresh market, mechanical harvest
 Mississippi, 2018

Snap Beans	PERCENT YIELD	UNIT	BREAKEVEN PRICE																					
			11.72	12.35	13.08	13.93	14.93	16.14	17.61	19.45	21.82	24.97	29.39											
50	75.00	30lb	-1086	-1038	-984	-920	-844	-754	-644	-505	-328	-91	239	-1325	-1278	-1223	-1160	-1084	-994	-883	-745	-568	-331	0
60	90.00	30lb	-953	-896	-831	-754	-664	-555	-423	-257	-44	239	637	-1193	-1136	-1070	-994	-904	-795	-662	-497	-284	0	397
70	105.00	30lb	-820	-754	-678	-588	-483	-356	-202	-8	239	1035	-1060	-994	-917	-828	-723	-596	-441	-248	0	331	795	
80	120.00	30lb	-688	-612	-525	-423	-302	-157	18	239	524	1433	-928	-852	-764	-662	-542	-397	-220	0	284	662	1193	
90	135.00	30lb	-555	-470	-372	-257	-121	40	239	488	808	1830	-795	-710	-611	-497	-361	-198	0	248	568	994	1591	
100	150.00	30lb	-423	-328	-219	-91	59	239	460	737	1092	2228	-662	-568	-458	-331	-180	0	497	852	1325	1988		
110	165.00	30lb	-290	-186	-66	74	239	438	681	985	1376	2626	-530	-426	-305	-165	0	198	441	745	1136	1657	2386	
120	180.00	30lb	-157	-44	86	239	420	637	902	1234	1660	3024	-397	-284	-152	0	180	397	662	994	1420	1988	2784	
130	195.00	30lb	-25	97	239	405	601	836	1123	1482	1944	3422	-265	-142	0	165	361	596	883	1243	1704	2320	3182	
140	210.00	30lb	107	239	392	571	782	1035	1344	1731	2228	3819	-132	0	152	331	542	795	1104	1491	1988	2651	3579	
150	225.00	30lb	239	381	545	737	963	1234	1565	1980	2512	4217	0	142	305	497	723	994	1325	1740	2272	2983	3977	

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 12.A Estimated resource use and costs for field operations, per acre
 Southern peas, fresh market, hand harvest
 Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST			EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
-----dollars-----														
Lime (Spread)	ton		0.33	Jan								0.4950	46.00	22.77
Sub-Soiler	2 shank	2WD 75 hp	0.404	Feb	3.23	2.52	1.13	2.68	0.40	5.46				15.02
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	Feb	0.67	0.52	0.08	0.30	0.08	1.14				2.71
AMM Sulfate 33%	cwt											0.5000	22.50	11.25
Phosphorus (46% P205)	cwt											1.5600	18.75	29.25
Potash (60% K2O)	cwt											1.2000	22.20	26.64
Disk Harrow	14'	2WD 75 hp	0.141	Mar	2.26	1.76	1.95	4.12	0.28	3.83				13.92
Disk Bed	4-Row	2WD 75 hp	0.140	Mar	1.13	0.88	0.31	0.82	0.14	1.90				5.04
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	Apr	1.55	1.21	0.20	0.52	0.29	3.63				7.11
Treflan	pt											0.5000	3.52	1.76
Plntr - Vacuum	4-Row	2WD 75 hp	0.226	Apr	1.80	1.41	17.41	27.68	0.22	3.06				51.36
Southern Peas - OP	lb											10.0000	4.55	45.50
Sprayer Air Blast	16', 100 ga	2WD 75 hp	0.245	Apr	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Brigade 2EC	oz											6.0000	0.74	4.44
Sprayer Air Blast	16', 100 ga	2WD 75 hp	0.245	May	3.92	3.06	20.15	34.97	0.49	6.63				68.73
Mustang Max	oz											8.0000	1.34	10.72
Cultivate	4-Row	2WD 75 hp	0.155	May	1.24	0.97	0.33	0.87	0.15	2.10				5.51
Trailer - Vegetables	16'	2WD 75 hp	0.090	May	2.16	1.68	0.15	0.25	0.54	6.45				10.69
HARVEST LABOR	hour			May					75.00	778.50				778.50
5-Gal Bucket	each											20.0000	4.00	80.00
Sheller S. Peas	each			May				6.20				0.0200		6.20
100/10 lb bg S. Peas	acre											1.0000		62.53
R.B.Convey S. Peas	each			May			0.25	2.79	6.00	62.28				2.79
Rot.Pk.Table S Peas	each			May				2.62				0.0200		2.62
Application 1	acre								3.00	31.14				31.29
Bag Sealer S. Peas	each			May				0.72				0.0200		0.72
Application 1	acre								0.10	1.04				1.56
TOTALS					19.92	15.54	52.71	102.03	86.96	910.48			232.33	1333.01
INTEREST ON OPERATING CAPITAL														
UNALLOCATED LABOR														
TOTAL SPECIFIED COST														

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 12.B Estimated costs per acre
 Southern peas, fresh market, hand harvest
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
AMM Sulfate 33%	cwt	22.50	0.5000	11.25	_____
Phosphorus (46% P205)	cwt	18.75	1.5600	29.25	_____
Potash (60% K20)	cwt	22.20	1.2000	26.64	_____
HERBICIDE					
Treflan	pt	3.52	0.5000	1.76	_____
INSECTICIDE					
Brigade 2EC	oz	0.74	6.0000	4.44	_____
Mustang Max	oz	1.34	8.0000	10.72	_____
SEED/PLANTS					
Southern Peas - OP	lb	4.55	10.0000	45.50	_____
OTHER					
5-Gal Bucket	each	4.00	20.0000	80.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	2.4950	33.71	_____
HARVEST LABOR					
Special Labor	hour	10.38	75.0000	778.50	_____
HAND LABOR					
Implements	hour	10.38	0.3669	3.81	_____
GRD LABOR PEAS					
Rot.Pk.Table S Peas	hour	10.38	3.0000	31.14	_____
Bag Sealer S. Peas	hour	10.38	0.1000	1.04	_____
Sheller S. Peas	hour	10.38	6.0000	62.28	_____
UNALLOCATED LABOR	hour	13.50	0.4990	6.74	_____
DIESEL FUEL					
Tractors	gal	1.80	9.6319	17.34	_____
REPAIR & MAINTENANCE					
Implements	acre	51.79	1.0000	51.79	_____
Tractors	acre	2.58	1.0000	2.58	_____
Rot.Pk.Table S Peas	acre	0.15	1.0000	0.15	_____
Bag Sealer S. Peas	acre	0.52	1.0000	0.52	_____
Sheller S. Peas	acre	0.25	1.0000	0.25	_____
INTEREST ON OP. CAP.	acre	6.63	1.0000	6.63	_____
TOTAL DIRECT EXPENSES				1228.81	_____
FIXED EXPENSES					
Implements	acre	89.70	1.0000	89.70	_____
Tractors	acre	15.54	1.0000	15.54	_____
R.B.Convey S. Peas	each	139.54	0.0200	2.79	_____
Rot.Pk.Table S Peas	each	130.87	0.0200	2.62	_____
Bag Sealer S. Peas	each	36.17	0.0200	0.72	_____
Sheller S. Peas	each	309.85	0.0200	6.20	_____
TOTAL FIXED EXPENSES				117.57	_____
TOTAL SPECIFIED EXPENSES				1346.38	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 12.C Estimated monthly income and expense flows per acre
 Southern peas, fresh market, hand harvest
 Mississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	67.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	0.00	0.00	1.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.00	4.44	10.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	45.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	0.00	80.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	7.92	6.88	11.80	890.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	3.39	2.95	4.63	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.00	1.72	2.70	28.37	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.45	1.26	0.14	0.77	4.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	23.22	81.43	12.67	97.27	1014.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-23.22	-81.43	-12.67	-97.27	-1014.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-23.22	-104.65	-117.32	-214.59	-1228.81	-1228.81	-1228.81	-1228.81	-1228.81	-1228.81	-1228.81	-1228.81

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 13.A Estimated resource use and costs for field operations, per acre
 Southern peas, fresh market, mechanical harvest
 Mississippi, 2018

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		AMOUNT
						-----dollars-----		-----dollars-----		-----dollars-----		-----dollars-----			
Lime (Spread)	ton			0.33	Jan							0.4950	46.00	22.77	22.77
Sub-Soiler	2 shank	2WD 75 hp	0.404	1.00	Feb	3.23	2.52	1.13	2.68	0.40	5.46				15.02
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	1.00	Feb	0.67	0.52	0.08	0.30	0.08	1.14				2.71
AMM Sulfate 33%	cwt											0.5000	22.50	11.25	11.25
Phosphorus (46% P205)	cwt											1.5600	18.75	29.25	29.25
Potash (60% K2O)	cwt											1.2000	22.20	26.64	26.64
Disk Harrow	14'	2WD 75 hp	0.141	2.00	Mar	2.26	1.76	1.95	4.12	0.28	3.83				13.92
Disk Bed	4-Row	2WD 75 hp	0.140	1.00	Mar	1.13	0.88	0.31	0.82	0.14	1.90				5.04
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	1.00	Apr	1.55	1.21	0.20	0.52	0.29	3.63				7.11
Treflan	pt											0.5000	3.52	1.76	1.76
Plntr - Vacuum	4-Row	2WD 75 hp	0.226	1.00	Apr	1.80	1.41	17.41	27.68	0.22	3.06				51.36
Southern Peas - OP	lb											10.0000	4.55	45.50	45.50
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Apr	1.96	1.53	10.08	17.49	0.24	3.32				34.38
Brigade 2EC	oz											6.0000	0.74	4.44	4.44
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	2.00	May	3.92	3.06	20.15	34.97	0.49	6.63				68.73
Mustang Max	oz											8.0000	1.34	10.72	10.72
Cultivate	4-Row	2WD 75 hp	0.155	1.00	May	1.24	0.97	0.33	0.87	0.15	2.10				5.51
Trailer-Southern Pea	16'	2WD 75 hp	3.571	1.00	May	28.51	22.23	2.17	3.63	7.14	85.32				141.86
Picker Beans/Peas	1-Row	2WD 75 hp	3.571	1.00	May	28.51	22.23	60.06	42.90	10.71	122.39				276.09
Sacks - S Peas	each											75.0000	0.42	31.50	31.50
Sheller S. Peas	each			1.00	May				6.20			0.0200			6.20
64/10 lb bg S. Peas	acre							0.25		6.00	62.28	1.0000			62.53
R.B.Convey S. Peas	each			1.00	May				2.79			0.0200			2.79
Rot.Pk.Table S Peas	each			1.00	May				2.62			0.0200			2.62
Application 1	acre							0.15		3.00	31.14	1.0000			31.29
Bag Sealer S. Peas	each			1.00	May				0.72			0.0200			0.72
Application 1	acre							0.52		0.10	1.04	1.0000			1.56
TOTALS						74.78	58.32	114.79	148.31	29.27	333.24			183.83	913.27
INTEREST ON OPERATING CAPITAL															4.68
UNALLOCATED LABOR															25.31
TOTAL SPECIFIED COST															943.26

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 13.B Estimated costs per acre
 Southern peas, fresh market, mechanical harvest
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
AMM Sulfate 33%	cwt	22.50	0.5000	11.25	_____
Phosphorus(46% P205)	cwt	18.75	1.5600	29.25	_____
Potash (60% K20)	cwt	22.20	1.2000	26.64	_____
HERBICIDE					
Treflan	pt	3.52	0.5000	1.76	_____
INSECTICIDE					
Brigade 2EC	oz	0.74	6.0000	4.44	_____
Mustang Max	oz	1.34	8.0000	10.72	_____
SEED/PLANTS					
Southern Peas - OP	lb	4.55	10.0000	45.50	_____
OTHER					
Sacks - S Peas	each	0.42	75.0000	31.50	_____
OPERATOR LABOR					
Tractors	hour	13.51	9.3679	126.56	_____
HAND LABOR					
Implements	hour	10.38	10.8112	112.22	_____
GRD LABORPEAS					
Rot.Pk.Table S Peas	hour	10.38	3.0000	31.14	_____
Bag Sealer S. Peas	hour	10.38	0.1000	1.04	_____
Sheller S. Peas	hour	10.38	6.0000	62.28	_____
UNALLOCATED LABOR	hour	13.50	1.8735	25.31	_____
DIESEL FUEL					
Tractors	gal	1.80	36.1639	65.10	_____
REPAIR & MAINTENANCE					
Implements	acre	113.87	1.0000	113.87	_____
Tractors	acre	9.68	1.0000	9.68	_____
Rot.Pk.Table S Peas	acre	0.15	1.0000	0.15	_____
Bag Sealer S. Peas	acre	0.52	1.0000	0.52	_____
Sheller S. Peas	acre	0.25	1.0000	0.25	_____
INTEREST ON OP. CAP.	acre	4.68	1.0000	4.68	_____
TOTAL DIRECT EXPENSES				736.63	_____
FIXED EXPENSES					
Implements	acre	135.98	1.0000	135.98	_____
Tractors	acre	58.32	1.0000	58.32	_____
R.B.Convey S. Peas	each	139.54	0.0200	2.79	_____
Rot.Pk.Table S Peas	each	130.87	0.0200	2.62	_____
Bag Sealer S. Peas	each	36.17	0.0200	0.72	_____
Sheller S. Peas	each	309.85	0.0200	6.20	_____
TOTAL FIXED EXPENSES				206.63	_____
TOTAL SPECIFIED EXPENSES				943.26	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 13.C Estimated monthly income and expense flows per acre
Southern peas, fresh market, mechanical harvest
Mississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	67.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	0.00	0.00	1.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.00	4.44	10.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	45.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	0.00	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	7.92	6.88	11.80	331.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	3.39	2.95	4.63	54.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.00	1.72	2.70	28.37	91.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.45	1.26	0.14	0.77	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	23.22	81.43	12.67	97.27	522.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-23.22	-81.43	-12.67	-97.27	-522.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-23.22	-104.65	-117.32	-214.59	-736.63	-736.63	-736.63	-736.63	-736.63	-736.63	-736.63	-736.63

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 13.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Southern peas, fresh market, mechanical harvest
 Mississippi, 2018

		-----BREAK-EVEN PRICE-----										
		9.82	10.52	11.33	12.28	13.39	14.73	16.37	18.42	21.05	24.56	29.47
PERCENT	YIELD UNIT	-----dollars-----										
50	32.00 101b	-422	-399	-373	-343	-307	-265	-212	-147	-62	49	206
		-628	-606	-580	-550	-514	-471	-419	-353	-269	-157	0
60	38.40 101b	-359	-332	-301	-265	-222	-170	-107	-29	71	206	395
		-565	-539	-507	-471	-428	-377	-314	-235	-134	0	188
70	44.80 101b	-296	-265	-228	-186	-136	-76	-2	88	206	363	583
		-503	-471	-435	-393	-343	-282	-209	-117	0	157	377
80	51.20 101b	-233	-197	-156	-107	-50	17	101	206	341	521	772
		-440	-404	-362	-314	-257	-188	-104	0	134	314	565
90	57.60 101b	-170	-130	-83	-29	35	112	206	324	476	678	961
		-377	-336	-290	-235	-171	-94	0	117	269	471	754
100	64.00 101b	-107	-62	-11	49	120	206	311	442	610	835	1149
		-314	-269	-217	-157	-85	0	104	235	404	628	943
110	70.40 101b	-44	4	61	128	206	300	416	560	745	992	1338
		-251	-202	-145	-78	0	94	209	353	539	786	1131
120	76.80 101b	17	71	134	206	292	395	521	678	880	1149	1527
		-188	-134	-72	0	85	188	314	471	673	943	1320
130	83.20 101b	80	139	206	285	378	489	625	796	1015	1307	1715
		-125	-67	0	78	171	282	419	589	808	1100	1509
140	89.60 101b	143	206	279	363	463	583	730	914	1149	1464	1904
		-62	0	72	157	257	377	524	707	943	1257	1697
150	96.00 101b	206	274	351	442	549	678	835	1031	1284	1621	2093
		0	67	145	235	343	471	628	825	1078	1414	1886

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 14.A Estimated resource use and costs for field operations, per acre
Squash, summer, fresh market, irrigated
5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST	
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE		COST
-----dollars-----														
Lime (Spread)	ton		0.33	Feb								0.4950	46.00	22.77
Chisel Plow	7'	2WD 75 hp	0.220	1.00	Feb	1.76	1.37	0.39	0.68	0.22	2.98			7.18
Disk Harrow	10'	2WD 75 hp	0.198	2.00	Mar	3.17	2.47	1.11	2.35	0.39	5.36			14.46
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	1.00	Mar	1.13	0.88	0.45	1.19	0.21	2.63			6.28
Fert 13-13-13	cwt											9.0000	21.58	194.22
BS, Jay/Tape/Squash	Bed 5'cntr	2WD 75 hp	1.294	1.00	Mar	10.33	8.06	2.74	7.78	1.29	17.48			46.39
Plastic Mulch	roll													627.00
Drip Tape	roll													260.55
Plntr/H20/pnch/seed	1-Row	2WD 75 hp	2.578	1.00	Apr	20.58	16.05	5.09	8.24	5.15	61.59			111.55
Squash - Hybrid	lb											2.0000	220.00	440.00
Irrigation			1.00	Apr								6.0000	110.97	665.82
Rural Water	ac-in													665.82
Fertigate CAN03/KN03	hour		1.00	Apr						1.00	10.38			10.38
FERTIGATION LABOR	lb											25.0000	0.29	7.25
Calcium Nitrate	oz									0.24	3.32			34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Apr	1.96	1.53	10.08	17.49	0.24	3.32			4.44
Brigade 2EC												6.0000	0.74	4.44
Fertigate CAN03/KN03	hour		2.00	Apr						2.00	20.76			20.76
FERTIGATION LABOR	lb											50.0000	0.29	14.50
Calcium Nitrate	oz									0.24	3.32			34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Apr	1.96	1.53	10.08	17.49	0.24	3.32			23.54
Quadris												11.0000	2.14	23.54
Fertigate CAN03/KN03	hour		1.00	Apr						1.00	10.38			10.38
FERTIGATION LABOR	lb											25.0000	0.29	7.25
Calcium Nitrate	oz									0.49	6.63			68.73
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	2.00	Apr	3.92	3.06	20.15	34.97	0.49	6.63			8.88
Brigade 2EC												3.0000	6.56	19.68
Bravo Weather Stick	pt		4.00	May										41.52
Fertigate CAN03/KN03	hour									4.00	41.52			29.00
FERTIGATION LABOR	lb											100.0000	0.29	29.00
Calcium Nitrate	oz									0.24	3.32			34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	May	1.96	1.53	10.08	17.49	0.24	3.32			31.43
Assail 30 SG	oz									1.80	21.50			35.59
Trailer - Vegetables	16'	2WD 75 hp	0.090	10.00	Jun	7.18	5.60	0.49	0.82	100.00	1038.00			1038.00
HARVEST LABOR	hour		1.00	Jun								200.0000	4.00	800.00
5-Gal Bucket	each											250.0000	1.50	375.00
Bushel Box	each													800.00
GRADE & PACK LABOR	hour		10.00	Jun						110.00	1141.80			1141.80
Mulch Lifter	1-Row	2WD 75 hp	0.589	1.00	Jun	4.70	3.67	0.15	2.67	0.58	7.96			19.15
LABOR MULCH CLEANUP	hour									15.00	155.70			155.70
Irrigation Setup	acre			Apr								1.0000		315.50
TOTALS						58.65	45.75	60.81	111.17	243.89	2554.63			6677.84
INTEREST ON OPERATING CAPITAL														50.04
UNALLOCATED LABOR														19.85
TOTAL SPECIFIED COST														6747.73

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 14.B Estimated costs per acre
 Squash, summer, fresh market, irrigated
 5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	9.0000	194.22	_____
Calcium Nitrate	lb	0.29	200.0000	58.00	_____
FUNGICIDE					
Quadris	oz	2.14	11.0000	23.54	_____
Bravo Weather Stick	pt	6.56	3.0000	19.68	_____
INSECTICIDE					
Brigade 2EC	oz	0.74	18.0000	13.32	_____
Assail 30 SG	oz	5.93	5.3000	31.43	_____
SEED/PLANTS					
Squash - Hybrid	lb	220.00	2.0000	440.00	_____
OTHER					
Plastic Mulch	roll	285.00	2.2000	627.00	_____
5-Gal Bucket	each	4.00	200.0000	800.00	_____
Bushel Box	each	1.50	250.0000	375.00	_____
IRRIGATION SUPPLIES					
Drip Tape	roll	173.70	1.5000	260.55	_____
Rural Water	ac-in	110.97	6.0000	665.82	_____
OPERATOR LABOR					
Tractors	hour	13.51	7.3471	99.26	_____
HARVEST LABOR					
Special Labor	hour	10.38	100.0000	1038.00	_____
GRADE & PACK LABOR					
Special Labor	hour	10.38	110.0000	1141.80	_____
HAND LABOR					
Implements	hour	10.38	3.5486	36.83	_____
FERTIGATION LABOR					
Special Labor	hour	10.38	8.0000	83.04	_____
LABOR MULCH CLEANUP					
Special Labor	hour	10.38	15.0000	155.70	_____
UNALLOCATED LABOR					
	hour	13.50	1.4694	19.85	_____
DIESEL FUEL					
Tractors	gal	1.80	28.3629	51.05	_____
REPAIR & MAINTENANCE					
Implements	acre	60.81	1.0000	60.81	_____
Tractors	acre	7.60	1.0000	7.60	_____
INTEREST ON OP. CAP.	acre	50.04	1.0000	50.04	_____
TOTAL DIRECT EXPENSES				6275.31	_____
FIXED EXPENSES					
Implements	acre	111.17	1.0000	111.17	_____
Tractors	acre	45.75	1.0000	45.75	_____
Irrigation Setup	acre	315.50	1.0000	315.50	_____
TOTAL FIXED EXPENSES				472.42	_____
TOTAL SPECIFIED EXPENSES				6747.73	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.
 Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 14.C Table 14.E Estimated monthly income and expense flows per acre
Squash, summer, fresh market, irrigated
5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018

ITEM	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	194.22	29.00	29.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	43.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	13.32	31.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	440.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	627.00	0.00	0.00	1175.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	260.55	665.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	30.42	126.00	45.50	2368.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.53	12.73	24.74	1.71	10.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.62	6.20	49.08	10.33	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.56	17.92	16.53	0.94	14.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	29.06	1149.04	1407.71	118.91	3570.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-29.06	-1149.04	-1407.71	-118.91	-3570.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-29.06	-1178.10	-2585.81	-2704.72	-6275.31	-6275.31	-6275.31	-6275.31	-6275.31	-6275.31	-6275.31	-6275.31

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.
* Lease costs are based on hourly usage costs.

Table 14.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Squash, summer, fresh market, irrigated
 5 ft row spacing, 20 gpm with 8,712 ft of drip tape, Mississippi, 2018

Squash	PERCENT YIELD	UNIT	BREAK-EVEN PRICE												
			18.49	19.70	21.10	22.74	24.67	26.99	29.82	33.36	37.91	43.98	52.47		
50	125.00	421b	-3775 -4247	-3623 -4095	-3448 -3920	-3244 -3716	-3002 -3475	-2713 -3185	-2359 -2831	-1916 -2389	-1347 -1820	-589 -1061	472 0		
60	150.00	421b	-3350 -3822	-3168 -3640	-2958 -3430	-2713 -3185	-2423 -2896	-2076 -2548	-1651 -2123	-1120 -1592	-437 -910	472 0	1746 1274		
70	175.00	421b	-2925 -3398	-2713 -3185	-2468 -2940	-2182 -2654	-1844 -2316	-1438 -1911	-943 -1415	-323 -796	472 0	1534 1061	3020 2548		
80	200.00	421b	-2500 -2973	-2258 -2730	-1978 -2450	-1651 -2123	-1265 -1737	-801 -1274	-235 -707	472 0	1382 910	2596 2123	4295 3822		
90	225.00	421b	-2076 -2548	-1803 -2275	-1487 -1960	-1120 -1592	-685 -1158	-164 -637	472 0	1268 796	2292 1820	3658 3185	5569 5097		
100	250.00	421b	-1651 -2123	-1347 -1820	-997 -1470	-589 -1061	-106 -579	472 0	1180 707	2065 1592	3202 2730	4719 4247	6843 6371		
110	275.00	421b	-1226 -1699	-892 -1365	-507 -980	-58 -530	472 0	1109 637	1888 1415	2861 2389	4113 3640	5781 5309	8117 7645		
120	300.00	421b	-801 -1274	-437 -910	-17 -490	472 0	1051 579	1746 1274	2596 2123	3658 3185	5023 4550	6843 6371	9392 8919		
130	325.00	421b	-377 -849	17 -455	472 0	1003 530	1630 1158	2383 1911	3304 2831	4454 3982	5933 5461	7905 7433	10666 10194		
140	350.00	421b	47 -424	472 0	962 490	1534 1061	2210 1737	3020 2548	4012 3539	5250 4778	6843 6371	8967 8495	11940 11468		
150	375.00	421b	472 0	927 455	1452 980	2065 1592	2789 2316	3658 3185	4719 4247	6047 5574	7753 7281	10029 9556	13214 12742		

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 15.A Estimated resource use and costs for field operations, per acre
Sweet corn, fresh market, hand harvest
Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST		
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE		COST	
													-----dollars-----		
Lime (Spread)	ton		0.33	Jan								0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	Feb	1.76	1.37	0.39	0.68	0.22	2.98					7.18
Disk Harrow	10'	2WD 75 hp	0.198	Feb	3.17	2.47	1.11	2.35	0.39	5.36					14.46
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	Mar	1.13	0.88	0.45	1.19	0.21	2.63					6.28
Fert 13-13-13	cwt											7.5000	21.58	161.85	161.85
Cultivate	4-Row	2WD 75 hp	0.155	Mar	1.24	0.97	0.33	0.87	0.15	2.10					5.51
Plntr - Vacuum	4-Row	2WD 75 hp	0.226	Mar	1.80	1.41	17.41	27.68	0.22	3.06					51.36
Sweet Corn - Hybrid	lb														163.98
Poncho	lbseed														0.15
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	Mar	1.55	1.21	0.20	0.52	0.29	3.63					7.11
Bicep II Magnum	pt														22.04
Cultivate+sidedress	4-Row	2WD 75 hp	0.193	Apr	3.09	2.41	1.68	7.41	0.58	7.25					21.84
AMM Sulfate 33%	cwt											4.0000	22.50	90.00	90.00
Sprayer 110 gal	30' 47hp		0.035	May	1.74	4.81			0.37	4.61					11.16
Brigade 2EC	oz											42.0000	0.74	31.08	31.08
Sprayer 110 gal	30' 47hp		0.035	Jun	1.24	3.44			0.26	3.29					7.97
Radiant 1SC	oz														204.60
Brigade 2EC	oz											30.0000	6.82	204.60	204.60
Trailer - Vegetables 16'		2WD 75 hp	0.090	Jun	0.72	0.56	0.05	0.08	0.18	2.15					14.80
HARVEST & PACK LABOR	hour		1.00	Jun					50.00	519.00					3.56
Crates - Sweet Corn	each		1.00	Jun								200.0000	2.35	470.00	470.00
Ice + Cooling	crate											200.0000	1.29	258.00	258.00
TOTALS					17.44	19.53	21.62	40.78	52.89	556.06			1439.27		2094.70
INTEREST ON OPERATING CAPITAL															14.32
UNALLOCATED LABOR															6.04
TOTAL SPECIFIED COST															2115.06

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 15.B Estimated costs per acre
 Sweet corn, fresh market, hand harvest
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	7.5000	161.85	_____
AMM Sulfate 33%	cwt	22.50	4.0000	90.00	_____
HERBICIDE					
Bicep II Magnum	pt	5.51	4.0000	22.04	_____
INSECTICIDE					
Poncho	lbseed	0.73	0.2020	0.15	_____
Brigade 2EC	oz	0.74	62.0000	45.88	_____
Radiant 1SC	oz	6.82	30.0000	204.60	_____
SEED/PLANTS					
Sweet Corn - Hybrid	lb	18.22	9.0000	163.98	_____
OTHER					
Crates - Sweet Corn	each	2.35	200.0000	470.00	_____
Ice + Cooling	crate	1.29	200.0000	258.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	1.8112	24.48	_____
Self-Propelled	hour	13.51	0.4231	5.71	_____
HAND LABOR					
Implements	hour	10.38	0.4512	4.68	_____
Self-Propelled	hour	10.38	0.2115	2.19	_____
HARVEST & PACK LABOR					
Special Labor	hour	10.38	50.0000	519.00	_____
UNALLOCATED LABOR	hour	13.51	0.4468	6.04	_____
DIESEL FUEL					
Tractors	gal	1.80	6.9920	12.59	_____
Self-Propelled	gal	1.80	0.9092	1.63	_____
REPAIR & MAINTENANCE					
Implements	acre	21.62	1.0000	21.62	_____
Tractors	acre	1.87	1.0000	1.87	_____
Self-Propelled	acre	1.35	1.0000	1.35	_____
INTEREST ON OP. CAP.	acre	14.32	1.0000	14.32	_____

TOTAL DIRECT EXPENSES				2054.75	_____
FIXED EXPENSES					
Implements	acre	40.78	1.0000	40.78	_____
Tractors	acre	11.28	1.0000	11.28	_____
Self-Propelled	acre	8.25	1.0000	8.25	_____

TOTAL FIXED EXPENSES				60.31	_____

TOTAL SPECIFIED EXPENSES				2115.06	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 15.C Estimated monthly income and expense flows per acre
Sweet corn, fresh market, hand harvest
Mississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	0.00	161.85	90.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	0.00	22.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.15	0.00	31.08	219.40	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	163.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	0.00	0.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	10.01	13.35	8.30	5.28	525.16	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	4.29	4.98	2.69	0.95	1.31	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.00	2.14	19.13	2.08	0.79	0.70	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.54	0.32	6.09	1.23	0.31	5.83	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	23.31	16.76	391.57	104.30	38.41	1480.40	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-23.31	-16.76	-391.57	-104.30	-38.41	-1480.40	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-23.31	-40.07	-431.64	-535.94	-574.35	-2054.75	-2054.75	-2054.75	-2054.75	-2054.75	-2054.75	-2054.75

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 15.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Sweet corn, fresh market, hand harvest
 Mississippi, 2018

Sweet Corn	PERCENT YIELD UNIT	BREAKEVEN PRICE																					
		8.26	8.59	8.97	9.42	9.94	10.57	11.34	12.30	13.54	15.18	17.49											
50	100.00 5doz	-862	-829	-791	-747	-694	-631	-554	-458	-335	-170	60	-922	-889	-851	-807	-755	-692	-615	-519	-395	-230	0
60	120.00 5doz	-770	-730	-685	-631	-568	-493	-401	-285	-137	60	337	-830	-790	-745	-692	-629	-553	-461	-346	-197	0	276
70	140.00 5doz	-677	-631	-578	-516	-443	-354	-247	-112	60	291	613	-738	-692	-638	-576	-503	-415	-307	-173	0	230	553
80	160.00 5doz	-585	-532	-472	-401	-317	-216	-93	60	258	521	890	-645	-593	-532	-461	-377	-276	-153	0	197	461	830
90	180.00 5doz	-493	-434	-365	-285	-191	-78	60	233	455	752	1167	-553	-494	-425	-346	-251	-138	0	173	395	692	1107
100	200.00 5doz	-401	-335	-259	-170	-65	60	214	406	653	983	1444	-461	-395	-319	-230	-125	0	153	346	593	922	1384
110	220.00 5doz	-308	-236	-152	-55	60	198	367	579	851	1213	1721	-369	-296	-212	-115	0	138	307	519	790	1153	1661
120	240.00 5doz	-216	-137	-46	60	186	337	521	752	1049	1444	1998	-276	-197	-106	0	276	461	692	988	1384	1937	
130	260.00 5doz	-124	-38	60	175	311	475	675	925	1246	1675	2274	-184	-98	0	115	251	415	615	865	1186	1614	2214
140	280.00 5doz	-31	60	166	291	437	613	829	1098	1444	1905	2551	-92	0	106	230	377	553	768	1038	1384	1845	2491
150	300.00 5doz	60	159	273	406	563	752	983	1271	1642	2136	2828	0	98	212	346	503	692	922	1211	1581	2076	2768

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 16.A Estimated resource use and costs for field operations, per acre
Sweet corn, fresh market, train harvest (shipping)
Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES		POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST	
			RATE	OVER	MTH	DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT		PRICE
-----dollars-----														
Lime (Spread)	ton			0.33	Jan						0.4950	46.00	22.77	22.77
Chisel Plow	7'	2WD 75 hp	0.220	1.00	Feb	1.76	1.37	0.39	0.68	0.22			2.98	7.18
Disk Harrow	10'	2WD 75 hp	0.198	2.00	Feb	3.17	2.47	1.11	2.35	0.39			5.36	14.46
Disk Bed +App Fert	4-Row	2WD 75 hp	0.140	1.00	Mar	1.13	0.88	0.45	1.19	0.21			2.63	6.28
Fert 13-13-13	cwt										7.5000	21.58	161.85	161.85
Cultivate	4-Row	2WD 75 hp	0.155	1.00	Mar	1.24	0.97	0.33	0.87	0.15			2.10	5.51
Plntr - Vacuum+Ins	4R 30-40	2WD 75 hp	0.226	1.00	Mar	1.80	1.41	19.06	30.31	0.22			3.06	55.64
Sweet Corn - Hybrid	lb										9.0000	18.22	163.98	163.98
Poncho	lbseed										0.2020	0.73	0.15	0.15
Cultivate+App Herb	4-Row	2WD 75 hp	0.193	1.00	Mar	1.55	1.21	0.20	0.52	0.29			3.63	7.11
Bicep II Magnum	pt										4.0000	5.51	22.04	22.04
Cultivate+Sidedress	2-Row	2WD 75 hp	0.390	2.00	Apr	6.24	4.86	0.93	4.09	1.17			14.60	30.72
AMM Sulfate 33%	cwt										4.0000	22.50	90.00	90.00
Sprayer 110 gal	30' 47hp		0.035	7.00	May	1.74	4.81			0.37			4.61	11.16
Brigade 2EC	oz										42.0000	0.74	31.08	31.08
Sprayer 110 gal	30' 47hp		0.035	5.00	Jun	1.24	3.44			0.26			3.29	7.97
Radiant 1SC	oz										30.0000	6.82	204.60	204.60
Brigade 2EC	oz										20.0000	0.74	14.80	14.80
Mule Train (Corn)	30'	2WD 75 hp	0.200	1.00	Jun	1.60	1.24	11.65	72.90	8.60			89.89	177.28
Trailer (MuleTrn)Corn	16'	2WD 75 hp	0.229	1.00	Jun	1.83	1.43	2.07	3.48	0.68			7.86	16.67
Crates - Sweet Corn	each			1.00	Jun						200.0000	2.35	470.00	470.00
Ice + Cooling	crate										200.0000	1.29	258.00	258.00
TOTALS						23.30	24.09	36.19	116.39	12.59		1439.27		1779.25
INTEREST ON OPERATING CAPITAL														12.87
UNALLOCATED LABOR														8.02
TOTAL SPECIFIED COST														1800.14

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Table 16.B Estimated costs per acre
 Sweet corn, fresh market, train harvest (shipping)
 Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	0.4950	22.77	_____
Fert 13-13-13	cwt	21.58	7.5000	161.85	_____
AMM Sulfate 33%	cwt	22.50	4.0000	90.00	_____
HERBICIDE					
Bicep II Magnum	pt	5.51	4.0000	22.04	_____
INSECTICIDE					
Poncho	lbseed	0.73	0.2020	0.15	_____
Brigade 2EC	oz	0.74	62.0000	45.88	_____
Radiant 1SC	oz	6.82	30.0000	204.60	_____
SEED/PLANTS					
Sweet Corn - Hybrid	lb	18.22	9.0000	163.98	_____
OTHER					
Crates - Sweet Corn	each	2.35	200.0000	470.00	_____
Ice + Cooling	crate	1.29	200.0000	258.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	2.5439	34.37	_____
Self-Propelled	hour	13.51	0.4231	5.71	_____
HARVEST LABOR					
Implements	hour	10.38	8.8583	91.95	_____
HAND LABOR					
Implements	hour	10.38	0.5580	5.79	_____
Self-Propelled	hour	10.38	0.2115	2.19	_____
UNALLOCATED LABOR	hour	13.51	0.5934	8.02	_____
DIESEL FUEL					
Tractors	gal	1.80	9.8207	17.68	_____
Self-Propelled	gal	1.80	0.9092	1.63	_____
REPAIR & MAINTENANCE					
Implements	acre	36.19	1.0000	36.19	_____
Tractors	acre	2.64	1.0000	2.64	_____
Self-Propelled	acre	1.35	1.0000	1.35	_____
INTEREST ON OP. CAP.	acre	12.87	1.0000	12.87	_____

TOTAL DIRECT EXPENSES				1659.66	_____
FIXED EXPENSES					
Implements	acre	116.39	1.0000	116.39	_____
Tractors	acre	15.84	1.0000	15.84	_____
Self-Propelled	acre	8.25	1.0000	8.25	_____

TOTAL FIXED EXPENSES				140.48	_____

TOTAL SPECIFIED EXPENSES				1800.14	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 16.C Estimated monthly income and expense flows per acre
Sweet corn, fresh market, train harvest (shipping)
Mississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	22.77	0.00	161.85	90.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	0.00	22.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.15	0.00	31.08	219.40	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	163.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	0.00	0.00	0.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	10.01	13.35	16.71	5.28	102.68	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	4.29	4.98	5.43	0.95	3.66	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.00	2.14	20.78	1.74	0.79	14.73	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.54	0.32	6.12	1.35	0.31	4.23	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	23.31	16.76	393.25	115.23	38.41	1072.70	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-23.31	-16.76	-393.25	-115.23	-38.41	-1072.70	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-23.31	-40.07	-433.32	-548.55	-586.96	-1659.66	-1659.66	-1659.66	-1659.66	-1659.66	-1659.66	-1659.66

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 16.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Sweet corn, fresh market, train harvest (shipping)
 Mississippi, 2018

Sweet Corn	-----BREAK-EVEN PRICE-----												
	7.21	7.47	7.76	8.10	8.51	9.00	9.59	10.33	11.29	12.56	14.34		
PERCENT YIELD	-----dollars-----												
UNIT													
50	100.00	5doz	-572	-546	-517	-483	-442	-394	-334	-260	-165	-37	140
			-712	-687	-658	-623	-583	-534	-475	-400	-305	-178	0
60	120.00	5doz	-501	-470	-435	-394	-345	-287	-215	-126	-12	140	354
			-641	-611	-575	-534	-486	-427	-356	-267	-152	0	213
70	140.00	5doz	-429	-394	-353	-305	-248	-180	-97	6	140	318	568
			-570	-534	-493	-445	-388	-320	-237	-133	0	178	427
80	160.00	5doz	-358	-317	-270	-215	-151	-73	21	140	293	496	782
			-498	-458	-411	-356	-291	-213	-118	0	152	356	641
90	180.00	5doz	-287	-241	-188	-126	-53	33	140	274	445	675	995
			-427	-381	-329	-267	-194	-106	0	133	305	534	855
100	200.00	5doz	-215	-165	-106	-37	43	140	259	407	598	853	1209
			-356	-305	-246	-178	-97	0	118	267	458	712	1069
110	220.00	5doz	-144	-88	-24	51	140	247	378	541	751	1031	1423
			-285	-229	-164	-89	0	106	237	400	611	891	1283
120	240.00	5doz	-73	-12	58	140	237	354	496	675	904	1209	1637
			-213	-152	-82	0	97	213	356	534	763	1069	1496
130	260.00	5doz	-2	64	140	229	334	461	615	808	1056	1387	1851
			-142	-76	0	89	194	320	475	668	916	1247	1710
140	280.00	5doz	69	140	222	318	432	568	734	942	1209	1566	2065
			-71	0	82	178	291	427	594	801	1069	1425	1924
150	300.00	5doz	140	216	304	407	529	675	853	1076	1362	1744	2279
			0	76	164	267	388	534	712	935	1222	1603	2138

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Table 17.A Estimated resource use and costs for field operations, per acre
Sweet potatoes
Mississippi, 2018

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	
-----dollars-----														
Trapping	acre													1.00
Spray (Broadcast)	60'	MFWD 130	0.028	1.00	Apr	0.44	0.60	0.24	0.28	0.04	0.53	1.0000	1.00	1.00
Gly Star Plus	pt													2.09
Disk Harrow	24'	MFWD 170	0.082	2.00	Apr	3.39	4.98	1.91	4.03	0.16	2.23	2.0000	2.17	4.34
Chisel Plow Folding	24'	MFWD 170	0.077	1.00	Apr	1.59	2.34	1.10	1.91	0.07	1.05			16.54
Custom Apply Fert	acre													7.99
Fert 5-20-30+S+B	cwt													7.00
Lorsban 15G	lb													176.55
Disk Bed (Hipper)fld	8R-40	MFWD 130	0.070	1.80	May	1.98	2.70	0.63	1.68	0.12	1.71	1.0000	7.00	31.26
Disk Bed (Hipper)fld	8R-40	MFWD 130	0.070	0.20	May	0.22	0.30	0.07	0.19	0.01	0.19	7.5000	23.54	176.55
Spray (Broadcast)	60'	MFWD 130	0.028	1.00	May	0.44	0.60	0.24	0.28	0.04	0.53	13.3000	2.35	31.26
Valor SX	oz													8.70
Trailer-Sweet Potato	16'	MFWD 130	0.598	1.00	May	9.32	12.72	5.42	9.08	0.59	8.09	2.0000	4.57	9.14
Sweetpotato Plants	thous													44.63
Trailer Water	10'	MFWD 130	0.600	1.00	May	9.35	12.75	0.19	0.56	0.60	8.11	12.0000	32.50	390.00
Plntr/Transplanter	8R-42	MFWD 170	0.333	1.00	May	6.84	10.04	0.05	3.54	5.66	57.83	2.0000	8.00	16.00
Crate Sweetpotato	each													2.09
Spray (Broadcast)	60'	MFWD 130	0.028	1.00	May	0.44	0.60	0.24	0.28	0.04	0.53	2.0000	19.43	38.86
Command 3ME	pt													4.74
Brigade 2EC	oz													1.12
Ditcher	acre	MFWD 130	0.020	1.00	May	0.31	0.43	0.05	0.06	0.02	0.27	1.0000	15.00	15.00
Scouting Sweetpotato	acre													2.09
Spray (Broadcast)	60'	MFWD 130	0.028	1.00	May	0.44	0.60	0.24	0.28	0.04	0.53	6.4000	0.74	4.74
Brigade 2EC	oz													4.74
Cultivate - Heavy	8R-42	MFWD 130	0.073	1.00	May	1.15	1.57	0.42	1.12	0.07	1.00	0.5000	12.77	6.39
Ditcher	acre	MFWD 130	0.020	1.00	May	0.31	0.43	0.05	0.06	0.02	0.27	1.0000	25.65	25.65
Cultivate - Heavy	8R-42	MFWD 130	0.073	1.00	Jun	1.15	1.57	0.42	1.12	0.07	1.00	0.5000	13.63	7.68
Ditcher	acre	MFWD 130	0.020	1.00	Jun	0.31	0.43	0.05	0.06	0.02	0.27	1.0000	10.00	10.00
Spray (Broadcast)	60'	MFWD 130	0.028	0.50	Jul	0.22	0.30	0.12	0.14	0.02	0.26	0.5000	12.77	6.39
Post 1.53	pt													1.04
Hand Weeding Swt.Pot	acre													6.39
Stalk Shredder-Flail	15'	MFWD 130	0.110	1.00	Sep	1.73	2.36	0.53	1.56	0.11	1.50	1.0000	25.65	25.65
Trailer-Sweet Potato	16'	MFWD 130	0.598	1.00	Sep	9.32	12.72	5.42	9.08	0.59	8.09	0.5000	13.63	7.68
SWEET POTATO LABOR	hour													44.63
Truck	1/2 ton													10.00
Truck	1 ton +													51.12
Harvester,Swt.Potato	2 Row	MFWD 170	1.730	1.00	Sep	12.64	131.20			1.73	23.37			167.21
SWEET POTATO LABOR	hour													144.78
Bin Repair	each													300.00
Custom Skid Loader	hour													3.00
SKID LOADER LABOR-2	hour													3.00
Custom Skid Loader-2	acre													43.60
Fuel Skid Loader (2)	acre													13.63
Fork Lift	hour													7.10
Custom Haul Swt. Pot	acre													43.77
Sweetpotato Storage	cwt													70.00
Clean, grade, pack	box													224.00
Box Sweetpotato	each													854.70
Sweet Potato Broker	box													551.10
TOTALS						96.20	249.51	24.11	45.55	57.05	608.79	2.0000	1.50	2784.20
INTEREST ON OPERATING CAPITAL														3808.36
UNALLOCATED LABOR														28.43
TOTAL SPECIFIED COST														27.65
														3864.44

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 17.B Estimated costs per acre
Sweet potatoes
Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM					
Trapping	acre	1.00	1.0000	1.00	_____
Custom Apply Fert	acre	7.00	1.0000	7.00	_____
Scouting Sweetpotato	acre	15.00	1.0000	15.00	_____
Custom Skid Loader-2	acre	13.63	1.0000	13.63	_____
Fuel Skid Loader (2)	acre	7.10	1.0000	7.10	_____
Custom Haul Swt. Pot	acre	70.00	1.0000	70.00	_____
FERTILIZER					
Fert 5-20-30+S+B	cwt	23.54	7.5000	176.55	_____
HERBICIDE					
Gly Star Plus	pt	2.17	2.0000	4.34	_____
Valor SX	oz	4.57	2.0000	9.14	_____
Command 3ME	pt	19.43	2.0000	38.86	_____
Poast 1.53	pt	12.77	0.5000	6.39	_____
INSECTICIDE					
Lorsban 15G	lb	2.35	13.3000	31.26	_____
Brigade 2EC	oz	0.74	12.8000	9.47	_____
SEED/PLANTS					
Sweetpotato Plants	thous	32.50	12.0000	390.00	_____
OTHER					
Crate Sweetpotato	each	8.00	2.0000	16.00	_____
Hand Weeding Swt.Pot	acre	25.65	1.0000	25.65	_____
Bin Repair	each	1.50	2.0000	3.00	_____
Sweetpotato Storage	cwt	2.00	112.0000	224.00	_____
Clean, grade, pack	box	2.59	330.0000	854.70	_____
Box Sweetpotato	each	1.67	330.0000	551.10	_____
Sweet Potato Broker	box	1.00	330.0000	330.00	_____
OPERATOR LABOR					
Tractors	hour	13.51	3.9711	53.65	_____
Self-Propelled	hour	13.51	6.2600	84.57	_____
HAND LABOR					
Implements	hour	10.38	6.1296	63.64	_____
SWEET POTATO LABOR					
Special Labor	hour	10.00	31.0000	310.00	_____
Implements	hour	10.00	5.3333	53.33	_____
SKID LOADER LABOR-2					
Special Labor	hour	10.00	4.3600	43.60	_____
UNALLOCATED LABOR	hour	13.51	2.0462	27.65	_____
DIESEL FUEL					
Tractors	gal	1.80	29.8407	53.71	_____
Self-Propelled	gal	1.80	1.2456	2.24	_____
GASOLINE					
Self-Propelled	gal	2.10	3.1416	6.60	_____
LP GAS					
Self-Propelled	gal	1.65	2.3754	3.92	_____
REPAIR & MAINTENANCE					
Implements	acre	24.11	1.0000	24.11	_____
Tractors	acre	15.99	1.0000	15.99	_____
Self-Propelled	acre	13.74	1.0000	13.74	_____
INTEREST ON OP. CAP.	acre	28.43	1.0000	28.43	_____
TOTAL DIRECT EXPENSES				3569.38	_____
FIXED EXPENSES					
Implements	acre	45.55	1.0000	45.55	_____
Tractors	acre	98.48	1.0000	98.48	_____
Self-Propelled	acre	151.03	1.0000	151.03	_____
TOTAL FIXED EXPENSES				295.06	_____
TOTAL SPECIFIED EXPENSES				3864.44	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.

Table 17.C Estimated monthly income and expense flows per acre
Sweet potatoes
Mississippi, 2018

ITEM	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
CUSTOM	8.00	15.00	0.00	0.00	0.00	90.73	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZER	176.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	4.34	48.00	0.00	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	31.26	9.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	390.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	16.00	0.00	25.65	0.00	1962.80	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	4.55	84.12	1.52	0.30	0.00	545.95	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	4.16	23.78	1.13	0.17	0.00	37.23	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	4.51	14.62	0.80	0.17	0.00	33.74	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	5.53	11.89	0.05	0.39	0.00	10.57	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	238.90	612.89	3.50	33.07	0.00	2681.02	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-238.90	-612.89	-3.50	-33.07	0.00	-2681.02	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-238.90	-851.79	-855.29	-888.36	-888.36	-3569.38	-3569.38	-3569.38	-3569.38	-3569.38	-3569.38	-3569.38

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

* Lease costs are based on hourly usage costs.

Table 17.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
Sweet potatoes
Mississippi, 2018

		---BREAKEVEN PRICE---										
		10.78	11.08	11.42	11.83	12.30	12.88	13.58	14.45	15.57	17.07	19.17
PERCENT	YIELD UNIT	---dollars---										
50	150.00 40lb	-963 -1258	-918 -1213	-866 -1161	-806 -1101	-734 -1029	-648 -943	-543 -838	-412 -707	-244 -539	-19 -314	295 0
60	180.00 40lb	-837 -1132	-783 -1078	-721 -1016	-648 -943	-562 -857	-459 -755	-334 -629	-176 -471	25 -269	295 0	672 377
70	210.00 40lb	-711 -1006	-648 -943	-576 -871	-491 -786	-391 -686	-271 -566	-124 -419	59 -235	295 0	609 314	1050 755
80	240.00 40lb	-585 -880	-513 -808	-430 -725	-334 -629	-219 -514	-82 -377	85 -209	295 0	564 269	924 629	1427 1132
90	270.00 40lb	-459 -755	-379 -674	-285 -580	-176 -471	-48 -343	106 -188	295 0	531 235	834 539	1238 943	1805 1510
100	300.00 40lb	-334 -629	-244 -539	-140 -435	-19 -314	123 -171	295 0	504 209	766 471	1104 808	1553 1258	2182 1887
110	330.00 40lb	-208 -503	-109 -404	4 -290	137 -157	295 0	483 188	714 419	1002 707	1373 1078	1868 1572	2560 2265
120	360.00 40lb	-82 -377	25 -269	149 -145	295 0	466 171	672 377	924 629	1238 943	1643 1348	2182 1887	2937 2642
130	390.00 40lb	43 -251	160 -134	295 0	452 157	638 343	861 566	1133 838	1474 1179	1912 1617	2497 2202	3315 3020
140	420.00 40lb	169 -125	295 0	440 145	609 314	809 514	1050 755	1343 1048	1710 1415	2182 1887	2811 2516	3692 3397
150	450.00 40lb	295 0	429 134	585 290	766 471	981 686	1238 943	1553 1258	1946 1651	2452 2157	3126 2831	4070 3775

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2017 input prices.

Table 18.A Estimated resource use and costs for field operations, per acre
 Tomatoes, fresh market, irrigated
 6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	
-----dollars-----													
Lime (Spread)	ton		0.33	Feb							0.3300	46.00	15.18
Chisel Plow	7'	2WD 75 hp	0.220	Feb	1.76	1.37	0.39	0.68	0.22	2.98			7.18
Disk Harrow	10'	2WD 75 hp	0.198	Mar	3.17	2.47	1.11	2.35	0.39	5.36			14.46
Fert-Cyclone Spin	750 lb	2WD 75 hp	0.084	Mar	0.67	0.52	0.08	0.30	0.08	1.14			2.71
AMM Sulfate 33%	cwt										1.1700	22.50	26.33
Phosphorus (46% P205)	cwt										2.6000	18.75	48.75
Potash (60% K2O)	cwt										2.0000	22.20	44.40
Disk + Incorporate	10'	2WD 75 hp	0.206	Mar	1.64	1.28	0.95	1.68	0.30	3.86			9.41
Treflan	pt										0.7500	3.52	2.64
BS, Lay/Tape/Tomato	Bed 6'cntr	2WD 75 hp	1.078	Mar	8.61	6.71	2.75	7.80	1.07	14.57			40.44
Plastic Mulch	roll										1.8000	285.00	513.00
Drip Tape	roll										1.2000	173.70	208.44
Plntr/H2O Tomato	1R 6'cntr	2WD 75 hp	1.718	Apr	13.72	10.70	2.56	4.14	6.87	76.74			107.86
PLANTING LABOR	hour								30.00	311.40			311.40
Tomato Plants-Hybrid	thous										4.4000	97.67	429.75
Fert 15-30-15	lb										37.5000	0.58	21.75
Admire Pro	oz										7.0000	1.70	11.90
Irrigation			1.00	Apr							6.0000	110.97	665.82
Rural Water	ac-in												
Fertigate CAN03/KN03	hour		1.00	Apr							30.0000	0.29	8.70
FERTIGATION LABOR	hour												10.38
Calcium Nitrate	lb												8.70
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Apr	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Bravo Weather Stick	pt										1.5000	6.56	9.84
Radiant ISC	oz										10.0000	6.82	68.20
Fertigate CAN03/KN03	hour		1.00	Apr							30.0000	0.29	8.70
FERTIGATION LABOR	hour												10.38
Calcium Nitrate	lb												8.70
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	Apr	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Radiant ISC	oz										10.0000	6.82	68.20
Quadris	oz										5.0000	2.14	10.70
Fertigate CAN03/KN03	hour		2.00	Apr							60.0000	0.29	17.40
FERTIGATION LABOR	hour												20.76
Calcium Nitrate	lb												17.40
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Quadris	oz										5.0000	2.14	10.70
Brigade 2EC	oz										6.0000	0.74	4.44
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Radiant ISC	oz										10.0000	6.82	68.20
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	May	1.96	1.53	10.08	17.49	0.24	3.32			34.38
Brigade 2EC	oz										6.0000	0.74	4.44
Bravo Weather Stick	pt										2.0000	6.56	13.12
Oberon 2SC	oz										8.0000	4.24	33.92
Fertigate CAN03/KN03	hour		1.00	May							30.0000	0.29	8.70
FERTIGATION LABOR	hour												10.38
Calcium Nitrate	lb												8.70

(continued)

Table 18.A Estimated resource use and costs for field operations, per acre
 Tomatoes, fresh market, irrigated
 6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018 (continued)

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF TIMES RATE OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT		TOTAL COST
					DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	
-----dollars-----													
HAND & STOR LABOR	hour		1.00	May					10.00	103.80			103.80
Wood Stakes	100												3212.00
Plastic string	6000'												42.00
Fertigate CAN03/KN03	hour		3.00	May					3.00	31.14			31.14
FERTIGATION LABOR	hour												26.10
Calcium Nitrate	lb												51.90
Sucker Control	hour		1.00	Jun					5.00	51.90			51.90
HAND LABOR	hour												10.38
Fertigate CAN03/KN03	hour		1.00	Jun					1.00	10.38			10.38
FERTIGATION LABOR	hour												8.70
Calcium Nitrate	lb												34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Jun	1.96	1.53	10.08	0.24	3.32			13.12
Bravo Weather Stick	pt												4.44
Brigade 2EC	oz												4.44
Fertigate CAN03/KN03	hour		3.00	Jun					3.00	31.14			31.14
FERTIGATION LABOR	hour												26.10
Calcium Nitrate	lb												34.38
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Jun	1.96	1.53	10.08	0.24	3.32			13.12
Brigade 2EC	oz												4.44
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Jul	1.96	1.53	10.08	0.24	3.32			13.12
Brigade 2EC	oz												4.44
Trailer - Vegetables	16'	2WD 75 hp	0.090	1.00	Jul	0.72	0.56	0.05	0.18	2.15			3.56
CustomHarvest Tomato box	each												1600.00
5-Gal Bucket	box												800.00
GRADE & PACK LABOR	hour		1.00	Jul					320.00	3321.60			3321.60
Box Tomato	hour												2704.00
Mulch Lifter	1-Row	2WD 75 hp	0.589	1.00	Jul	4.70	3.67	0.15	0.58	7.96			19.15
LABOR MULCH CLEANUP	hour								15.00	155.70			155.70
Irrigation Setup	acre			Apr							1.0000		311.46
TOTALS						50.67	39.52	88.68	159.62	403.69	4210.28	10768.56	15628.79
INTEREST ON OPERATING CAPITAL													125.22
UNALLOCATED LABOR													17.12
TOTAL SPECIFIED COST													15771.13

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.
 Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 18.B Estimated costs per acre
 Tomatoes, fresh market, irrigated
 6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
CUSTOM					
CustomHarvest Tomato	box	1.00	1600.0000	1600.00	_____
FERTILIZER					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
AMM Sulfate 33%	cwt	22.50	1.1700	26.33	_____
Phosphorus(46% P205)	cwt	18.75	2.6000	48.75	_____
Potash (60% K20)	cwt	22.20	2.0000	44.40	_____
Fert 15-30-15	lb	0.58	37.5000	21.75	_____
Calcium Nitrate	lb	0.29	360.0000	104.40	_____
FUNGICIDE					
Bravo Weather Stick	pt	6.56	5.5000	36.08	_____
Quadris	oz	2.14	10.0000	21.40	_____
HERBICIDE					
Treflan	pt	3.52	0.7500	2.64	_____
INSECTICIDE					
Admire Pro	oz	1.70	7.0000	11.90	_____
Radiant 1SC	oz	6.82	30.0000	204.60	_____
Brigade 2EC	oz	0.74	30.0000	22.20	_____
Oberon 2SC	oz	4.24	8.0000	33.92	_____
SEED/PLANTS					
Tomato Plants-Hybrid	thous	97.67	4.4000	429.75	_____
OTHER					
Plastic Mulch	roll	285.00	1.8000	513.00	_____
Wood Stakes	100	73.00	44.0000	3212.00	_____
Plastic string	6000'	10.50	4.0000	42.00	_____
5-Gal Bucket	each	4.00	200.0000	800.00	_____
Box Tomato	box	1.69	1600.0000	2704.00	_____
IRRIGATION SUPPLIES					
Drip Tape	roll	173.70	1.2000	208.44	_____
Rural Water	ac-in	110.97	6.0000	665.82	_____
OPERATOR LABOR					
Tractors	hour	13.51	6.3481	85.80	_____
PLANTING LABOR					
Special Labor	hour	10.38	30.0000	311.40	_____
GRADE & PACK LABOR					
Special Labor	hour	10.38	320.0000	3321.60	_____
HAND & STOR LABOR					
Special Labor	hour	10.38	10.0000	103.80	_____
HAND LABOR					
Special Labor	hour	10.38	5.0000	51.90	_____
Implements	hour	10.38	5.3493	55.52	_____
FERTIGATION LABOR					
Special Labor	hour	10.38	12.0000	124.56	_____
LABOR MULCH CLEANUP					
Special Labor	hour	10.38	15.0000	155.70	_____
UNALLOCATED LABOR					
	hour	13.48	1.2696	17.12	_____
DIESEL FUEL					
Tractors	gal	1.80	24.5064	44.13	_____
REPAIR & MAINTENANCE					
Implements	acre	88.68	1.0000	88.68	_____
Tractors	acre	6.54	1.0000	6.54	_____
INTEREST ON OP. CAP.	acre	125.22	1.0000	125.22	_____
TOTAL DIRECT EXPENSES				15260.53	_____
FIXED EXPENSES					
Implements	acre	159.62	1.0000	159.62	_____
Tractors	acre	39.52	1.0000	39.52	_____
Irrigation Setup	acre	311.46	1.0000	311.46	_____
TOTAL FIXED EXPENSES				510.60	_____
TOTAL SPECIFIED EXPENSES				15771.13	_____

Note: Cost of production estimates are based on 2017 input prices.
Fertilization decisions should be based on soil tests.
 Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 18.C Estimated monthly income and expense flows per acre
 Tomatoes, fresh market, irrigated
 6 ft row spacing, 16 gpm with 7,260 ft of drip tape, Mississippi, 2018

ITEM	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
CUSTOM	0.00	0.00	0.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00
FERTILIZER	15.18	119.48	56.55	34.80	34.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	20.54	23.82	13.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	148.30	111.00	8.88	4.44	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	429.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	513.00	0.00	3254.00	0.00	3504.00	0.00	0.00	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	208.44	665.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	3.58	29.70	442.26	157.26	101.38	3493.22	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.53	12.26	15.36	5.13	3.42	6.43	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.62	6.72	25.00	30.99	20.66	11.23	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	0.50	17.65	28.55	42.94	1.46	34.12	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	21.41	909.89	1832.13	3659.94	183.72	8653.44	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-21.41	-909.89	-1832.13	-3659.94	-183.72	-8653.44	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-21.41	-931.30	-2763.43	-6423.37	-6607.09	-15260.53	-15260.53	-15260.53	-15260.53	-15260.53	-15260.53	-15260.53

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.
 * Lease costs are based on hourly usage costs.

Table 18.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
Sweet potatoes
Mississippi, 2018

		-----BREAK-EVEN PRICE-----													
		10.78	11.08	11.42	11.83	12.30	12.88	13.58	14.45	15.57	17.07	19.17			
PERCENT	YIELD UNIT	-----dollars-----													
Sweet Potatoes		10.78	11.08	11.42	11.83	12.30	12.88	13.58	14.45	15.57	17.07	19.17			
50	150.00 40lb	-963 -1258	-918 -1213	-866 -1161	-806 -1101	-734 -1029	-648 -943	-543 -838	-412 -707	-244 -539	-19 -314	295 0			
60	180.00 40lb	-837 -1132	-783 -1078	-721 -1016	-648 -943	-562 -857	-459 -755	-334 -629	-176 -471	25 -269	295 0	672 377			
70	210.00 40lb	-711 -1006	-648 -943	-576 -871	-491 -786	-391 -686	-271 -566	-124 -419	59 -235	295 0	609 314	1050 755			
80	240.00 40lb	-585 -880	-513 -808	-430 -725	-334 -629	-219 -514	-82 -377	85 -209	295 0	564 269	924 629	1427 1132			
90	270.00 40lb	-459 -755	-379 -674	-285 -580	-176 -471	-48 -343	106 -188	295 0	531 235	834 539	1238 943	1805 1510			
100	300.00 40lb	-334 -629	-244 -539	-140 -435	-19 -314	123 -171	295 0	504 209	766 471	1104 808	1553 1258	2182 1887			
110	330.00 40lb	-208 -503	-109 -404	4 -290	137 -157	295 0	483 188	714 419	1002 707	1373 1078	1868 1572	2560 2265			
120	360.00 40lb	-82 -377	25 -269	149 -145	295 0	466 171	672 377	924 629	1238 943	1643 1348	2182 1887	2937 2642			
130	390.00 40lb	43 -251	160 -134	295 0	452 157	638 343	861 566	1133 838	1474 1179	1912 1617	2497 2202	3315 3020			
140	420.00 40lb	169 -125	295 0	440 145	609 314	809 514	1050 755	1343 1048	1710 1415	2182 1887	2811 2516	3692 3397			
150	450.00 40lb	295 0	429 134	585 290	766 471	981 686	1238 943	1553 1258	1946 1651	2452 2157	3126 2831	4070 3775			

The top number in each cell is Returns Above Direct Expenses.
The bottom number in each cell is Returns Above Total Specified Expenses.
Only the product listed has been varied to calculate net returns.
Note: Cost of production estimates are based on 2017 input prices.

Table 19.A Estimated resource use and costs for field operations, per acre
 Watermelons, irrigated
 8 ft row spacing, 12 gpm with 5,445 ft of drip tape, Mississippi, 2018

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR HOURS	OPERATING/DURABLE INPUT		TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED		AMOUNT	PRICE	
-----dollars-----													-----dollars-----
Lime (Spread)	ton			1.00	Jan						1.5000	46.00	69.00
Chisel Plow	7'	2WD 75 hp	0.220	1.00	Feb	1.76	1.37	0.39	0.68	0.22			7.18
Disk Harrow	10'	2WD 75 hp	0.198	1.00	Feb	1.59	1.23	0.56	1.18	0.19			7.24
BS, Lay/Tape/Melon Plastic Mulch	Bed 8'cntr roll	2WD 75 hp	0.808	1.00	Mar	6.46	5.03	2.78	7.90	0.80			33.10
Drip Tape	roll										1.4000	285.00	399.00
Spray (Broadcast)	27'	2WD 75 hp	0.062	1.00	Mar	0.50	0.39	0.16	0.19	0.09			156.33
Strategy	pt										2.0000	9.78	19.56
Plntr/H2O Melon	1R 8'cntr	2WD 75 hp	0.645	1.00	Mar	5.15	4.02	1.29	2.09	2.58			41.36
Watermelon - Diploid	thous										1.8000	95.31	171.56
Irrigation				1.00	Mar								
Rural Water	ac-in										6.0000	110.97	665.82
Fertigate CAN03/KN03	hour			1.00	Mar								
FERTIGATION LABOR	hour									1.00	10.38		10.38
Calcium Nitrate	lb										89.0000	0.29	25.81
Potash (60% K2O)	cwt										0.5000	22.20	11.10
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Apr	1.96	1.53	10.08	17.49	0.24			34.38
Assail 30 SG	oz										4.0000	5.93	23.72
Fertigate CAN03/KN03	hour			1.00	Apr								
FERTIGATION LABOR	hour									1.00	10.38		10.38
Calcium Nitrate	lb										89.0000	0.29	25.81
Potash (60% K2O)	cwt										0.5000	22.20	11.10
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Apr	1.96	1.53	10.08	17.49	0.24			34.38
Brigade 2EC	oz										6.0000	0.74	4.44
Fertigate CAN03/KN03	hour			4.00	Apr								
FERTIGATION LABOR	hour									4.00	41.52		41.52
Calcium Nitrate	lb										356.0000	0.29	103.24
Potash (60% K2O)	cwt										2.0000	22.20	44.40
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	2.00	May	3.92	3.06	20.15	34.97	0.49			68.73
Bravo Weather Stick	pt										3.0000	6.56	19.68
Quadris	oz										22.0000	2.14	47.08
Fertigate CAN03/KN03	hour			1.00	May								
FERTIGATION LABOR	hour									1.00	10.38		10.38
Calcium Nitrate	lb										89.0000	0.29	25.81
Potash (60% K2O)	cwt										0.5000	22.20	11.10
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	May	1.96	1.53	10.08	17.49	0.24			34.38
Bravo Weather Stick	pt										2.0000	6.56	13.12
Fertigate CAN03/KN03	hour			2.00	May								
FERTIGATION LABOR	hour									2.00	20.76		20.76
Calcium Nitrate	lb										178.0000	0.29	51.62
Potash (60% K2O)	cwt										1.0000	22.20	22.20
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Jun	1.96	1.53	10.08	17.49	0.24			34.38
Bravo Weather Stick	pt										6.0000	0.74	4.44
Fertigate CAN03/KN03	hour			2.00	May								
FERTIGATION LABOR	hour												
Calcium Nitrate	lb										178.0000	0.29	51.62
Potash (60% K2O)	cwt										1.0000	22.20	22.20
Sprayer Air Blast	16' 100 ga	2WD 75 hp	0.245	1.00	Jun	1.96	1.53	10.08	17.49	0.24			34.38
Brigade 2EC	oz										6.0000	0.74	4.44

(continued)

Table 19.A Estimated resource use and costs for field operations, per acre
 Watermelons, irrigated
 8 ft spacing with 12 gpm with 5,445 ft of drip tape, Mississippi, 2018 (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	
-----dollars-----														
Trailer - Vegetables 16'		2WD 75 hp	0.090	4.00	Jun	2.87	2.24	0.20	0.33	0.72	8.60			14.24
Harvest Labor Melons cwt				1.00	Jun							200.0000	2.57	514.00
Pallet Crates-1350lb each												20.0000	20.66	413.20
Plastic Clean Up				1.00	Jun	4.70	3.67	0.15	2.67	0.58	7.96			19.15
Mulch Lifter	1-Row	2WD 75 hp	0.589							15.00	155.70			155.70
LABOR MULCH CLEANUP	hour				Mar							1.0000		303.38
Irrigation Setup	acre													
TOTALS						34.79	27.13	66.00	119.97	30.68	332.17		2853.14	3736.58
INTEREST ON OPERATING CAPITAL														36.08
UNALLOCATED LABOR														11.77
TOTAL SPECIFIED COST														3784.43

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 19.B Estimated costs per acre
 Watermelons, irrigated
 8 ft row spacing, 12 gpm with 5,445 ft of drip tape, Mississippi, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZER					
Lime (Spread)	ton	46.00	1.5000	69.00	_____
Calcium Nitrate	lb	0.29	801.0000	232.29	_____
Potash (60% K20)	cwt	22.20	4.5000	99.90	_____
FUNGICIDE					
Bravo Weather Stick	pt	6.56	5.0000	32.80	_____
Quadris	oz	2.14	22.0000	47.08	_____
HERBICIDE					
Strategy	pt	9.78	2.0000	19.56	_____
INSECTICIDE					
Assail 30 SG	oz	5.93	4.0000	23.72	_____
Brigade 2EC	oz	0.74	12.0000	8.88	_____
SEED/PLANTS					
Watermelon - Diploid	thous	95.31	1.8000	171.56	_____
OTHER					
Plastic Mulch	roll	285.00	1.4000	399.00	_____
Harvest Labor Melons	cwt	2.57	200.0000	514.00	_____
Pallet Crates-1350lb	each	20.66	20.0000	413.20	_____
IRRIGATION SUPPLIES					
Drip Tape	roll	173.70	0.9000	156.33	_____
Rural Water	ac-in	110.97	6.0000	665.82	_____
OPERATOR LABOR					
Tractors	hour	13.51	4.3578	58.89	_____
HAND LABOR					
Implements	hour	10.38	2.3268	24.16	_____
FERTIGATION LABOR					
Special Labor	hour	10.38	9.0000	93.42	_____
LABOR MULCH CLEANUP					
Special Labor	hour	10.38	15.0000	155.70	_____
UNALLOCATED LABOR					
	hour	13.50	0.8715	11.77	_____
DIESEL FUEL					
Tractors	gal	1.80	16.8230	30.29	_____
REPAIR & MAINTENANCE					
Implements	acre	66.00	1.0000	66.00	_____
Tractors	acre	4.50	1.0000	4.50	_____
INTEREST ON OP. CAP.	acre	36.08	1.0000	36.08	_____

TOTAL DIRECT EXPENSES				3333.95	_____
FIXED EXPENSES					
Implements	acre	119.97	1.0000	119.97	_____
Tractors	acre	27.13	1.0000	27.13	_____
Irrigation Setup	acre	303.38	1.0000	303.38	_____

TOTAL FIXED EXPENSES				450.48	_____

TOTAL SPECIFIED EXPENSES				3784.43	_____

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

Table 19.C Estimated monthly income and expense flows per acre
 Watermelons, irrigated
 8 ft row spacing, 12 gpm with 5,445 ft of drip tapMississippi, 2018

ITEM	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DIRECT EXPENSES												
FERTILIZER	69.00	0.00	36.91	184.55	110.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUNGICIDE	0.00	0.00	0.00	0.00	79.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HERBICIDE	0.00	0.00	19.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INSECTICIDE	0.00	0.00	0.00	28.16	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	171.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	0.00	0.00	399.00	0.00	0.00	927.20	0.00	0.00	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	822.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	6.80	55.40	59.86	43.08	178.80	0.00	0.00	0.00	0.00	0.00	0.00
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	0.00	2.91	10.54	3.42	5.12	8.30	0.00	0.00	0.00	0.00	0.00	0.00
REPAIR & MAINTENANCE	0.00	1.39	5.80	20.66	30.99	11.66	0.00	0.00	0.00	0.00	0.00	0.00
INTEREST ON OP. CAP.	1.64	0.22	24.09	3.52	2.13	4.48	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL DIRECT EXPENSES	70.64	11.32	1545.01	300.17	271.93	1134.88	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME	-70.64	-11.32	-1545.01	-300.17	-271.93	-1134.88	0.00	0.00	0.00	0.00	0.00	0.00
NET INCOME TO DATE	-70.64	-81.96	-1626.97	-1927.14	-2199.07	-3333.95	-3333.95	-3333.95	-3333.95	-3333.95	-3333.95	-3333.95

Note: Cost of production estimates are based on 2017 input prices.

Fertilization decisions should be based on soil tests.

Irrigation implies 6 acre inches applied as needed over the production period for both fertigation and water needs.

* Lease costs are based on hourly usage costs.

Table 19.D Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Watermelons, irrigated
 8 ft row spacing, 12 gpm with 5,445 ft of drip tape, Mississippi, 2018

		-----BREAKEVEN PRICE-----												
		13.47	14.25	15.15	16.19	17.43	18.92	20.73	23.00	25.92	29.81	35.26		
PERCENT	YIELD	-----dollars-----												
	UNIT													
50	100.00 cwt	-1728	-1650	-1560	-1456	-1332	-1183	-1002	-775	-483	-94	450		
		-2178	-2101	-2011	-1906	-1782	-1634	-1452	-1225	-933	-544	0		
60	120.00 cwt	-1510	-1417	-1309	-1183	-1035	-856	-638	-366	-16	450	1104		
		-1961	-1867	-1759	-1634	-1485	-1307	-1089	-817	-466	0	653		
70	140.00 cwt	-1292	-1183	-1058	-911	-738	-530	-275	41	450	995	1757		
		-1743	-1634	-1508	-1361	-1188	-980	-726	-408	0	544	1307		
80	160.00 cwt	-1074	-950	-806	-638	-440	-203	87	450	917	1539	2411		
		-1525	-1400	-1257	-1089	-891	-653	-363	0	466	1089	1961		
90	180.00 cwt	-856	-716	-555	-366	-143	123	450	859	1384	2084	3065		
		-1307	-1167	-1005	-817	-594	-326	0	408	933	1634	2614		
100	200.00 cwt	-638	-483	-303	-94	153	450	813	1267	1851	2629	3718		
		-1089	-933	-754	-544	-297	0	363	817	1400	2178	3268		
110	220.00 cwt	-421	-249	-52	178	450	777	1176	1676	2318	3174	4372		
		-871	-700	-502	-272	0	326	726	1225	1867	2723	3922		
120	240.00 cwt	-203	-16	199	450	747	1104	1539	2084	2785	3718	5026		
		-653	-466	-251	0	297	653	1089	1634	2334	3268	4575		
130	260.00 cwt	14	217	450	722	1044	1431	1903	2493	3251	4263	5679		
		-435	-233	0	272	594	980	1452	2042	2801	3813	5229		
140	280.00 cwt	232	450	701	995	1341	1757	2266	2901	3718	4808	6333		
		-217	0	251	544	891	1307	1815	2451	3268	4357	5883		
150	300.00 cwt	450	683	953	1267	1638	2084	2629	3310	4185	5353	6987		
		0	233	502	817	1188	1634	2178	2859	3735	4902	6536		

The top number in each cell is Returns Above Direct Expenses.
 The bottom number in each cell is Returns Above Total Specified Expenses.
 Only the product listed has been varied to calculate net returns.
 Note: Cost of production estimates are based on 2017 input prices.

Appendix

Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2018

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)CB	2WD 50 hp	32,300	600	8	2.57	13.51	4.63	1.00	19.15	6.07	25.22
Tractor (40-59hp)CB	MFWD 50 hp	39,500	600	8	2.57	13.51	4.63	1.23	19.37	7.42	26.80
Tractor (40-59hp)RB	2WD 50 hp	21,100	600	8	2.57	13.51	4.63	0.65	18.80	3.96	22.76
Tractor (40-59hp)RB	MFWD 50 hp	24,800	600	8	2.57	13.51	4.63	0.77	18.91	4.66	23.58
Tractor (60-89hp)CB	2WD 75 hp	49,300	600	8	3.86	13.51	6.94	1.54	21.99	9.27	31.27
Tractor (60-89hp)CB	MFWD 75 hp	52,500	600	8	3.86	13.51	6.94	1.64	22.09	9.87	31.97
Tractor (60-89hp)RB	2WD 75 hp	33,100	600	8	3.86	13.51	6.94	1.03	21.49	6.22	27.71
Tractor (60-89hp)RB	MFWD 75 hp	37,800	600	8	3.86	13.51	6.94	1.18	21.63	7.10	28.74
Tractor (120-139hp)CB	MFWD 130	113,000	600	8	6.69	13.51	12.04	3.53	29.08	21.25	50.33
Tractor (160-179hp)CB	MFWD 170	153,000	600	8	8.75	13.51	15.75	4.78	34.04	30.10	64.14
Utility Vehicle	600CC	8,340	200	8	0.50	13.51	1.05	1.30	15.86	5.14	21.00

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, 2018

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-----					
Fork Lift		33,500	1000	10	1.07	2.220	29.99	3.91	1.41	35.32	8.44	43.77
Sprayer 110 gal	30' 47hp	44,600	350	6	2.14	0.035	0.65	0.13	0.11	0.90	0.68	1.59
Sprayer (600-750GAL)	60'	193,000	350	8	5.66	0.017	0.32	0.17	0.18	0.69	1.19	1.89
Truck	1 ton +	334,800	780	5	0.72	1.730	23.37	2.24	10.39	36.01	131.19	167.20
Truck	1/2 ton	29,000	1040	5	1.36	2.310	31.20	6.59	1.93	39.73	11.38	51.11
Utility Vehicle	600 CC	8,340	200	5	0.50	0.250	3.37	0.26	0.52	4.16	1.84	6.00
Utility Vehicle	800CC	10,000	200	8	0.70	0.249	3.37	0.36	0.39	4.13	1.54	5.67

Notes:

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

Total 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, 2018

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-----								
Bd Shaper Cucumber	Bed 4'cntr	2WD 75 hp	2,740	81	16	1.617	21.85	11.24	1.64	1.67	36.40	4.65	10.06	51.13	
Bd Shaper Melons	Bed 8'cntr	2WD 75 hp	2,740	40	16	0.808	10.92	5.62	1.66	0.83	19.04	4.71	5.03	28.79	
Bd Shaper Squash	Bed 5'cntr	2WD 75 hp	2,740	65	16	1.294	17.48	8.99	1.63	1.33	29.45	4.64	8.05	42.14	
Bd Shaper Tomato	Bed 6'cntr	2WD 75 hp	2,740	54	16	1.078	14.56	7.49	1.64	1.11	24.82	4.65	6.71	36.18	
Bd Shaper/LayCucumbe	Bed 4'cntr	2WD 75 hp	4,280	81	16	1.617	38.64	11.24	2.56	1.67	54.12	7.27	10.06	71.46	
Bd Shaper/LayMelon	Bed 8'cntr	2WD 75 hp	4,280	40	16	0.808	19.32	5.62	2.59	0.83	28.37	7.36	5.03	40.77	
Bd Shaper/LaySquash	Bed 5'cntr	2WD 75 hp	4,280	65	16	1.294	30.91	8.99	2.55	1.33	43.80	7.25	8.05	59.10	
Bd Shaper/LayTomato	Bed 6'cntr	2WD 75 hp	4,280	54	16	1.078	25.76	7.49	2.56	1.11	36.93	7.27	6.71	50.92	
Bd Shaper3XCucumber	Bed 4'cntr	2WD 75 hp	7,360	81	16	1.617	38.64	11.24	4.40	1.67	55.96	12.38	10.06	78.42	
Bd Shaper3XMelon	Bed 8'cntr	2WD 75 hp	7,360	40	16	0.808	19.32	5.62	4.46	0.83	30.24	12.53	5.03	47.81	
Bd Shaper3XSquash	Bed 5'cntr	2WD 75 hp	7,360	65	16	1.294	30.91	8.99	4.39	1.33	45.64	12.34	8.05	66.04	
Bd Shaper3XTomato	Bed 6'cntr	2WD 75 hp	7,360	54	16	1.078	25.76	7.49	4.40	1.11	38.78	12.38	6.71	57.87	
BS, L,T,Fung BPepper	Bed 6'cntr	2WD 75 hp	6,590	54	16	1.078	48.15	7.49	3.94	1.11	60.70	11.19	6.71	78.61	
BS, Lay/Tape BPepper	Bed 6'cntr	2WD 75 hp	4,590	54	16	1.078	14.56	7.49	2.75	1.11	25.92	7.79	6.71	40.44	
BS, Lay/Tape/Melon	Bed 8'cntr	2WD 75 hp	4,590	40	16	0.808	10.92	5.62	2.78	0.83	20.16	7.89	5.03	33.10	
BS, Lay/Tape/Pumpkin	Bed 8'cntr	2WD 75 hp	4,590	40	16	0.808	1.09	0.56	0.27	0.08	2.01	0.78	0.50	3.30	
BS, Lay/Tape/Squash	Bed 5'cntr	2WD 75 hp	4,590	65	16	1.294	17.48	8.99	2.74	1.33	30.55	7.77	8.05	46.38	
BS, Lay/Tape/Tomato	Bed 6'cntr	2WD 75 hp	4,590	54	16	1.078	14.56	7.49	2.75	1.11	25.92	7.79	6.71	40.44	
BS,Lay/Tape/Cucumber	Bed 4'cntr	2WD 75 hp	4,590	81	16	1.617	21.85	11.24	2.75	1.67	37.51	7.79	10.06	55.38	
Chisel Plow	7'	2WD 75 hp	4,940	150	12	0.220	2.97	1.53	0.39	0.22	5.12	0.68	1.37	7.18	
Chisel Plow Folding	24'	MFWD 170	39,300	150	12	0.077	1.05	1.22	1.10	0.37	3.75	1.91	2.34	8.00	
Cult - Rotary Hoe	12'	2WD 75 hp	5,660	32	27	0.214	2.90	1.49	0.56	0.22	5.18	2.47	1.33	8.99	
Cult - Rotary Hoe	15'	2WD 75 hp	5,240	26	27	0.171	2.32	1.19	0.51	0.17	4.20	2.25	1.06	7.53	
Cultipacker	12'	2WD 75 hp	6,910	300	12	0.124	1.68	0.86	0.20	0.12	2.87	0.27	0.77	3.93	
Cultivate	1-Row	2WD 75 hp	1,330	110	27	0.589	7.96	4.09	0.10	0.60	12.77	0.46	3.66	16.90	
Cultivate	2-Row	2WD 75 hp	1,370	59	27	0.312	4.22	2.17	0.10	0.32	6.82	0.47	1.94	9.24	
Cultivate	4-Row	2WD 75 hp	1,540	29	10	0.155	2.09	1.07	0.32	0.16	3.66	0.87	0.96	5.49	
Cultivate - Heavy	4R-38	2WD 50 hp	12,200	150	10	0.155	2.09	0.71	0.50	0.10	3.42	1.33	0.61	5.36	
Cultivate - Heavy	8R-42	MFWD 130	21,600	150	10	0.073	0.99	0.88	0.42	0.26	2.56	1.12	1.56	5.25	
Cultivate+App Herb	4-Row	2WD 75 hp	3,820	150	10	0.193	3.62	1.34	0.19	0.20	5.36	0.52	1.20	7.09	
Cultivate+App Ins	2-Row	2WD 75 hp	3,650	150	10	0.390	7.30	2.71	0.38	0.40	10.80	1.00	2.43	14.23	
Cultivate+App Ins	4-Row	2WD 75 hp	3,820	150	10	0.193	3.62	1.34	0.19	0.20	5.36	0.52	1.20	7.09	
Cultivate+Sidedress	2-Row	2WD 75 hp	3,130	39	27	0.390	7.30	2.71	0.46	0.40	10.88	2.04	2.43	15.36	
Cultivate+Sidedress	4-Row	2WD 75 hp	5,570	19	27	0.193	3.62	1.34	0.84	0.20	6.01	3.70	1.20	10.92	
Disc Mower	10'	2WD 75 hp	12,800	200	8	0.206	2.78	1.43	1.65	0.21	6.08	1.83	1.28	9.20	
Disk + Incorporate	10'	2WD 75 hp	15,400	200	10	0.206	3.85	1.43	0.95	0.21	6.45	1.67	1.28	9.41	
Disk + Incorporate	14'	2WD 75 hp	30,100	200	10	0.147	2.75	1.02	1.33	0.15	5.26	2.34	0.91	8.52	
Disk Bed	2-Row	2WD 75 hp	4,630	160	10	0.284	3.83	1.97	0.24	0.29	6.35	0.96	1.76	9.08	
Disk Bed	4-Row	2WD 75 hp	8,800	160	10	0.140	1.90	0.97	0.31	0.14	3.34	0.81	0.87	5.03	
Disk Bed (Hipper)fld	8R-40	MFWD 130	20,000	160	10	0.070	0.95	0.84	0.35	0.24	2.40	0.93	1.49	4.83	
Disk Bed + Spray PD	8R-40	MFWD 130	25,400	160	10	0.070	0.95	0.84	0.44	0.24	2.49	1.18	1.49	5.17	
Disk Bed +App Fert	4-Row	2WD 75 hp	12,830	160	10	0.140	2.63	0.97	0.45	0.14	4.21	1.19	0.87	6.28	
Disk Harrow	5'	2WD 75 hp	2,070	180	10	0.412	5.57	2.86	0.23	0.42	9.10	0.50	2.56	12.17	
Disk Harrow	10'	2WD 75 hp	10,100	180	10	0.198	2.67	1.37	0.55	0.20	4.81	1.17	1.23	7.22	
Disk Harrow	10'	2WD 75 hp	10,100	180	10	0.198	2.67	1.37	0.55	0.20	4.81	1.17	1.23	7.22	
Disk Harrow	14'	2WD 75 hp	24,800	180	10	0.141	1.91	0.98	0.97	0.14	4.02	2.06	0.88	6.96	
Disk Harrow	24'	MFWD 170	41,500	180	10	0.082	1.11	1.30	0.95	0.39	3.76	2.01	2.48	8.26	
Ditcher	2WD 50 hp		5,700	200	10	0.020	0.27	0.09	0.04	0.01	0.42	0.06	0.07	0.56	
Fert-Cyclone Spin	750 lb	2WD 75 hp	1,280	50	8	0.084	1.13	0.58	0.08	0.08	1.89	0.29	0.52	2.71	
Fert-Side Dresser	1R 3'	2WD 75 hp	3,860	42	10	0.846	11.43	5.87	2.33	0.87	20.51	9.14	5.26	34.92	
Fert-Side Dresser	2R 6'	2WD 75 hp	4,670	21	10	0.423	5.71	2.93	2.82	0.43	11.91	11.06	2.63	25.61	
Fert-Side Dresser	4R-40	2WD 75 hp	6,450	10	10	0.195	2.63	1.35	3.77	0.20	7.97	14.80	1.21	23.99	
Fert-Sprd Pull Type	6'	2WD 75 hp	3,950	10	10	0.392	5.30	2.72	4.65	0.40	13.09	18.24	2.44	33.79	
Fert-Sprd Pull Type	8'	2WD 75 hp	4,150	15	10	0.294	3.98	2.04	2.44	0.30	8.77	9.58	1.83	20.19	
Fert-Sprd Pull Type	10'	2WD 75 hp	4,540	12	10	0.235	3.18	1.63	2.67	0.24	7.74	10.48	1.46	19.69	
Fert-Sprd Pull Type	12'	2WD 75 hp	4,950	10	10	0.196	2.65	1.36	2.91	0.20	7.13	11.43	1.22	19.79	
Front End Loader	.5yd	2WD 75 hp	5,430	100	10	0.600	8.10	4.16	0.97	0.62	13.87	3.96	3.73	21.56	
Harvester,Swt.Potato	2 Row	MFWD 170	34,000	300	15	1.011	76.62	15.92	6.72	4.83	104.10	10.24	30.43	144.78	
Mulch Lifter	1-Row	2WD 75 hp	2,230	29	30	0.589	7.96	4.09	0.15	0.60	12.81	2.67	3.66	19.15	
Mule Train (Corn)	30'	MFWD 75 hp	69,900	12	25	0.200	89.89	1.38	11.65	0.23	103.16	72.89	1.42	177.48	
Mule Train (corn)	30'	2WD 75 hp	69,900	12	25	0.500	224.73	3.47	29.12	0.51	257.85	182.23	3.11	443.20	
Picker Beans/Peas	1-Row	2WD 75 hp	43,000	179	10	3.571	122.39	24.81	60.05	3.69	210.95	42.89	22.23	276.08	
Picker Corn	1-Row	2WD 75 hp	50,000	42	10	0.840	11.35	5.83	30.01	0.86	48.07	50.02	5.23	103.32	
Plastic Layer Melon	Bed 8'cntr	2WD 75 hp	2,580	40	16	0.808	10.92	5.62	1.56	0.83	18.94	4.43	5.03	28.42	
Plastic Layer Squash	Bed 5'cntr	2WD 75 hp	2,580	65	16	1.294	17.48	8.99	2.56	1.33	30.38	4.37	8.05	42.80	
Plastic Layer Tomato	Bed 6'cntr	2WD 75 hp	2,580	54	16	1.078	14.56	7.49	2.57	1.11	25.75	4.38	6.71	36.85	
Plastic Lyr Cucumber	Bed 4'cntr	2WD 75 hp	2,580	81	16	1.617	21.85	11.24	2.57	1.67	37.34	4.38	10.06	51.79	
Plntr - Vacuum	1-Row	2WD 75 hp	6,270	53	18	1.057	14.28	7.34	6.25	1.09	28.98	9.94	6.58	45.52	
Plntr - Vacuum	2-Row	2WD 75 hp	7,470	20	18	0.396	5.35	2.75	7.40	0.41	15.93	11.77	2.46	30.17	
Plntr - Vacuum	4-Row	2WD 75 hp	16,900	11	18	0.226	3.06	1.57	17.41	0.23	22.28	27.68	1.41	51.37	
Plntr - Vacuum+Ins	1-Row	2WD 75 hp	7,340	53	18	1.057	14.28	7.34	7.32	1.09	30.05	11.64	6.58	48.28	

(continued)

Table 3. Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2018 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---	Total Imp.	---Fixed---	Total Cost		
			dollars	hours	years	hr/ac	-----\$/acre-----							
Plntr - Vacuum+Ins	2R 30-40	2WD 75 hp	9,995	20	18	0.396	5.35	2.75	9.91	0.41	18.43	15.75	2.46	36.66
Plntr - Vacuum+Ins	4R 30-40	2WD 75 hp	18,500	11	18	0.226	3.06	1.57	19.05	0.23	23.93	30.30	1.41	55.64
Plntr - Vacuum+Ins	Bed 4'cntr	2WD 75 hp	7,340	40	18	0.793	10.71	5.51	7.27	0.82	24.32	11.57	4.93	40.83
Plntr - Vacuum+Ins	Bed 5'cntr	2WD 75 hp	7,340	32	18	0.634	8.57	4.40	7.27	0.65	20.91	11.57	3.95	36.44
Plntr - Vacuum+Ins	Bed 6'cntr	2WD 75 hp	7,340	26	18	0.528	7.14	3.67	7.46	0.54	18.83	11.86	3.29	33.99
Plntr - Vacuum+Ins	Bed 8'cntr	2WD 75 hp	7,340	20	18	0.396	5.35	2.75	7.27	0.41	15.80	11.57	2.46	29.84
Plntr/H2O Cucumber	1R 4'cntr	2WD 75 hp	2,560	129	17	2.578	115.11	17.91	2.55	2.66	138.25	4.14	16.04	158.44
Plntr/H2O Cucumber	2R 4'cntr	2WD 75 hp	5,550	129	17	1.289	84.31	8.95	2.77	1.33	97.38	4.48	8.02	109.89
Plntr/H2O Melon	1R 8'cntr	2WD 75 hp	2,560	64	17	0.645	28.80	4.48	1.29	0.66	35.24	2.08	4.01	41.35
Plntr/H2O Melon	2R 8'cntr	2WD 75 hp	5,550	64	17	0.644	42.15	4.47	2.79	0.66	50.09	4.52	4.01	58.63
Plntr/H2O Squash	1R 5'cntr	2WD 75 hp	2,560	103	17	2.062	92.09	14.33	2.56	2.13	111.11	4.15	12.83	128.10
Plntr/H2O Squash	2R 5'cntr	2WD 75 hp	5,550	103	17	1.031	67.45	7.16	2.77	1.06	78.46	4.49	6.41	89.38
Plntr/H2O Tomato	1R 6'cntr	2WD 75 hp	2,560	86	17	1.718	76.74	11.94	2.55	1.77	93.02	4.14	10.69	107.86
Plntr/H2O Tomato	2R 6'cntr	2WD 75 hp	5,550	86	17	0.859	56.21	5.97	2.77	0.88	65.84	4.48	5.34	75.68
Plntr/H2O Wheel	2-Row	2WD 75 hp	5,550	74	17	1.473	96.36	10.23	5.52	1.52	113.64	8.94	9.17	131.76
Plntr/H2O/pnch/seed	1-Row	2WD 75 hp	5,090	129	17	2.578	61.59	17.91	5.08	2.66	87.25	8.23	16.04	111.54
Plntr/H2O/pnch/seed	2R 18-60	2WD 75 hp	8,140	129	17	1.586	37.90	11.02	5.00	1.64	55.57	8.10	9.87	73.55
Plntr/Transplant-H2O	4R 36-48	2WD 75 hp	17,400	34	17	0.687	73.51	4.77	0.41	0.71	79.41	28.34	4.27	112.04
Plntr/Transplanter	1-Row	2WD 75 hp	2,820	31	19	1.586	70.83	11.02	0.15	1.64	83.65	11.13	9.87	104.67
Plntr/Transplanter	4R 36-48	2WD 75 hp	13,900	300	19	0.687	73.51	4.77	0.03	0.71	79.03	2.45	4.27	85.77
Plntr/Transplanter	8R-42	MFWD 170	20,640	150	19	0.333	57.83	5.25	0.04	1.59	64.72	3.53	10.03	78.30
Rotary Cutter	7'	2WD 75 hp	4,690	185	10	0.169	2.28	1.17	0.64	0.17	4.28	0.45	1.05	5.79
Rotary Tiller	5'	2WD 75 hp	2,130	49	18	0.970	13.11	6.74	2.95	1.00	23.81	3.33	6.04	33.19
Spray (Broadcast)	27'	2WD 75 hp	5,350	200	8	0.062	1.17	0.43	0.15	0.09	1.86	0.18	0.58	2.63
Spray (Broadcast)	60'	MFWD 130	17,800	200	8	0.028	0.52	0.33	0.23	0.09	1.20	0.28	0.59	2.08
Spray Boom	12/17'	2WD 75 hp	2,280	200	8	0.099	1.86	0.69	0.10	0.10	2.76	0.12	0.61	3.51
Sprayer Air Blast	16' 100 ga	2WD 75 hp	9,848	12	16	0.245	3.31	1.70	10.07	0.25	15.35	17.48	1.52	34.36
Sprayer Air Blast	16' 200 ga	2WD 75 hp	14,735	12	16	0.245	3.31	1.70	15.07	0.25	20.35	26.16	1.52	48.04
Stalk Shredder-Flail	15'	2WD 50 hp	22,100	185	10	0.110	1.49	0.51	0.52	0.07	2.61	1.55	0.44	4.61
Sub-Soiler	1 shank	2WD 75 hp	955	54	23	1.078	14.56	7.49	0.57	1.11	23.75	1.34	6.71	31.81
Sub-Soiler	2 shank	2WD 75 hp	1,870	20	23	0.404	5.46	2.81	1.13	0.41	9.82	2.67	2.51	15.01
Take Up Reel (M&T)	1-Row	2WD 75 hp	2,850	42	10	0.588	7.94	4.08	1.19	0.60	13.84	4.72	3.66	22.22
Take Up Reel (Mulch)	1-Row	2WD 75 hp	1,400	42	10	0.588	7.94	4.08	0.58	0.60	13.23	2.32	3.66	19.21
Trailer - Snap Bean	16'	2WD 75 hp	2,036	179	15	3.571	85.32	24.81	2.16	3.69	115.99	3.63	22.23	141.86
Trailer - Vegetables	16'	2WD 75 hp	2,036	200	15	0.090	2.15	0.62	0.04	0.09	2.91	0.08	0.56	3.55
Trailer Utility	10'	2WD 50 hp	1,185	200	15	0.600	8.10	2.77	0.09	0.39	11.37	0.31	2.38	14.07
Trailer Water	10'	2WD 50 hp	1,185	150	10	0.600	8.10	2.77	0.18	0.39	11.47	0.55	2.38	14.40
Trailer (MuleTrn) Corn	16'	2WD 75 hp	2,036	12	15	0.229	7.85	1.59	2.07	0.23	11.75	3.47	1.42	16.65
Trailer-Lima/B. Bean	16'	2WD 75 hp	2,036	179	15	3.571	85.32	24.81	2.16	3.69	115.99	3.63	22.23	141.86
Trailer-Southern Pea	16'	2WD 75 hp	2,036	179	15	3.571	85.32	24.81	2.16	3.69	115.99	3.63	22.23	141.86
Trailer-Sweet Potato	16'	MFWD 130	2,036	12	15	0.598	8.08	7.21	5.41	2.11	22.83	9.08	12.72	44.64

Notes:

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, 2018

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANT					
Crop Oil Conc. (Veg)	pt	2.61	Imidan 70 WSB	lb	10.79
CUSTOM			Lorsban 15G	lb	2.35
Contract Plt BPepper	1000pl	13.75	Lorsban 4E	pt	6.10
Custom Apply Fert	acre	7.00	Mustang Max	oz	1.34
Custom Haul Swt. Pot	acre	70.00	Oberon 2SC	oz	4.24
Custom Skid Loader-2	acre	13.63	Poncho	lbseed	0.73
CustomHarvest Tomato	box	1.00	Radiant 1SC	oz	6.82
Fuel Skid Loader (2)	acre	7.10	Tombstone	oz	0.98
Scouting Sweetpotato	acre	15.00	Trimax	oz	3.33
Trapping	acre	1.00	IRRIGATION SUPPLIES		
FERTILIZER			Adapter (Reg to Head)	1 1/2"	5.64
AMM Sulfate 33%	cwt	22.50	Barb Lock Sleeve	1/4"	0.54
Boron (15G Sol)	lb	0.75	Cost of PumpingWater	6" in	24.00
Calcium Nitrate	lb	0.29	Coupler	5/8"	0.58
Fert 13-13-13	cwt	21.58	Drip Tape	roll	173.70
Fert 15-30-15	lb	0.58	End Plug for Header	1 1/2"	3.77
Fert 5-20-30+S+B	cwt	23.54	Feeder Tube	ft	0.11
Lime (Spread)	ton	46.00	Fertigation System	each	47.37
Phosphorus (46% P205)	cwt	18.75	Header Line 1 1/2"	ft	0.39
Potash (60% K20)	cwt	22.20	Hole Punch	1/4"	4.68
FUNGICIDE			Hose Clamp	1 1/2"	1.05
Blocker 10G	lb	1.24	Pressure Regulator	12 PSI	41.60
Bravo Weather Stick	pt	6.56	PVC Female Adaptor	1 1/2"	5.64
Captan 50 WP	lb	4.93	PVC Fitting (adpt)	1 1/2"	2.08
Dithane Rainshield	lb	4.08	PVC Fitting (bush)	1 1/2"	3.37
Headline EC	oz	2.63	Rural Water	ac-in	110.97
Kocide 2000	lb	6.27	Transfer Barb	1/4"	0.23
Quadris	oz	2.14	Y Filter	1"	23.16
Ridomil Gold SL	oz	6.42	OTHER		
Tilt	oz	0.75	1.75bu tub Bell Pepp	each	27.75
Topsin 4.5L	oz	0.61	5-Gal Bucket	each	4.00
HERBICIDE			Bin Repair	each	1.50
Assure 1l	oz	0.74	Bin Sweetpotato20 bu	each	57.00
Basagran	pt	12.31	Bins/Stacking 25bu	each	20.30
Bicep II Magnum	pt	5.51	Bins/Stacking 25bu	each	20.30
Command 3ME	pt	19.43	Box Cabbage	each	2.69
Dual II Magnum	pt	14.83	Box Sweetpotato	each	1.67
Dual Magnum	pt	13.80	Box Tomato	box	1.69
Fusilade DX	oz	1.00	Boxes-Waxed	each	1.82
Glyphosate 3lbs a.e.	pt	2.17	Bushel Box	each	1.50
Glyphosate 3lbs a.e.	oz	0.14	Clean, grade, pack	box	2.59
Gly Star Plus	pt	2.17	Clean, grade, pack	lb	0.01
Goal 2XL	pt	9.89	Cooling Box - Greens	box	1.37
Gramoxone SL 2.0	oz	0.15	Cooling Snap Beans	bu box	1.37
Lorox 50 DF	lb	24.12	CoolingBox S.Cabbage	box	1.37
Outlook	pt	17.47	Crate Sweetpotato	each	8.00
Permit 75DF	oz	22.43	Crates - Sweet Corn	each	2.35
Poast 1.53	pt	12.77	Grd & Pack S.Cabbage	box	1.81
Roundup Power Max	pt	2.72	Hand Weeding Swt.Pot	acre	25.65
Roundup Power Max	oz	0.17	Harv.Labor S.Cabbage	box	1.75
Roundup WeatherMax	pt	4.16	Harvest Labor Melons	cwt	2.57
Roundup WeatherMax	oz	0.26	Harvest Labor Pepper	bu	0.90
Sandea	oz	39.90	Ice	cwt	13.00
Select MAX	oz	0.79	Ice + Cooling	crate	1.29
Strategy	pt	9.78	Ice + Cooling	box	1.38
Treflan	pt	3.52	Labor Clean up	acre	160.00
Valor SX	oz	4.57	Labor (Packing)	each	1.00
INSECTICIDE			Marketing Fee	box	1.00
Acephate	lb	7.43	Pallet Crates-1350lb	each	20.66
Admire Pro	oz	1.70	Plastic Mulch	roll	285.00
Agri-Mek 15EC	oz	2.54	Plastic string	6000'	10.50
Asana XL	oz	0.58	Sacks - S Peas	each	0.42
Assail 30 SG	oz	5.93	Soil Test	each	6.00
Avaunt 30 WDG	oz	6.89	Soil Test Probe	each	75.00
Brigade 2EC	oz	0.74	Sweet Potato Broker	box	1.00
Gaicho 600	oz	2.35			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2018 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Sweetpotato Storage	cwt	2.00	Okra - OP	lb	7.87
Wood Stakes	100	73.00	Pepper Plants	100plt	11.04
SEED/PLANTS			Peppers - OP	lb	167.00
Broccoli - Hybrid	lb	1141.00	Peppers-hybrid	lb	5129.00
Broccoli Plants	thous	40.32	Pumpkin Seed Hybrid	lb	109.00
Cabbage - Hybrid	lb	773.00	Snap Beans - Hybrid	lb	5.77
Cabbage Plants	thous	35.61	Southern Peas - OP	lb	4.55
Collard Seed - OP	lb	11.05	Squash - Hybrid	lb	220.00
Collard Seed -Hybrid	lb	247.00	Sweet Corn - Hybrid	lb	18.22
Cucumber - Hybrid	lb	194.00	Sweetpotato Plants	thous	32.50
Greens - Hybrid	lb	119.00	Tomato - Hybrid	lb	10080.00
Greens - OP	lb	10.55	Tomato Plants-Hybrid	thous	97.67
Lima Bean - Hybrid	lb	4.02	Turnip - Hybrid	lb	91.86
Mustard Seed - OP	lb	17.12	Turnip Seed - OP	lb	10.05
Mustard Seed -Hybrid	lb	90.35	Watermelon - Diploid	lb	738.00
Okra - Hybrid	lb	205.00	Watermelon -Triploid	thous	217.00

Appendix Table 5. Estimated fuel prices
and interest rates Mississippi, 2018

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	1.80
Electricity	kWh	0.00
Gasoline	gal	2.10
LP Gas	gal	1.65
Natural Gas	Mcf	0.00
INTEREST RATES		
Short-term	%	4.75
Intermediate-term	%	5.00

Appendix Table 6. Labor names, units and wage rates, Mississippi, 2018

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	13.51
HARVEST LABOR	hour	10.38
PLANTING LABOR	hour	10.38
GRADE & PACK LABOR	hour	10.38
MARKETING LABOR	hour	10.38
HAND & STOR LABOR	hour	10.38
HAND LABOR	hour	10.38
FERTIGATION LABOR	hour	10.38
HARVEST & PACK LABOR	hour	10.38
HARVEST LABOR BEANS	hour	10.38
LABOR BEAN TRAILER	hour	10.38
GRD LABORPEAS	hour	10.38
LABOR S.PEA TRAILER	hour	10.38
LABOR CABGETRAILER	hour	10.38
LABOR MULCH CLEANUP	hour	10.38
GRD LABORLIMA BEANS	hour	10.38
GRD LABORS. BEANS	hour	10.38
SWEET POTATO LABOR	hour	10.00
SKID LOADER LABOR-2	hour	10.00

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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Fertigation System	each	47.37	1.0000	47.37	_____
Barb Lock Sleeve	1/4"	0.54	45.0000	24.30	_____
Transfer Barb	1/4"	0.23	45.0000	10.35	_____
Feeder Tube	ft	0.11	50.0000	5.60	_____
Header Line 1 1/2"	ft	0.39	300.0000	118.50	_____
Adapter(Reg to Head)	1 1/2"	5.64	1.0000	5.64	_____
End Plug for Header	1 1/2"	3.77	1.0000	3.77	_____
Hose Clamp	1 1/2"	1.05	2.0000	2.10	_____
Pressure Regulator	12 PSI	41.60	1.0000	41.60	_____
PVC Female Adaptor	1 1/2"	5.64	1.0000	5.64	_____
Y Filter	1"	23.16	1.0000	23.16	_____
PVC Fitting (bush)	1 1/2"	3.37	1.0000	3.37	_____
PVC Fitting (adpt)	1 1/2"	2.08	1.0000	2.08	_____
Hole Punch	1/4"	4.68	1.0000	4.68	_____
Coupler	5/8"	0.58	4.0000	2.32	_____

TOTAL DIRECT EXPENSES				300.48	_____

TOTAL INTEREST				15.02	_____

TOTAL SPECIFIED EXPENSES				315.50	_____

Note: Cost of production estimates are based on 2017 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 \$315.50 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Fertigation System	each	47.37	1.0000	47.37	_____
Barb Lock Sleeve	1/4"	0.54	40.0000	21.60	_____
Transfer Barb	1/4"	0.23	40.0000	9.20	_____
Feeder Tube	ft	0.11	50.0000	5.60	_____
Header Line 1 1/2"	ft	0.39	300.0000	118.50	_____
Adapter(Reg to Head)	1 1/2"	5.64	1.0000	5.64	_____
End Plug for Header	1 1/2"	3.77	1.0000	3.77	_____
Hose Clamp	1 1/2"	1.05	2.0000	2.10	_____
Pressure Regulator	12 PSI	41.60	1.0000	41.60	_____
PVC Female Adaptor	1 1/2"	5.64	1.0000	5.64	_____
Y Filter	1"	23.16	1.0000	23.16	_____
PVC Fitting (bush)	1 1/2"	3.37	1.0000	3.37	_____
PVC Fitting (adpt)	1 1/2"	2.08	1.0000	2.08	_____
Hole Punch	1/4"	4.68	1.0000	4.68	_____
Coupler	5/8"	0.58	4.0000	2.32	_____

TOTAL DIRECT EXPENSES				296.63	_____

TOTAL INTEREST				14.83	_____

TOTAL SPECIFIED EXPENSES				311.46	_____

Note: Cost of production estimates are based on 2017 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 \$311.46 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, 2018

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
IRRIGATION SUPPLIES					
Fertigation System	each	47.37	1.0000	47.37	_____
Barb Lock Sleeve	1/4"	0.54	30.0000	16.20	_____
Transfer Barb	1/4"	0.23	30.0000	6.90	_____
Feeder Tube	ft	0.11	50.0000	5.60	_____
Header Line 1 1/2"	ft	0.39	300.0000	118.50	_____
Adapter (Reg to Head)	1 1/2"	5.64	1.0000	5.64	_____
End Plug for Header	1 1/2"	3.77	1.0000	3.77	_____
Hose Clamp	1 1/2"	1.05	2.0000	2.10	_____
Pressure Regulator	12 PSI	41.60	1.0000	41.60	_____
PVC Female Adaptor	1 1/2"	5.64	1.0000	5.64	_____
Y Filter	1"	23.16	1.0000	23.16	_____
PVC Fitting (bush)	1 1/2"	3.37	1.0000	3.37	_____
PVC Fitting (adpt)	1 1/2"	2.08	1.0000	2.08	_____
Hole Punch	1/4"	4.68	1.0000	4.68	_____
Coupler	5/8"	0.58	4.0000	2.32	_____

TOTAL DIRECT EXPENSES				288.93	_____

TOTAL INTEREST				14.45	_____

TOTAL SPECIFIED EXPENSES				303.38	_____

Note: Cost of production estimates are based on 2017 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 \$303.38 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.

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By Elizabeth Canales, MSU Extension, Blake Layton, MSU Extension, Casey Barickman, MAFES/MSU Extension, and Stephen Meyers, MSU Extension.



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