

**PEANUTS  
2017  
PLANNING BUDGETS**

**Mississippi State University  
Department of Agricultural Economics  
Budget Report 2016-07**

**October 2016**



## Foreword

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 2017 planning decisions. This would be a one-year short-run decision. Decisions beyond one 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.

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

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

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

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# 2017 Planning Budgets

## Budgets for Agricultural Enterprises

This publication provides economic and technical information in the form of enterprise budgets for a major crop 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 in providing educational programs to farmers,
- by lenders as a basis for credit,
- to provide basic data for research, and
- to inform non-farmers of the costs incurred by farmers in the production of food and fiber crops.

A budget should be prepared with a specific objective in mind. The budgets in this report were prepared to provide general information for several different uses. They provide information concerning general levels of costs and returns which will need to be adjusted for specific situations. Most users should think of these budgets as a first approximation and then make appropriate adjustments using the "Your Farm" column provided on each budget to add, delete, or change costs or incomes to reflect their specific situations.

## Methods and Procedures

### Production Practices

The production practices listed in each budget are the result of a combined effort by researchers and extension personnel to represent those practices that producers could use in a specific production system. Producers might use different practices in their own operations. If different types and quantities of operating inputs are to be used, then the budgeted expenses should be changed to more accurately reflect actual input usage.

Committees made up of appropriate disciplines from the Mississippi Agricultural and Forestry Experiment Station, the Mississippi State University Extension Service, and the U.S. Department of Agriculture review and update the practices in the budgets every year. The updates are based on the 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 2016. (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).

The labor wage rate per hour includes social security, accident and unemployment insurance, and some perquisites (11). Labor costs are estimated for four labor categories: operator labor, hand labor, irrigation labor, and unallocated labor. Operator labor and hand labor represent estimates of labor required to

perform the in-field tasks. Operator labor is that labor required to operate all power-driven equipment. Irrigation labor is used to perform tasks associated with an irrigation system. Unallocated labor is an estimate of labor that is not used directly in producing the enterprise. Its cost is estimated as a percentage of operator labor (11). The percentages used for the various crop enterprises are listed in Appendix Table 6.

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

### Estimates of Fixed Costs

Annual fixed cost estimates for machinery are based on a budgeting technique which computes the annual capital recovery charge (2, p. 143). When a combination of machines or equipment is required to perform a single operation, the total cost per acre for all equipment used in the operation is estimated. The fixed cost of machinery ownership is calculated by first computing the capital recovery factor and then using it to estimate the annual capital recovery charge.

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

where:

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

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

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:

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

$$\text{CRCPA} = \text{CRCPH} \times \text{PR}$$

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 peanut yields that may be expected in a given year. Budget yields are tempered with unpublished research and judgments of the commodity committee. Producers should use yield estimates that are reflective of their own operation.

To estimate returns, a price for the commodity must be used. Individual producers must determine their own expected price for the commodity. The price used in the budgets is the higher of the loan rate or the best estimate of a contract price for the following growing season. Industry peanut buyers are polled to estimate a contract price.

A special table is presented to illustrate the effects of alternative levels of yields and prices on net returns. The budgeted yield and the budgeted price are used as base values (100 percent). Yields are then varied from 50 to 150 percent of the base yield while prices are varied from 75 to 125 percent of the base price. Net returns are computed for each combination of yield and price.

### Net Returns

Net returns are generally considered to be the amount left after subtracting all costs from all incomes for a particular enterprise. In these budgets, "RETURNS ABOVE DIRECT EXPENSES" and "RETURNS ABOVE TOTAL SPECIFIED EXPENSES" are used as a proxy for the economic concepts of net returns above variable costs and net returns above variable plus fixed costs, respectively. Some

items are intentionally left out of these calculations, i.e., costs for land or land rent, taxes, insurance premiums, general farm overhead, and expected incomes from government payments or insurance payments. These costs and incomes vary widely among farms and farm situations so as to make routine calculation for representative situations impractical. These items should, however, be considered by each producer and factored into the final budget each producer develops for his own situation.

### Irrigation Costs

Estimated costs of a ¼ mile center pivot irrigation system is presented in Appendix Table 8. A dryland crop budget may be converted to an irrigated crop budget by adding the appropriate direct and fixed costs to the costs of the dryland crop. Also, adjustments in crop yields and other costs may be required with the addition of supplemental irrigation.



## Enterprise Budgets

Table 1.A Estimated costs per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.62	5.5000	36.41	_____
Aframe	oz	1.13	2.2500	2.54	_____
Tebuconazole	oz	2.73	7.2000	19.66	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.29	4.0000	9.16	_____
Dual II Magnum	pt	15.51	1.0000	15.51	_____
Valor SX	oz	6.60	3.0000	19.80	_____
Storm	pt	12.75	1.5000	19.13	_____
Cadre	oz	4.21	4.0000	16.84	_____
Butyrac 200 (2,4-DB)	pt	4.77	2.0000	9.54	_____
Select Max	pt	14.99	1.0000	14.99	_____
INSECTICIDES					
Admire Pro	oz	1.72	9.0000	15.48	_____
Acephate 90%	lb	9.80	0.1375	1.35	_____
SEED/PLANTS					
Peanut Seed	lb	0.78	125.0000	97.50	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	3.75	6.0000	22.50	_____
HAULING					
Haul Peanuts	ton	14.50	1.8000	26.10	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____
DRYING					
Dry Peanuts	ton	24.00	1.0800	25.92	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
INOCULANT					
Optimize LIFT	oz	0.59	14.8000	8.73	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	1.6246	21.35	_____
Self-Propelled	hour	13.14	0.1983	2.59	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	13.17	1.4583	19.22	_____
DIESEL FUEL					
Tractors	gal	1.70	17.5722	29.87	_____
Self-Propelled	gal	1.70	1.7850	3.04	_____
REPAIR & MAINTENANCE					
Implements	acre	11.10	1.0000	11.10	_____
Tractors	acre	10.37	1.0000	10.37	_____
Self-Propelled	acre	2.03	1.0000	2.03	_____
INTEREST ON OP. CAP.	acre	6.61	1.0000	6.61	_____
TOTAL DIRECT EXPENSES				515.35	_____
FIXED EXPENSES					
Implements	acre	37.28	1.0000	37.28	_____
Tractors	acre	65.35	1.0000	65.35	_____
Self-Propelled	acre	13.50	1.0000	13.50	_____
TOTAL FIXED EXPENSES				116.13	_____
TOTAL SPECIFIED EXPENSES				631.48	_____

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 1.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.8000	720.00	_____
				-----	
TOTAL INCOME				720.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	58.61	1.0000	58.61	_____
HERBICIDES	acre	104.97	1.0000	104.97	_____
INSECTICIDES	acre	16.83	1.0000	16.83	_____
SEED/PLANTS	acre	97.50	1.0000	97.50	_____
ADJUVANTS	acre	22.50	1.0000	22.50	_____
HAULING	acre	26.10	1.0000	26.10	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
INOCULANT	acre	8.73	1.0000	8.73	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.2199	1.99	_____
OPERATOR LABOR	hour	13.14	1.8229	23.94	_____
UNALLOCATED LABOR	hour	13.17	1.4583	19.22	_____
DIESEL FUEL	gal	1.70	19.3573	32.91	_____
REPAIR & MAINTENANCE	acre	23.50	1.0000	23.50	_____
INTEREST ON OP. CAP.	acre	6.61	1.0000	6.61	_____
				-----	
TOTAL DIRECT EXPENSES				515.35	_____
RETURNS ABOVE DIRECT EXPENSES				204.65	_____
TOTAL FIXED EXPENSES				116.13	_____
				-----	
TOTAL SPECIFIED EXPENSES				631.48	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				88.52	_____

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 1.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
-----hours-----										
Soil Test	acre			0.33	Apr	0.3300				
Sprayer 600-750gal Glyphosate 3lbs a.e	60' 175hp pt		0.017	1.00	Apr	4.0000		0.01	0.02	0.01
Lime (Spread)	ton			0.33	Apr	0.3300				
Bed-Rip/Disk Fold.	8R-38	MFWD 190	0.073	1.00	May		0.07	0.07	0.07	0.05
Peanut Plt&Pre Rigid	8R-38	MFWD 190	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal Dual II Magnum	60' 175hp pt		0.017	1.00	May	1.0000		0.01	0.02	0.01
Valor SX	oz					3.0000				
Sprayer 600-750gal Acephate 90%	60' 175hp lb		0.017	0.25	May	0.1375		0.00	0.00	0.00
Sprayer 600-750gal Storm	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Jul	1.1250		0.01	0.02	0.01
Sprayer 600-750gal Butyrac 200 (2,4-DB)	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Select Max	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Tebuconazole	oz					7.2000				
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Aug	1.1250		0.01	0.02	0.01
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Aug	1.5000		0.01	0.02	0.01
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Sep	1.5000		0.01	0.02	0.01
Peanut Dig/Invertor	4R-38	MFWD 190	0.186	1.00	Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep		0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.0800				
Cleaning Peanuts	ton					1.5300				
Haul Peanuts	ton					1.8000				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.82	1.62	2.04	1.45

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 1.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.08	3.38		3.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Glyphosate 3lbs a.e	pt	9.16						0.22	9.38		9.38
Lime (Spread)	ton	15.18						0.36	15.54		15.54
Bed-Rip/Disk Fold.	8R-38		1.21	0.55	1.73			0.07	3.56	3.31	6.87
Peanut Plt&Pre Rigid	8R-38		2.01	2.43	3.95			0.17	8.56	7.73	16.29
Peanut Seed	lb	97.50						1.93	99.43		99.43
Optimize LIFT	oz	8.73						0.17	8.90		8.90
Admire Pro	oz	15.48						0.31	15.79		15.79
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Dual II Magnum	pt	15.51						0.31	15.82		15.82
Valor SX	oz	19.80						0.39	20.19		20.19
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13				0.25	0.30	0.55
Acephate 90%	lb	1.35						0.03	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Storm	pt	19.13						0.30	19.43		19.43
Cadre	oz	16.84						0.27	17.11		17.11
Butyrac 200 (2,4-DB)	pt	4.77						0.08	4.85		4.85
Crop Oil Conc.(Veg.)	pt	7.50						0.12	7.62		7.62
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Bravo Weather Stick	pt	9.93						0.16	10.09		10.09
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.02	1.29		1.29
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Butyrac 200 (2,4-DB)	pt	4.77						0.06	4.83		4.83
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Select Max	pt	14.99						0.18	15.17		15.17
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	6.62						0.08	6.70		6.70
Tebuconazole	oz	19.66						0.23	19.89		19.89
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.01	1.28		1.28
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	9.93						0.08	10.01		10.01
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50				0.95	1.20	2.15
Bravo Weather Stick	pt	9.93						0.04	9.97		9.97
Peanut Dig/Invertor	4R-38		3.10	2.42	4.41			0.04	9.97	8.43	18.40
Peanut Harvester	4R-38		18.40	13.41	22.10			0.21	54.12	68.32	122.44
Dry Peanuts	ton	25.92						0.10	26.02		26.02
Cleaning Peanuts	ton	27.54						0.11	27.65		27.65
Haul Peanuts	ton	26.10						0.10	26.20		26.20
Peanut Dump Cart	6-Row		5.15	2.66	7.33			0.06	15.20	14.84	30.04
TOTALS		407.18	32.91	23.50	45.15	0.00	6.61	515.35	116.13	631.48	

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 1.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	720.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	27.55	11.20	9.93
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	9.16	35.31	40.74	19.76	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.83	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50	15.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.10
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.18	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.50	6.31	1.00	2.00	1.00	34.34
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	0.27	3.56	0.54	1.08	0.54	26.92
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	3.21	0.36	0.72	0.36	18.67
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.68	3.40	0.97	0.79	0.11	0.66
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.27	174.85	61.04	66.90	13.21	170.08
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-174.85	-61.04	-66.90	-13.21	549.92
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-204.12	-265.16	-332.06	-345.27	204.65

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.



Table 1.F estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-38 inch  
 All Areas, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
PRODUCT PRICE													
Peanut Runner	300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00		
PERCENT	YIELD	UNIT	dollars										
50	0.90	ton	-205 -321	-187 -303	-169 -285	-151 -267	-133 -249	-115 -231	-97 -213	-79 -195	-61 -177	-43 -159	-25 -141
60	1.08	ton	-159 -275	-137 -253	-116 -232	-94 -210	-73 -189	-51 -167	-29 -145	-8 -124	13 -102	34 -81	56 -59
70	1.26	ton	-113 -229	-88 -204	-62 -179	-37 -153	-12 -128	12 -103	37 -78	63 -53	88 -27	113 -2	138 22
80	1.44	ton	-67 -183	-38 -154	-9 -125	19 -97	47 -68	76 -39	105 -10	134 18	163 46	191 75	220 104
90	1.62	ton	-21 -137	11 -105	43 -72	75 -40	108 -7	140 24	173 56	205 89	237 121	270 154	302 186
100	1.80	ton	24 -91	60 -55	96 -19	132 16	168 52	204 88	240 124	276 160	312 196	348 232	384 268
110	1.98	ton	70 -45	110 -5	149 33	189 73	229 112	268 152	308 192	347 231	387 271	427 310	466 350
120	2.16	ton	116 0	159 43	203 86	246 130	289 173	332 216	375 259	419 302	462 346	505 389	548 432
130	2.34	ton	162 46	209 93	256 140	303 186	349 233	396 280	443 327	490 374	537 420	583 467	630 514
140	2.52	ton	208 92	259 142	309 193	359 243	410 294	460 344	511 394	561 445	611 495	662 546	712 596
150	2.70	ton	254 138	308 192	362 246	416 300	470 354	524 408	578 462	632 516	686 570	740 624	794 678

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 2016 input prices..

Table 2.A Estimated costs per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.62	5.5000	36.41	_____
Aframe	oz	1.13	2.2500	2.54	_____
Tebuconazole	oz	2.73	7.2000	19.66	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.29	4.0000	9.16	_____
Dual II Magnum	pt	15.51	1.0000	15.51	_____
Valor SX	oz	6.60	3.0000	19.80	_____
Storm	pt	12.75	1.5000	19.13	_____
Cadre	oz	4.21	4.0000	16.84	_____
Butyrac 200 (2,4-DB)	pt	4.77	2.0000	9.54	_____
Select Max	pt	14.99	1.0000	14.99	_____
INSECTICIDES					
Admire Pro	oz	1.72	9.0000	15.48	_____
Acephate 90%	lb	9.80	0.1375	1.35	_____
SEED/PLANTS					
Peanut Seed	lb	0.78	125.0000	97.50	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	3.75	6.0000	22.50	_____
HAULING					
Haul Peanuts	ton	14.50	1.8000	26.10	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____
DRYING					
Dry Peanuts	ton	24.00	1.0800	25.92	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
INOCULANT					
Optimize LIFT	oz	0.59	14.8000	8.73	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	1.6876	22.18	_____
Self-Propelled	hour	13.14	0.1983	2.59	_____
HAND LABOR					
Implements	hour	9.06	0.1527	1.38	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR					
	hour	13.18	1.5087	19.89	_____
DIESEL FUEL					
Tractors	gal	1.70	18.0359	30.65	_____
Self-Propelled	gal	1.70	1.7850	3.04	_____
REPAIR & MAINTENANCE					
Implements	acre	11.54	1.0000	11.54	_____
Tractors	acre	10.66	1.0000	10.66	_____
Self-Propelled	acre	2.03	1.0000	2.03	_____
INTEREST ON OP. CAP.	acre	6.70	1.0000	6.70	_____
TOTAL DIRECT EXPENSES				518.74	_____
FIXED EXPENSES					
Implements	acre	35.59	1.0000	35.59	_____
Tractors	acre	67.12	1.0000	67.12	_____
Self-Propelled	acre	13.50	1.0000	13.50	_____
TOTAL FIXED EXPENSES				116.21	_____
TOTAL SPECIFIED EXPENSES				634.95	_____

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 2.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.8000	720.00	_____
				-----	
TOTAL INCOME				720.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	58.61	1.0000	58.61	_____
HERBICIDES	acre	104.97	1.0000	104.97	_____
INSECTICIDES	acre	16.83	1.0000	16.83	_____
SEED/PLANTS	acre	97.50	1.0000	97.50	_____
ADJUVANTS	acre	22.50	1.0000	22.50	_____
HAULING	acre	26.10	1.0000	26.10	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
INOCULANT	acre	8.73	1.0000	8.73	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.2519	2.28	_____
OPERATOR LABOR	hour	13.14	1.8859	24.77	_____
UNALLOCATED LABOR	hour	13.18	1.5087	19.89	_____
DIESEL FUEL	gal	1.70	19.8209	33.69	_____
REPAIR & MAINTENANCE	acre	24.23	1.0000	24.23	_____
INTEREST ON OP. CAP.	acre	6.70	1.0000	6.70	_____
				-----	
TOTAL DIRECT EXPENSES				518.74	_____
RETURNS ABOVE DIRECT EXPENSES				201.26	_____
TOTAL FIXED EXPENSES				116.21	_____
				-----	
TOTAL SPECIFIED EXPENSES				634.95	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				85.05	_____

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 2.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Apr	0.3300				
Sprayer 600-750gal Glyphosate 3lbs a.e	60' 175hp pt		0.017	1.00	Apr	4.0000		0.01	0.02	0.01
Lime (Spread)	ton			0.33	Apr	0.3300				
Bed-Rip/Disk Rigid	8R-30	MFWD 190	0.139	1.00	May		0.13	0.13	0.13	0.11
Peanut Plt&Pre Rigid	8R-30	MFWD 190	0.152	1.00	May		0.15	0.15	0.30	0.12
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal Dual II Magnum	60' 175hp pt		0.017	1.00	May	1.0000		0.01	0.02	0.01
Valor SX	oz					3.0000				
Sprayer 600-750gal Acephate 90%	60' 175hp lb		0.017	0.25	May	0.1375		0.00	0.00	0.00
Sprayer 600-750gal Storm	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Jul	1.1250		0.01	0.02	0.01
Sprayer 600-750gal Butyrac 200 (2,4-DB)	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Select Max	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt					2.0000				
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Tebuconazole	oz					7.2000				
Sprayer 600-750gal Aframe	60' 175hp oz		0.017	1.00	Aug	1.1250		0.01	0.02	0.01
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Aug	1.5000		0.01	0.02	0.01
Sprayer 600-750gal Bravo Weather Stick	60' 175hp pt		0.017	1.00	Sep	1.5000		0.01	0.02	0.01
Peanut Dig/Invertor	4R-30	MFWD 190	0.235	1.00	Sep		0.23	0.23	0.23	0.18
Peanut Harvester	4R-30	MFWD 225	0.849	1.00	Sep		0.85	0.85	0.85	0.68
Dry Peanuts	ton					1.0800				
Cleaning Peanuts	ton					1.5300				
Haul Peanuts	ton					1.8000				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
<b>TOTALS</b>						-----hours-----				
						1.88	1.68	2.13	1.50	

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 2.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.08	3.38		3.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Glyphosate 3lbs a.e	pt	9.16						0.22	9.38		9.38
Lime (Spread)	ton	15.18						0.36	15.54		15.54
Bed-Rip/Disk Rigid	8R-30		2.31	1.03	3.29			0.13	6.76	6.12	12.88
Peanut Plt&Pre Rigid	8R-30		2.54	3.24	5.00			0.21	10.99	10.08	21.07
Peanut Seed	lb	97.50						1.93	99.43		99.43
Optimize LIFT	oz	8.73						0.17	8.90		8.90
Admire Pro	oz	15.48						0.31	15.79		15.79
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Dual II Magnum	pt	15.51						0.31	15.82		15.82
Valor SX	oz	19.80						0.39	20.19		20.19
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13				0.25	0.30	0.55
Acephate 90%	lb	1.35						0.03	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Storm	pt	19.13						0.30	19.43		19.43
Cadre	oz	16.84						0.27	17.11		17.11
Butyrac 200 (2,4-DB)	pt	4.77						0.08	4.85		4.85
Crop Oil Conc.(Veg.)	pt	7.50						0.12	7.62		7.62
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Bravo Weather Stick	pt	9.93						0.16	10.09		10.09
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.02	1.29		1.29
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Butyrac 200 (2,4-DB)	pt	4.77						0.06	4.83		4.83
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Select Max	pt	14.99						0.18	15.17		15.17
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	6.62						0.08	6.70		6.70
Tebuconazole	oz	19.66						0.23	19.89		19.89
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.01	1.28		1.28
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	9.93						0.08	10.01		10.01
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50				0.95	1.20	2.15
Bravo Weather Stick	pt	9.93						0.04	9.97		9.97
Peanut Dig/Invertor	4R-30		3.92	3.07	5.58			0.05	12.62	10.67	23.29
Peanut Harvester	4R-30		16.73	12.20	20.11			0.19	49.23	61.00	110.23
Dry Peanuts	ton	25.92						0.10	26.02		26.02
Cleaning Peanuts	ton	27.54						0.11	27.65		27.65
Haul Peanuts	ton	26.10						0.10	26.20		26.20
Peanut Dump Cart	6-Row		5.15	2.66	7.33			0.06	15.20	14.84	30.04
TOTALS			407.18	33.69	24.23	46.94	0.00	6.70	518.74	116.21	634.95

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 2.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	720.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	27.55	11.20	9.93
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	9.16	35.31	40.74	19.76	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.83	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50	15.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.10
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.18	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.50	8.92	1.00	2.00	1.00	33.52
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	0.27	5.19	0.54	1.08	0.54	26.07
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	4.50	0.36	0.72	0.36	18.11
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.68	3.50	0.97	0.79	0.11	0.65
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.27	180.48	61.04	66.90	13.21	167.84
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-180.48	-61.04	-66.90	-13.21	552.16
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-209.75	-270.79	-337.69	-350.90	201.26

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 8 row-30 inch  
 All Areas, Mississippi, 2017

			PERCENT										
PRODUCT			75	80	85	90	95	100	105	110	115	120	125
Peanut Runner			300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00
PERCENT	YIELD	UNIT	dollars										
50	0.90	ton	-208 -325	-190 -307	-172 -289	-154 -271	-136 -253	-118 -235	-100 -217	-82 -199	-64 -181	-46 -163	-28 -145
60	1.08	ton	-162 -279	-141 -257	-119 -235	-97 -214	-76 -192	-54 -171	-33 -149	-11 -127	10 -106	31 -84	53 -63
70	1.26	ton	-116 -232	-91 -207	-66 -182	-41 -157	-15 -132	9 -106	34 -81	59 -56	84 -31	110 -6	135 19
80	1.44	ton	-70 -186	-41 -158	-13 -129	15 -100	44 -71	73 -42	102 -14	130 14	159 43	188 72	217 101
90	1.62	ton	-24 -140	7 -108	40 -76	72 -43	104 -11	137 21	169 53	202 85	234 118	266 150	299 183
100	1.80	ton	21 -94	57 -58	93 -22	129 13	165 49	201 85	237 121	273 157	309 193	345 229	381 265
110	1.98	ton	67 -48	106 -9	146 30	186 69	225 109	265 149	304 188	344 228	384 267	423 307	463 347
120	2.16	ton	113 -2	156 40	199 83	242 126	286 169	329 213	372 256	415 299	458 342	502 385	545 429
130	2.34	ton	159 43	206 89	252 136	299 183	346 230	393 277	440 323	486 370	533 417	580 464	627 511
140	2.52	ton	205 89	255 139	306 189	356 240	406 290	457 341	507 391	558 441	608 492	658 542	709 593
150	2.70	ton	251 135	305 189	359 243	413 297	467 351	521 405	575 459	629 513	683 567	737 621	791 675

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 2016 input prices.

Table 3.A Estimated costs per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	6.62	5.5000	36.41	_____
Aframe	oz	1.13	2.2500	2.54	_____
Tebuconazole	oz	2.73	7.2000	19.66	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.29	4.0000	9.16	_____
Dual II Magnum	pt	15.51	1.0000	15.51	_____
Valor SX	oz	6.60	3.0000	19.80	_____
Storm	pt	12.75	1.5000	19.13	_____
Cadre	oz	4.21	4.0000	16.84	_____
Butyrac 200 (2,4-DB)	pt	4.77	2.0000	9.54	_____
Select Max	pt	14.99	1.0000	14.99	_____
INSECTICIDES					
Admire Pro	oz	1.72	9.0000	15.48	_____
Acephate 90%	lb	9.80	0.1375	1.35	_____
SEED/PLANTS					
Peanut Seed	lb	0.78	125.0000	97.50	_____
ADJUVANTS					
Crop Oil Conc. (Veg.)	pt	3.75	6.0000	22.50	_____
HAULING					
Haul Peanuts	ton	14.50	1.8000	26.10	_____
CLEANING					
Cleaning Peanuts	ton	18.00	1.5300	27.54	_____
DRYING					
Dry Peanuts	ton	24.00	1.0800	25.92	_____
CUSTOM LIME					
Lime (Spread)	ton	46.00	0.3300	15.18	_____
INOCULANT					
Optimize LIFT	oz	0.59	14.8000	8.73	_____
SOIL TEST					
Soil Test	acre	10.00	0.3300	3.30	_____
OPERATOR LABOR					
Tractors	hour	13.14	1.1856	15.58	_____
Self-Propelled	hour	13.14	0.1983	2.59	_____
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	_____
Self-Propelled	hour	9.06	0.0991	0.90	_____
UNALLOCATED LABOR	hour	13.19	1.1072	14.61	_____
DIESEL FUEL					
Tractors	gal	1.70	12.8051	21.77	_____
Self-Propelled	gal	1.70	1.7850	3.04	_____
REPAIR & MAINTENANCE					
Implements	acre	8.76	1.0000	8.76	_____
Tractors	acre	7.56	1.0000	7.56	_____
Self-Propelled	acre	2.03	1.0000	2.03	_____
INTEREST ON OP. CAP.	acre	6.48	1.0000	6.48	_____
TOTAL DIRECT EXPENSES				491.23	_____
FIXED EXPENSES					
Implements	acre	31.12	1.0000	31.12	_____
Tractors	acre	47.62	1.0000	47.62	_____
Self-Propelled	acre	13.50	1.0000	13.50	_____
TOTAL FIXED EXPENSES				92.24	_____
TOTAL SPECIFIED EXPENSES				583.47	_____

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.



Table 3.B Summary of estimated costs and returns per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2017

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.8000	720.00	_____
				-----	
TOTAL INCOME				720.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	58.61	1.0000	58.61	_____
HERBICIDES	acre	104.97	1.0000	104.97	_____
INSECTICIDES	acre	16.83	1.0000	16.83	_____
SEED/PLANTS	acre	97.50	1.0000	97.50	_____
ADJUVANTS	acre	22.50	1.0000	22.50	_____
HAULING	acre	26.10	1.0000	26.10	_____
CLEANING	acre	27.54	1.0000	27.54	_____
DRYING	acre	25.92	1.0000	25.92	_____
CUSTOM LIME	acre	15.18	1.0000	15.18	_____
INOCULANT	acre	8.73	1.0000	8.73	_____
SOIL TEST	acre	3.30	1.0000	3.30	_____
HAND LABOR	hour	9.06	0.1795	1.63	_____
OPERATOR LABOR	hour	13.14	1.3840	18.17	_____
UNALLOCATED LABOR	hour	13.19	1.1072	14.61	_____
DIESEL FUEL	gal	1.70	14.5901	24.81	_____
REPAIR & MAINTENANCE	acre	18.35	1.0000	18.35	_____
INTEREST ON OP. CAP.	acre	6.48	1.0000	6.48	_____
				-----	
TOTAL DIRECT EXPENSES				491.23	_____
RETURNS ABOVE DIRECT EXPENSES				228.77	_____
				-----	
TOTAL FIXED EXPENSES				92.24	_____
				-----	
TOTAL SPECIFIED EXPENSES				583.47	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				136.53	_____

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes. Fertilization decisions should be based on soil tests. Soil test cost is prorated for a test every 3<sup>rd</sup> year. Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 3.C Estimated resource use for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	INPUT AMOUNT	IMPLEMENT	POWER UNIT	ALLOC LABOR	UNALL LABOR
						-----hours-----				
Soil Test	acre			0.33	Apr	0.3300				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 3lbs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3300				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May		0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 190	0.080	1.00	May		0.08	0.08	0.16	0.06
Peanut Seed	lb					125.0000				
Optimize LIFT	oz					14.8000				
Admire Pro	oz					9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	May			0.01	0.02	0.01
Dual II Magnum	pt					1.0000				
Valor SX	oz					3.0000				
Sprayer 600-750gal	60' 175hp		0.017	0.25	May			0.00	0.00	0.00
Acephate 90%	lb					0.1375				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Storm	pt					1.5000				
Cadre	oz					4.0000				
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Aframe	oz					1.1250				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Select Max	pt					1.0000				
Crop Oil Conc.(Veg.)	pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Bravo Weather Stick	pt					1.0000				
Tebuconazole	oz					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Aframe	oz					1.1250				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	pt					1.5000				
Peanut Dig/Invertor	6R-38	MFWD 190	0.124	1.00	Sep		0.12	0.12	0.12	0.09
Peanut Harvester	6R-38	MFWD 225	0.625	1.00	Sep		0.62	0.62	0.62	0.50
Dry Peanuts	ton					1.0800				
Cleaning Peanuts	ton					1.5300				
Haul Peanuts	ton					1.8000				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
TOTALS							1.38	1.18	1.56	1.10

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 3.D Estimated costs for field operations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----							FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL			
-----dollars-----											
Soil Test	acre	3.30						0.08	3.38		3.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Glyphosate 3lbs a.e	pt	9.16						0.22	9.38		9.38
Lime (Spread)	ton	15.18						0.36	15.54		15.54
Bed-Rip/Disk Fold.	12R-38		0.91	0.44	1.10			0.05	2.50	2.58	5.08
Peanut Plt&Pre Fold.	12R-38		1.34	2.88	2.64			0.14	7.00	7.54	14.54
Peanut Seed	lb	97.50						1.93	99.43		99.43
Optimize LIFT	oz	8.73						0.17	8.90		8.90
Admire Pro	oz	15.48						0.31	15.79		15.79
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Dual II Magnum	pt	15.51						0.31	15.82		15.82
Valor SX	oz	19.80						0.39	20.19		20.19
Sprayer 600-750gal	60' 175hp		0.07	0.05	0.13				0.25	0.30	0.55
Acephate 90%	lb	1.35						0.03	1.38		1.38
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Storm	pt	19.13						0.30	19.43		19.43
Cadre	oz	16.84						0.27	17.11		17.11
Butyrac 200 (2,4-DB)	pt	4.77						0.08	4.85		4.85
Crop Oil Conc.(Veg.)	pt	7.50						0.12	7.62		7.62
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.02	0.97	1.20	2.17
Bravo Weather Stick	pt	9.93						0.16	10.09		10.09
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.02	1.29		1.29
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Butyrac 200 (2,4-DB)	pt	4.77						0.06	4.83		4.83
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Select Max	pt	14.99						0.18	15.17		15.17
Crop Oil Conc.(Veg.)	pt	7.50						0.09	7.59		7.59
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	6.62						0.08	6.70		6.70
Tebuconazole	oz	19.66						0.23	19.89		19.89
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Aframe	oz	1.27						0.01	1.28		1.28
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50			0.01	0.96	1.20	2.16
Bravo Weather Stick	pt	9.93						0.08	10.01		10.01
Sprayer 600-750gal	60' 175hp		0.27	0.18	0.50				0.95	1.20	2.15
Bravo Weather Stick	pt	9.93						0.04	9.97		9.97
Peanut Dig/Invertor	6R-38		2.06	1.64	2.93			0.03	6.66	6.10	12.76
Peanut Harvester	6R-38		12.31	8.70	14.78			0.14	35.93	47.68	83.61
Dry Peanuts	ton	25.92						0.10	26.02		26.02
Cleaning Peanuts	ton	27.54						0.11	27.65		27.65
Haul Peanuts	ton	26.10						0.10	26.20		26.20
Peanut Dump Cart	6-Row		5.15	2.66	7.33			0.06	15.20	14.84	30.04
TOTALS			407.18	24.81	18.35	34.41	0.00	6.48	491.23	92.24	583.47

Note: Cost of production estimates are based on 2016 input prices.  
**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**  
**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**  
**Lime cost prorated for application every 3<sup>rd</sup> year.**  
 60% of all peanuts harvested need drying.  
 85% of all peanuts harvested need cleaning.

Table 3.E Estimated monthly income and expense flows per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2017

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	720.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	27.55	11.20	9.93
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	9.16	35.31	40.74	19.76	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.83	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97.50	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50	15.00	0.00	0.00
HAULING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.10
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.54
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.92
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.18	0.00	0.00	0.00	0.00	0.00
INOCULANT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.73	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.50	4.37	1.00	2.00	1.00	25.54
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	0.27	2.59	0.54	1.08	0.54	19.79
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.18	3.55	0.36	0.72	0.36	13.18
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.68	3.35	0.97	0.79	0.11	0.58
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.27	172.23	61.04	66.90	13.21	148.58
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-172.23	-61.04	-66.90	-13.21	571.42
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.27	-201.50	-262.54	-329.44	-342.65	228.77

Note: Cost of production estimates are based on 2016 input prices.

**Fertilizer recommendations are based on the nutrients that the peanut crop removes.**

**Fertilization decisions should be based on soil tests.**

**Soil test cost is prorated for a test every 3<sup>rd</sup> year.**

**Lime cost prorated for application every 3<sup>rd</sup> year.**

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

\* Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre  
 Peanut - runner, 1.8 ton (3600 lb) yield, 12 row-38inch  
 All Areas, Mississippi, 2017

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
Peanut Runner		300.00	320.00	340.00	360.00	380.00	400.00	420.00	440.00	460.00	480.00	500.00	
PERCENT	YIELD	UNIT	dollars										
50	0.90	ton	-181 -273	-163 -255	-145 -237	-127 -219	-109 -201	-91 -183	-73 -165	-55 -147	-37 -129	-19 -111	-1 -93
60	1.08	ton	-135 -227	-113 -205	-92 -184	-70 -162	-48 -141	-27 -119	-5 -97	15 -76	37 -54	59 -33	80 -11
70	1.26	ton	-89 -181	-64 -156	-38 -131	-13 -105	11 -80	36 -55	61 -30	87 -5	112 20	137 45	162 70
80	1.44	ton	-43 -135	-14 -106	14 -77	43 -49	71 -20	100 8	129 37	158 66	187 94	215 123	244 152
90	1.62	ton	2 -89	35 -57	67 -24	99 7	132 40	164 72	197 104	229 137	261 169	294 202	326 234
100	1.80	ton	48 -43	84 -7	120 28	156 64	192 100	228 136	264 172	300 208	336 244	372 280	408 316
110	1.98	ton	94 2	134 42	173 81	213 121	253 160	292 200	332 240	371 279	411 319	451 358	490 398
120	2.16	ton	140 48	183 91	227 134	270 178	313 221	356 264	399 307	443 350	486 394	529 437	572 480
130	2.34	ton	186 94	233 141	280 188	327 234	374 281	420 328	467 375	514 422	561 468	608 515	654 562
140	2.52	ton	232 140	283 190	333 241	384 291	434 342	484 392	535 442	585 493	636 543	686 594	736 644
150	2.70	ton	278 186	332 240	386 294	440 348	494 402	548 456	602 510	656 564	710 618	764 672	818 726

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 2016 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, 2017

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-----					
Combine (250-299 hp)	265 hp	323,000	300	8	13.64	13.14	23.18	33.64	69.97	132.75	202.73
Combine (300-349 hp)	325 hp	336,000	300	8	16.73	13.14	28.44	35.00	76.58	138.10	214.68
Combine (350-399 hp)	355 hp	340,000	300	8	18.27	13.14	31.05	35.41	79.61	139.74	219.36
Combine (400-449 hp)	425 hp	409,000	300	8	21.87	13.14	37.18	42.60	92.93	168.10	261.03
Combine (450-499hp)	475 hp	423,000	300	8	24.44	13.14	41.56	44.06	98.76	173.86	272.62
Tractor ( 20-39hp)CB	MFWD 30	28,500	600	8	1.54	13.14	2.62	0.89	16.65	5.35	22.01
Tractor ( 20-39hp)RB	MFWD 30	21,300	600	8	1.54	13.14	2.62	0.66	16.43	4.00	20.43
Tractor ( 40-59hp)CB	2WD 50	32,200	600	8	2.57	13.14	4.37	1.00	18.52	6.05	24.57
Tractor ( 40-59hp)CB	MFWD 50	39,100	600	8	2.57	13.14	4.37	1.22	18.73	7.35	26.08
Tractor ( 40-59hp)RB	2WD 50	20,900	600	8	2.57	13.14	4.37	0.65	18.16	3.93	22.09
Tractor ( 40-59hp)RB	MFWD 50	24,300	600	8	2.57	13.14	4.37	0.75	18.27	4.56	22.84
Tractor ( 60-89hp)CB	2WD 75	48,300	600	8	3.86	13.14	6.56	1.50	21.21	9.08	30.29
Tractor ( 60-89hp)CB	MFWD 75	54,100	600	8	3.86	13.14	6.56	1.69	21.39	10.17	31.56
Tractor ( 60-89hp)RB	2WD 75	34,400	600	8	3.86	13.14	6.56	1.07	20.77	6.46	27.24
Tractor ( 60-89hp)RB	MFWD 75	35,800	600	8	3.86	13.14	6.56	1.11	20.82	6.73	27.55
Tractor ( 90-119hp)CB	2WD 105	65,300	600	8	5.40	13.14	9.18	2.04	24.36	12.28	36.64
Tractor ( 90-119hp)CB	MFWD 105	77,400	600	8	5.40	13.14	9.18	2.41	24.74	14.55	39.30
Tractor ( 90-119hp)RB	2WD 105	57,600	600	8	5.40	13.14	9.18	1.80	24.12	10.83	34.95
Tractor ( 90-119hp)RB	MFWD 105	62,100	600	8	5.40	13.14	9.18	1.94	24.26	11.67	35.94
Tractor (120-139hp)CB	2WD 130	177,000	600	8	6.69	13.14	11.37	5.53	30.04	33.28	63.33
Tractor (120-139hp)CB	MFWD 130	123,000	600	8	6.69	13.14	11.37	3.84	28.35	23.13	51.48
Tractor (140-159hp)CB	MFWD 150	143,000	600	8	7.72	13.14	13.12	4.46	30.73	26.89	57.62
Tractor (160-179hp)CB	MFWD 170	170,000	600	8	8.75	13.14	14.87	5.31	33.32	33.45	66.78
Tractor (180-199hp)CB	MFWD 190	186,000	600	8	9.77	13.14	16.62	5.81	35.57	36.60	72.17
Tractor (200-249hp)CB	MFWD 225	218,000	600	8	11.58	13.14	19.68	6.81	39.64	42.89	82.53
Tractor (250-349hp)CB	4WD 300	281,000	600	8	15.44	13.14	26.25	8.78	48.17	55.29	103.46
Tractor (250-349hp)CB	MFWD 300	297,000	600	8	15.44	13.14	26.25	9.28	48.67	58.44	107.11
Tractor (250-349hp)CB	Track 300	292,000	600	8	15.44	13.14	26.25	9.12	48.51	57.46	105.97
Tractor (350-449hp)	Track 400	351,000	600	8	20.58	13.14	35.00	10.96	59.11	69.07	128.18
Tractor (350-449hp)CB	4WD 400	325,000	600	8	20.58	13.14	35.00	10.15	58.29	63.95	122.25
Tractor (450-550hp)CB	4WD 500	359,000	600	8	25.73	13.14	43.75	11.21	68.10	70.64	138.75
Tractor (450-550hp)CB	Track 500	400,000	600	8	25.73	13.14	43.75	12.50	69.39	78.71	148.10
Utility Vehicle	800 CC	9,700	200	8	0.70	13.14	1.33	1.51	15.98	5.98	21.96
Utility Vehicle	900 CC	12,200	200	8	1.00	13.14	1.90	1.90	16.94	7.52	24.46
Utility Vehicle-mule	600 CC	6,500	200	8	0.50	13.14	0.95	1.01	15.10	4.00	19.11

## Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

CB = Cab, RB = Roll Bar



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, 2017

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-----					
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	5.72	5.63	10.79	22.15	42.59	64.74
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	5.72	7.89	14.13	27.75	55.78	83.53
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	3.82	5.27	9.61	18.71	37.92	56.63
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	4.84	6.77	15.85	27.48	62.56	90.05
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	3.82	5.35	12.51	21.69	49.39	71.09
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	5.72	9.02	21.58	36.33	85.18	121.51
Cotton Picker/Modu	6R-30 (500)	744,000	200	8	25.73	0.218	4.84	9.54	25.37	39.76	100.11	139.87
Cotton Picker/Modu	6R-38 (365)	536,000	200	8	20.58	0.172	3.82	6.03	14.43	24.28	56.94	81.22
Cotton Picker/Module	6R-38 (500)	745,000	200	8	25.73	0.172	3.82	7.53	20.05	31.42	79.14	110.56
Dry Applicator SP	70'300cuft	312,000	350	8	16.98	0.015	0.26	0.43	0.25	0.95	1.66	2.61
Sprayer 600-750gal	60' 175hp	193,000	350	8	9.00	0.017	0.31	0.26	0.18	0.76	1.19	1.96
Sprayer 600-825gal	80' 175hp	202,000	350	8	11.81	0.013	0.23	0.26	0.14	0.64	0.94	1.58
Sprayer 600-825gal	90' 250hp	273,000	350	8	12.73	0.011	0.20	0.25	0.17	0.63	1.13	1.76
Sprayer 800gal	100' 250hp	261,000	350	8	14.15	0.010	0.18	0.25	0.14	0.58	0.97	1.56
Sprayer 800gal	80' 250hp	250,000	350	8	12.86	0.013	0.23	0.28	0.17	0.69	1.16	1.86
Sprayer 1000-1400gal	90' 275hp	294,000	350	8	14.15	0.010	0.18	0.25	0.16	0.60	1.09	1.70
Sprayer 1000gal	100' 300hp	308,000	350	8	15.44	0.010	0.18	0.27	0.17	0.63	1.14	1.78
Sprayer 1200+gal	120' 300hp	343,000	350	8	15.44	0.008	0.15	0.23	0.16	0.54	1.06	1.61

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M--- Imp. P.U.	Total Direct	--Fixed-- Imp. P.U.	Total Cost			
				dollars	hours	years	hr/ac	-----\$/acre-----							
Bed-Paratill	Fold	8R-38	MFWD 225	54,400	150	12	0.080	1.06	1.59	1.58	0.55	4.78	2.75	3.46	11.00
Bed-Paratill	Fold	8R-38 2x1	MFWD 225	69,100	150	12	0.053	0.70	1.05	1.34	0.36	3.47	2.32	2.30	8.10
Bed-Paratill	Fold	12R-38	MFWD 225	69,100	150	12	0.053	0.70	1.05	1.34	0.36	3.47	2.32	2.30	8.10
Bed-Paratill	Rigid	4R-30	MFWD 225	13,500	150	12	0.204	2.68	4.02	0.99	1.39	9.09	1.72	8.76	19.58
Bed-Paratill	Rigid	4R-38	MFWD 225	13,500	150	12	0.160	2.11	3.16	0.78	1.09	7.16	1.36	6.90	15.42
Bed-Paratill	Rigid	6R-30	MFWD 225	19,900	150	12	0.136	1.78	2.68	0.97	0.92	6.37	1.69	5.84	13.92
Bed-Paratill	Rigid	6R-38	MFWD 225	18,800	150	12	0.107	1.41	2.11	0.73	0.73	4.99	1.26	4.61	10.87
Bed-Paratill	Rigid	8R-30	MFWD 225	25,000	150	12	0.102	1.34	2.01	0.92	0.69	4.97	1.60	4.38	10.95
Bed-Paratill	Rigid	8R-38	MFWD 225	25,000	150	12	0.080	1.06	1.59	0.72	0.55	3.93	1.26	3.46	8.65
Bed-Paratill	w/rol	4R-30	MFWD 225	17,900	150	12	0.204	2.68	4.02	1.32	1.39	9.42	2.29	8.76	20.47
Bed-Paratill	w/rol	4R-38	MFWD 225	17,900	150	12	0.160	2.11	3.16	1.03	1.09	7.41	1.80	6.90	16.12
Bed-Paratill	w/rol	6R-38	MFWD 225	25,200	150	12	0.107	1.41	2.11	0.97	0.73	5.24	1.69	4.61	11.55
Bed-Rip/Disk	Fold.	8R-38	MFWD 190	36,900	300	20	0.073	0.96	1.21	0.13	0.42	2.73	0.63	2.67	6.04
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	54,400	300	20	0.061	0.80	1.21	0.16	0.41	2.61	0.79	2.64	6.04
Bed-Rip/Disk	Fold.	12R-38	MFWD 225	54,400	300	20	0.046	0.60	0.90	0.12	0.31	1.95	0.59	1.98	4.53
Bed-Rip/Disk	Rigid	4R-30	MFWD 190	17,300	300	20	0.184	2.42	3.07	0.15	1.07	6.73	0.75	6.76	14.26
Bed-Rip/Disk	Rigid	4R-38	MFWD 190	17,300	300	20	0.146	1.92	2.43	0.12	0.85	5.34	0.60	5.37	11.32
Bed-Rip/Disk	Rigid	6R-38	MFWD 190	23,900	300	20	0.097	1.27	1.61	0.11	0.56	3.57	0.55	3.56	7.69
Bed-Rip/Disk	Rigid	8R-30	MFWD 190	31,300	300	20	0.139	1.82	2.31	0.21	0.80	5.16	1.03	5.08	11.28
Bed-Rip/Disk	Rigid	8R-38	MFWD 190	31,300	300	20	0.073	0.96	1.21	0.11	0.42	2.71	0.54	2.67	5.93
Bed-Rip/Disk	Rigid	6R-30	MFWD 190	23,900	300	20	0.123	1.61	2.04	0.14	0.71	4.53	0.69	4.51	9.74
Bed-Rip/Disk/Cond.	6-Row	MFWD 225	24,600	150	12	0.107	1.41	2.11	0.95	0.73	5.21	1.65	4.61	11.48	
Bed-Rip/Disk/Cond.	8-Row	MFWD 225	32,700	150	12	0.080	1.06	1.59	0.95	0.55	4.15	1.65	3.46	9.27	
Bed/Disk (Hipper)	4R-38	MFWD 150	8,800	160	10	0.147	1.93	1.93	0.32	0.65	4.86	0.85	3.97	9.69	
Bed/Disk (Hipper)	6R-30	MFWD 170	15,100	160	10	0.125	1.64	1.85	0.47	0.66	4.63	1.24	4.18	10.06	
Bed/Disk (Hipper)	6R-38	MFWD 170	15,100	160	10	0.098	1.29	1.46	0.37	0.52	3.66	0.98	3.30	7.94	
Bed/Disk (Hipper)	8R-30	MFWD 190	17,400	160	10	0.093	1.23	1.55	0.40	0.54	3.74	1.07	3.43	8.25	
Bed/Disk (Hipper)	8R-38 2x1	MFWD 190	33,600	160	10	0.049	0.64	0.82	0.41	0.28	2.16	1.09	1.80	5.07	
Bed/Disk (Hipper)	12R-30	MFWD 225	30,700	160	10	0.062	0.82	1.23	0.47	0.42	2.95	1.26	2.68	6.90	
Bed/Disk (Hipper)	12R-38	MFWD 225	33,600	160	10	0.049	0.64	0.97	0.41	0.33	2.37	1.09	2.11	5.58	
Bed/Disk (Hipper)	16R40	MFWD 300	47,000	160	10	0.035	0.46	0.92	0.41	0.32	2.13	1.09	2.06	5.30	
Bed/Disk (Hipper)Fl	8R-38	MFWD 190	20,200	160	10	0.074	0.97	1.23	0.37	0.43	3.01	0.98	2.71	6.71	
Bed/Disk (Hipper)Rd	8R-38	MFWD 190	14,600	160	10	0.074	0.97	1.23	0.27	0.43	2.90	0.71	2.71	6.33	
Bed/Disk w/roller	8R-30/40	MFWD 190	27,800	160	10	0.093	1.23	1.55	0.65	0.54	3.98	1.72	3.43	9.13	
Bed/Disk w/roller	12R-30/40	MFWD 225	44,400	160	10	0.062	0.82	1.23	0.69	0.42	3.17	1.83	2.68	7.68	
Bed/Disk w/roller	8R-38	MFWD 190	27,400	160	10	0.074	0.97	1.23	0.50	0.43	3.14	1.34	2.71	7.19	
Bed/Lister	4R-38	MFWD 150	18,200	160	8	0.228	3.00	2.99	0.97	1.02	7.99	3.06	6.14	17.20	
Bed/Lister	6R-38	MFWD 150	18,900	160	8	0.120	1.57	1.57	0.53	0.53	4.22	1.67	3.23	9.13	
Bed/Lister	8R-30	MFWD 190	20,500	160	8	0.114	1.50	1.89	0.54	0.66	4.61	1.72	4.17	10.51	
Bed/Lister	8R-38	MFWD 190	23,500	160	8	0.090	1.18	1.50	0.49	0.52	3.70	1.56	3.30	8.57	
Bed/Lister	8R-38 2x1	MFWD 190	46,200	160	8	0.060	0.78	0.99	0.65	0.34	2.78	2.04	2.19	7.03	
Bed/Lister	12R-38	MFWD 225	46,200	160	8	0.060	0.78	1.18	0.65	0.40	3.03	2.04	2.57	7.66	
Bed/Lister	16R-30	MFWD 225	59,400	160	8	0.035	0.46	0.69	0.48	0.23	1.88	1.53	1.50	4.92	
Bed/Lister	16R40	MFWD 300	82,400	160	8	0.043	0.56	1.13	0.83	0.39	2.92	2.62	2.51	8.06	
Bed/Lister-Roll-Fold	8R-38	MFWD 190	24,400	160	10	0.074	0.97	1.23	0.45	0.43	3.08	1.19	2.71	6.99	
Bed/Lister-Roll-Fold	12R-30	MFWD 225	29,200	160	10	0.062	0.82	1.23	0.45	0.42	2.93	1.20	2.68	6.82	
Bed/Lister-Roll-Fold	12R-38	MFWD 225	33,400	160	10	0.049	0.64	0.97	0.41	0.33	2.36	1.08	2.11	5.57	
Bed/Lister-Roll-Fold	16R-30	MFWD 225	34,800	160	10	0.046	0.61	0.92	0.40	0.31	2.26	1.07	2.01	5.35	
Bed/Lister-Roll-Rig.	8R-38	MFWD 190	21,300	160	10	0.074	0.97	1.23	0.39	0.43	3.03	1.04	2.71	6.78	
Blade-Box	6'-7'	MFWD 105	1,150	200	20	0.020	0.26	0.18	0.01	0.03	0.49	0.00	0.23	0.73	
Blade-Box	8'-10'	MFWD 105	3,010	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Blade-Box	12'-16'	MFWD 105	6,270	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Blade-Scraper	6'-7'	MFWD 105	1,100	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Blade-Scraper	8'-10'	MFWD 105	3,390	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Blade-Scraper	12'-16'	MFWD 105	6,860	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Boll Buggy	4R-38(250)	MFWD 190	30,500	200	10	0.257	3.38	4.28	1.96	1.49	11.13	3.99	9.43	24.56	
Boll Buggy	4R-38(350)	MFWD 190	30,500	200	10	0.257	3.38	4.28	1.96	1.49	11.13	3.99	9.43	24.56	
Boll Buggy	4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.26	2.86	1.31	1.00	7.44	2.67	6.30	16.42	
Boll Buggy	6R-30(355)	MFWD 190	30,500	200	10	0.218	2.86	3.62	1.66	1.26	9.42	3.38	7.98	20.80	
Boll Buggy	6R-38(355)	MFWD 190	30,500	200	10	0.172	2.26	2.86	1.31	1.00	7.44	2.67	6.30	16.42	
Chisel Plow-Folding	24'	MFWD 190	38,000	150	12	0.076	1.00	1.27	1.04	0.44	3.76	1.82	2.79	8.38	
Chisel Plow-Folding	32'	MFWD 225	49,900	150	12	0.057	0.75	1.13	1.04	0.39	3.33	1.80	2.47	7.61	
Chisel Plow-Folding	42'	MFWD 225	60,600	150	12	0.044	0.57	0.86	0.96	0.29	2.70	1.67	1.88	6.26	
Chisel Plow-Folding	50'	MFWD 225	79,400	150	10	0.036	0.48	0.72	1.27	0.25	2.73	2.06	1.58	6.39	
Chisel Plow-Folding	61'	MFWD 225	88,400	150	12	0.030	0.39	0.59	0.96	0.20	2.16	1.67	1.30	5.14	
Chisel Plow-Rigid	10'	MFWD 170	6,300	150	12	0.184	2.42	2.75	0.42	0.98	6.58	0.72	6.18	13.49	
Chisel Plow-Rigid	15'	2WD 130	11,400	150	12	0.123	1.61	1.40	0.50	0.68	4.21	0.88	4.10	9.19	
Chisel Plow-Rigid	20'	MFWD 225	11,300	150	12	0.102	1.34	2.02	0.41	0.69	4.49	0.72	4.40	9.62	
Chisel Plow-Rigid	24'	MFWD 190	12,100	150	12	0.077	1.01	1.28	0.33	0.44	3.07	0.58	2.81	6.48	
Cultivate	4R-30	2WD 105	11,900	150	10	0.206	2.71	1.89	0.65	0.42	5.68	1.72	2.53	9.94	
Cultivate	4R-38	2WD 105	12,000	150	10	0.162	2.13	1.49	0.51	0.29	4.43	1.37	1.75	7.56	
Cultivate	6R-30	MFWD 150	16,200	150	10	0.137	1.80	1.80	0.59	0.61	4.81	1.56	3.69	10.08	
Cultivate	6R-38	MFWD 150	17,100	150	10	0.108	1.42	1.42	0.49	0.48	3.83	1.30	2.91	8.05	
Cultivate	8R-30	MFWD 190	20,500	150	10	0.103	1.35	1.71	0.56	0.59	4.23	1.48	3.77	9.49	
Cultivate	8R-38	MFWD 190	21,300	150	10	0.073	0.96	1.22	0.41	0.42	3.03	1.10	2.69	6.84	
Cultivate	8R-38 2x1	MFWD 190	30,400	150	10	0.054	0.71	0.90	0.44	0.31	2.37	1.16	1.98	5.52	
Cultivate	12R-30	MFWD 225	35,500	150	10	0.068	0.90	1.35	0.65	0.46	3.37	1.71	2.94	8.04	
Cultivate	12R-38	MFWD 225	37,000	150	10	0.054	0.71	1.06	0.53	0.36	2.68	1.41	2.32	6.43	

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (continued)

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-----							
Cultivate	16R-30	MFWD 225	47,300	150	10	0.051	0.67	1.01	0.65	0.35	2.69	1.71	2.21	6.62
Cultivate & Post	4R-30	2WD 105	17,300	150	10	0.220	3.88	2.02	1.01	0.39	7.31	2.68	2.38	12.38
Cultivate & Post	4R-38	2WD 105	17,400	150	10	0.173	3.06	1.59	0.80	0.31	5.76	2.12	1.87	9.76
Cultivate & Post	6R-30	MFWD 150	21,600	150	10	0.146	2.59	1.92	0.84	0.65	6.01	2.23	3.94	12.19
Cultivate & Post	6R-38	MFWD 150	22,500	150	10	0.115	2.04	1.51	0.69	0.51	4.77	1.83	3.11	9.72
Cultivate & Post	8R-30	MFWD 190	25,900	150	10	0.110	1.94	1.82	0.75	0.63	5.17	2.00	4.02	11.20
Cultivate & Post	8R-38	MFWD 190	26,700	150	10	0.086	1.53	1.44	0.61	0.50	4.10	1.63	3.18	8.92
Cultivate & Post	8R-38 2x1	MFWD 190	38,300	150	10	0.057	1.02	0.96	0.59	0.33	2.91	1.56	2.11	6.59
Cultivate & Post	10R-30	MFWD 225	31,700	150	10	0.088	1.55	1.73	0.74	0.59	4.63	1.96	3.77	10.37
Cultivate & Post	12R-30	MFWD 225	41,000	150	10	0.073	1.29	1.44	0.80	0.49	4.04	2.11	3.14	9.30
Cultivate & Post	12R-38	MFWD 225	44,800	150	10	0.057	1.02	1.13	0.69	0.39	3.24	1.82	2.48	7.55
Cultivate & Post	16R-30	MFWD 225	55,100	150	10	0.055	0.97	1.08	0.80	0.37	3.23	2.13	2.35	7.73
Disk & Incorporate	14'	2WD 130	29,800	200	10	0.149	2.64	1.70	1.33	0.82	6.51	2.35	4.98	13.85
Disk & Incorporate	20'	MFWD 190	46,000	180	10	0.092	1.21	1.53	1.41	0.53	4.70	2.49	3.38	10.58
Disk & Incorporate	24'	MFWD 190	47,900	200	10	0.087	1.54	1.45	1.25	0.50	4.75	2.20	3.19	10.16
Disk & Incorporate	28'	MFWD 225	55,900	200	10	0.074	1.32	1.47	1.25	0.50	4.56	2.20	3.21	9.98
Disk & Incorporate	32'	MFWD 225	59,300	200	10	0.065	1.15	1.28	1.16	0.44	4.05	2.05	2.80	8.91
Disk Harrow	14'	2WD 130	24,400	180	10	0.140	1.84	1.59	0.95	0.77	5.16	2.00	4.67	11.84
Disk Harrow	20'	MFWD 190	40,600	180	10	0.098	1.29	1.63	1.10	0.57	4.60	2.34	3.59	10.53
Disk Harrow	24'	MFWD 190	42,500	180	10	0.081	1.07	1.36	0.96	0.47	3.87	2.04	2.99	8.91
Disk Harrow	28'	MFWD 225	50,400	180	10	0.070	0.92	1.38	0.98	0.47	3.76	2.07	3.00	8.84
Disk Harrow	32'	MFWD 225	53,900	180	10	0.061	0.80	1.20	0.91	0.41	3.35	1.94	2.63	7.92
Disk Harrow	42'	MFWD 225	94,400	180	10	0.046	0.61	0.92	1.22	0.31	3.08	2.59	2.00	7.67
Disk Harrow 40-100hp	14'	2WD 75	14,700	180	10	0.140	1.84	0.92	0.57	0.15	3.48	1.21	0.90	5.60
Disk Heavy	14'	MFWD 150	24,400	180	10	0.145	1.91	1.91	0.98	0.65	5.47	2.09	3.92	11.49
Disk Heavy	20'	MFWD 170	40,600	180	10	0.097	1.27	1.44	1.09	0.51	4.34	2.31	3.25	9.91
Disk Heavy	28'	MFWD 190	50,400	180	10	0.075	0.99	1.25	1.05	0.43	3.75	2.23	2.77	8.76
Disk Ripper	15'	MFWD 225	41,500	180	10	0.136	1.78	2.68	1.57	0.92	6.97	3.31	5.84	16.13
Ditcher		2WD 130	5,750	200	10	0.020	0.26	0.22	0.04	0.11	0.64	0.06	0.66	1.37
Ditcher (1m/160a)		2WD 130	5,750	200	10	0.009	0.12	0.10	0.02	0.05	0.30	0.02	0.31	0.64
Fert Appl (Liquid)	4R-38	MFWD 150	14,700	150	8	0.154	2.73	2.03	1.51	0.69	6.97	1.71	4.15	12.83
Fert Appl (Liquid)	6R-30	MFWD 170	13,700	150	8	0.130	2.31	1.94	1.19	0.69	6.15	1.34	4.38	11.88
Fert Appl (Liquid)	6R-38	MFWD 170	11,600	150	8	0.103	1.82	1.53	0.79	0.54	4.71	0.90	3.45	9.07
Fert Appl (Liquid)	8R-30	MFWD 190	14,500	150	8	0.098	1.73	1.63	0.94	0.57	4.88	1.07	3.59	9.55
Fert Appl (Liquid)	8R-38	MFWD 190	16,600	150	8	0.077	1.37	1.29	0.85	0.45	3.97	0.96	2.84	7.78
Fert Appl (Liquid)	8R-38 2x1	MFWD 190	17,700	150	8	0.051	0.91	0.85	0.60	0.30	2.68	0.68	1.89	5.26
Fert Appl (Liquid)	12R-30	MFWD 225	19,000	150	8	0.078	1.38	1.54	0.99	0.53	4.46	1.12	3.37	8.95
Fert Appl (Liquid)	12R-38	MFWD 225	17,700	150	8	0.051	0.91	1.01	0.60	0.35	2.89	0.68	2.21	5.79
Field Cult & Inc	42'	MFWD 225	64,700	100	10	0.037	0.66	0.74	0.61	0.25	2.27	2.58	1.62	6.48
Field Cult & Inc	50'	MFWD 225	74,900	100	10	0.031	0.56	0.62	0.59	0.21	1.99	2.51	1.36	5.86
Field Cult & Inc Fld	24'	MFWD 170	38,000	100	10	0.066	1.16	0.98	0.62	0.35	3.13	2.65	2.21	7.99
Field Cult & Inc Fld	32'	MFWD 190	45,000	100	10	0.049	0.87	0.82	0.55	0.28	2.54	2.35	1.81	6.71
Field Cult & Inc Rdg	12'	2WD 150	18,000	100	10	0.132	2.33	1.73	0.59	0.44	5.11	2.51	2.68	10.31
Field Cultivate Fld	24'	MFWD 170	25,300	100	10	0.062	0.81	0.92	0.39	0.33	2.46	1.66	2.08	6.21
Field Cultivate Fld	32'	MFWD 190	39,600	100	10	0.046	0.61	0.77	0.46	0.27	2.12	1.95	1.70	5.78
Field Cultivate Fld	42'	MFWD 225	56,900	100	10	0.035	0.46	0.69	0.50	0.24	1.91	2.13	1.52	5.57
Field Cultivate Fld	50'	MFWD 225	65,300	100	10	0.029	0.39	0.58	0.48	0.20	1.67	2.06	1.28	5.01
Field Cultivate Rdg	12'	2WD 150	12,600	100	10	0.124	1.63	1.63	0.39	0.41	4.08	1.65	2.52	8.26
Grain Cart Corn	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.06	0.28	0.92	2.27
Grain Cart Corn	700 bu	MFWD 190	36,800	200	12	0.025	0.33	0.42	0.25	0.14	1.15	0.43	0.92	2.51
Grain Cart Corn	1000 bu	MFWD 225	48,700	200	12	0.025	0.33	0.49	0.33	0.17	1.33	0.57	1.08	3.00
Grain Cart Rice	500 bu	MFWD 190	23,900	200	12	0.062	0.82	1.03	0.40	0.36	2.62	0.70	2.28	5.61
Grain Cart Rice	700 bu	MFWD 190	36,800	200	12	0.055	0.72	0.91	0.54	0.31	2.50	0.95	2.01	5.46
Grain Cart Rice	1000 bu	MFWD 190	48,700	200	12	0.045	0.60	0.76	0.60	0.26	2.23	1.04	1.67	4.96
Grain Cart Soybean	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.07	0.28	0.93	2.29
Grain Cart Soybean	700 bu	MFWD 190	36,800	200	12	0.021	0.27	0.35	0.21	0.12	0.96	0.36	0.77	2.11
Grain Cart Soybean	1000 bu	MFWD 190	48,700	200	12	0.021	0.27	0.35	0.28	0.12	1.03	0.48	0.77	2.30
Grain Cart Wht/Sor	500 bu	MFWD 190	23,900	200	12	0.025	0.33	0.42	0.16	0.14	1.07	0.28	0.93	2.29
Grain Cart Wht/Sor	700 bu	MFWD 190	36,800	200	12	0.021	0.27	0.35	0.21	0.12	0.96	0.36	0.77	2.11
Grain Cart Wht/Sor	1000 bu	MFWD 190	48,700	200	12	0.021	0.27	0.35	0.28	0.12	1.03	0.48	0.77	2.30
Grain Drill	10'	2WD 130	26,800	150	8	0.188	4.18	2.14	1.89	1.04	9.26	3.62	6.27	19.17
Grain Drill	12'	2WD 130	24,100	150	8	0.157	3.48	1.78	1.42	0.86	7.56	2.71	5.23	15.51
Grain Drill	15'	MFWD 150	32,700	150	8	0.125	2.79	1.65	1.54	0.56	6.54	2.94	3.38	12.87
Grain Drill	20'	MFWD 170	38,800	150	8	0.094	2.09	1.40	1.37	0.50	5.36	2.62	3.15	11.14
Grain Drill	24'	MFWD 190	58,600	150	8	0.078	1.74	1.30	1.72	0.45	5.23	3.30	2.87	11.41
Grain Drill	30'	MFWD 225	65,300	150	8	0.062	1.39	1.23	1.53	0.42	4.60	2.94	2.69	10.24
Grain Drill	35'	MFWD 225	93,600	150	8	0.053	1.19	1.06	1.89	0.36	4.51	3.61	2.31	10.44
Grain Drill & Pre	10'	2WD 130	32,200	150	8	0.203	4.50	2.31	2.45	1.12	10.39	4.69	6.75	21.84
Grain Drill & Pre	12'	2WD 130	29,600	150	8	0.169	3.75	1.92	1.87	0.93	8.49	3.59	5.63	17.72
Grain Drill & Pre	15'	MFWD 150	38,100	150	8	0.135	3.00	1.77	1.93	0.60	7.32	3.69	3.64	14.66
Grain Drill & Pre	20'	MFWD 170	44,300	150	8	0.101	2.25	1.51	1.68	0.53	5.99	3.22	3.39	12.61
Grain Drill & Pre	24'	MFWD 190	64,000	150	8	0.084	1.87	1.40	2.03	0.49	5.80	3.88	3.09	12.79
Grain Drill & Pre	30'	MFWD 225	70,700	150	8	0.067	1.50	1.33	1.79	0.46	5.09	3.43	2.90	11.42
Grain Drill & Pre	35'	MFWD 225	99,100	150	8	0.058	1.28	1.14	2.15	0.39	4.98	4.12	2.48	11.59
Grain Drill & Pre T	8R-38	MFWD 225	50,500	150	8	0.062	1.39	1.23	1.19	0.42	4.25	2.27	2.69	9.22
Harrow - Rigid	21'	2WD 150	6,750	200	10	0.073	0.97	0.97	0.17	0.24	2.36	0.26	1.50	4.13
Harrow - Folding	24'	MFWD 190	12,700	200	10	0.064	0.85	1.07	0.28	0.37	2.58	0.43	2.36	5.39
Harrow - Folding	30'	MFWD 190	15,200	200	10	0.051	0.68	0.86	0.27	0.30	2.11	0.41	1.89	4.42
Harrow - Folding	40'	MFWD 190	17,400	200	10	0.038	0.51	0.64	0.23	0.22	1.61	0.35	1.42	3.39
Harrow - Folding	48'	MFWD 225	22,700	200	10	0.032	0.42	0.63	0.25	0.22	1.53	0.38	1.38	3.31

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--		Total	
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	Cost	
			dollars	hours	years	hr/ac	-----\$/acre-----								
Harrow - Rigid	13'	2WD 130	4,950	200	10	0.119	1.56	1.35	0.20	0.66	3.79	0.31	3.97	8.08	
Header - Corn	6R-30	265 hp	46,500	300	8	0.170	2.23	3.94	1.97	5.72	13.89	2.97	22.60	39.47	
Header - Corn	6R-38	265 hp	46,700	300	8	0.134	1.76	3.11	1.56	4.52	10.97	2.36	17.84	31.18	
Header - Corn	8R-30	265 hp	58,600	300	8	0.127	1.67	2.96	1.87	4.29	10.80	2.81	16.95	30.57	
Header - Corn	8R-38	325 hp	59,600	300	8	0.100	1.32	2.87	1.50	3.53	9.23	2.26	13.94	25.44	
Header - Corn	12R-20	325 hp	77,400	300	8	0.127	1.67	3.63	2.47	4.46	12.25	3.71	17.63	33.60	
Header - Corn	12R-30	325 hp	91,600	300	8	0.085	1.11	2.42	1.94	2.97	8.46	2.93	11.75	23.16	
Header - Draper (CL)	25' Rigid	265 hp	58,200	300	8	0.203	2.66	4.70	2.70	6.83	16.91	4.23	26.96	48.11	
Header - Draper (CL)	30' Rigid	325 hp	67,200	300	8	0.169	2.22	4.81	2.60	5.92	15.56	4.07	23.37	43.01	
Header - Draper (CL)	36' Rigid	355 hp	71,300	300	8	0.141	1.85	4.38	2.30	4.99	13.53	3.60	19.70	36.84	
Header - Draper (SL)	25' Rigid	325 hp	58,200	300	8	0.176	2.31	5.00	2.34	6.16	15.82	3.67	24.30	43.80	
Header - Draper (SL)	30' Rigid	325 hp	67,200	300	8	0.146	1.92	4.17	2.25	5.13	13.49	3.53	20.25	37.28	
Header - Draper (SL)	36' Rigid	355 hp	71,300	300	8	0.122	1.60	3.79	1.99	4.32	11.72	3.12	17.07	31.93	
Header - Rice (CL)	25' Rigid	325 hp	64,400	300	8	0.253	3.33	7.21	4.08	8.88	23.52	6.14	35.05	64.73	
Header - Rice (CL)	30' Rigid	325 hp	74,100	300	8	0.211	2.77	6.01	3.91	7.40	20.11	5.89	29.21	55.22	
Header - Rice (SL)	25' Rigid	325 hp	64,400	300	8	0.220	2.89	6.25	3.54	7.70	20.38	5.32	30.38	56.10	
Header - Rice (SL)	30' Rigid	325 hp	74,100	300	8	0.183	2.40	5.21	3.39	6.41	17.43	5.10	25.31	47.86	
Header -RiceStrp(CL)	20'	265 hp	48,600	300	8	0.253	3.33	5.88	3.08	8.54	20.84	4.64	33.70	59.18	
Header -RiceStrp(CL)	24'	325 hp	53,300	300	8	0.211	2.77	6.01	2.81	7.40	19.01	4.24	29.21	52.47	
Header -RiceStrp(CL)	32'	325 hp	58,700	300	8	0.158	2.08	4.51	2.32	5.55	14.47	3.50	21.90	39.89	
Header -RiceStrp(SL)	20'	265 hp	48,600	300	8	0.220	2.89	5.10	2.67	7.40	18.06	4.02	29.20	51.29	
Header -RiceStrp(SL)	24'	325 hp	53,300	300	8	0.183	2.40	5.21	2.44	6.41	16.48	3.67	25.31	45.47	
Header -RiceStrp(SL)	32'	325 hp	58,700	300	8	0.137	1.80	3.91	2.01	4.81	12.54	3.03	18.98	34.57	
Header -Soybean	22' Flex	265 hp	31,800	300	8	0.116	1.52	2.69	0.92	3.90	9.04	1.38	15.41	25.84	
Header -Soybean	25' Flex	325 hp	34,300	300	8	0.102	1.34	2.90	0.87	3.57	8.70	1.31	14.10	24.12	
Header -Soybean	30' Flex	325 hp	39,600	300	8	0.085	1.11	2.42	0.84	2.97	7.36	1.26	11.75	20.38	
Header -Soybean	35' Flex	355 hp	45,700	300	8	0.072	0.95	2.26	0.83	2.58	6.64	1.25	10.19	18.09	
Header -Wheat/Sorghum	22' Rigid	265 hp	19,600	300	8	0.116	1.52	2.69	0.56	3.90	8.69	0.85	15.41	24.96	
Header -Wheat/Sorghum	25' Rigid	325 hp	24,300	300	8	0.102	1.34	2.90	0.62	3.57	8.44	0.93	14.10	23.48	
Header -Wheat/Sorghum	30' Rigid	325 hp	28,300	300	8	0.085	1.11	2.42	0.60	2.97	7.12	0.90	11.75	19.78	
Land Plane	50'x16'	MFWD 190	14,300	200	10	0.151	1.99	2.52	0.43	0.88	5.82	1.14	5.55	12.52	
Levee Pull & Seed	8 Blade	MFWD 170	10,400	100	10	0.003	0.04	0.05	0.00	0.01	0.12	0.03	0.11	0.28	
Levee Pull (1m/80a)	8 blade	MFWD 170	7,180	100	10	0.003	0.04	0.05	0.00	0.01	0.12	0.02	0.11	0.27	
Levee Splitter (1/80	32"	MFWD 150	7,180	100	10	0.004	0.05	0.05	0.00	0.01	0.13	0.03	0.11	0.27	
Module Builder	4R-38(250)	MFWD 190	34,700	200	10	0.257	5.72	4.28	2.23	1.49	13.74	4.54	9.43	27.72	
Module Builder	4R-38(350)	MFWD 190	34,700	200	10	0.257	5.72	4.28	2.23	1.49	13.74	4.54	9.43	27.72	
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	3.82	2.86	1.49	1.00	9.18	3.03	6.30	18.53	
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	4.84	3.62	1.89	1.26	11.63	3.85	7.98	23.47	
Module Builder	6R-38(355)	MFWD 190	34,700	200	10	0.172	3.82	2.86	1.49	1.00	9.18	3.03	6.30	18.53	
NT Grain Drill	10'	2WD 130	34,500	150	8	0.235	5.23	2.68	3.04	1.30	12.26	5.83	7.84	25.94	
NT Grain Drill	12'	2WD 130	41,800	150	8	0.163	3.63	1.86	2.56	0.90	8.96	4.90	5.44	19.32	
NT Grain Drill	15'	MFWD 150	49,700	150	8	0.130	2.90	1.71	2.44	0.58	7.65	4.66	3.52	15.84	
NT Grain Drill	20'	MFWD 170	65,600	150	8	0.098	2.18	1.46	2.41	0.52	6.57	4.62	3.28	14.48	
NT Grain Drill	24'	MFWD 190	82,400	150	8	0.081	1.81	1.36	2.52	0.47	6.18	4.83	2.99	14.01	
NT Grain Drill	30'	MFWD 225	94,200	150	8	0.065	1.45	1.28	2.31	0.44	5.50	4.42	2.80	12.73	
NT Grain Drill & Pre	10'	2WD 130	39,900	150	8	0.211	4.69	2.40	3.16	1.17	11.43	6.05	7.04	24.53	
NT Grain Drill & Pre	12'	2WD 130	47,200	150	8	0.176	3.91	2.00	3.12	0.97	10.01	5.96	5.86	21.84	
NT Grain Drill & Pre	15'	MFWD 150	55,100	150	8	0.141	3.13	1.85	2.91	0.63	8.52	5.57	3.79	17.89	
NT Grain Drill & Pre	20'	MFWD 170	71,000	150	8	0.105	2.34	1.57	2.81	0.56	7.29	5.38	3.53	16.22	
NT Grain Drill & Pre	24'	MFWD 190	87,800	150	8	0.088	1.95	1.46	2.90	0.51	6.83	5.55	3.22	15.61	
NT Grain Drill & Pre	30'	MFWD 225	99,600	150	8	0.070	1.56	1.38	2.63	0.48	6.06	5.03	3.02	14.12	
NT Plant&Pre-Folding	8R-38	MFWD 170	54,300	150	8	0.083	1.85	1.24	1.70	0.44	5.24	3.25	2.79	11.30	
NT Plant&Pre-Folding	8R-38 2x1	MFWD 170	86,900	150	8	0.055	1.23	0.82	1.81	0.29	4.17	3.47	1.86	9.50	
NT Plant&Pre-Folding	12R-20	MFWD 190	71,600	150	8	0.105	2.34	1.75	2.83	0.61	7.56	5.43	3.87	16.86	
NT Plant&Pre-Folding	12R-30	MFWD 190	78,100	150	8	0.070	1.56	1.17	2.06	0.40	5.21	3.95	2.58	11.74	
NT Plant&Pre-Folding	12R-38	MFWD 190	86,900	150	8	0.055	1.23	0.92	1.81	0.32	4.29	3.47	2.03	9.80	
NT Plant&Pre-Folding	16R-30	MFWD 190	109,000	150	8	0.052	1.17	0.87	2.16	0.30	4.52	4.13	1.93	10.59	
NT Plant&Pre-Folding	23R-15	MFWD 190	141,000	150	8	0.073	1.63	1.22	3.88	0.42	7.16	7.42	2.68	17.27	
NT Plant&Pre-Folding	24R-15	MFWD 225	148,000	150	8	0.070	1.56	1.38	3.91	0.48	7.34	7.48	3.02	17.85	
NT Plant&Pre-Folding	24R-20	MFWD 190	163,000	150	8	0.052	1.17	0.87	3.23	0.30	5.59	6.18	1.93	13.71	
NT Plant&Pre-Folding	24R-30	MFWD 190	199,000	150	8	0.035	0.78	0.58	2.63	0.20	4.20	5.03	1.29	10.52	
NT Plant&Pre-Folding	31R-15	MFWD 225	173,000	150	8	0.054	1.21	1.07	3.54	0.37	6.20	6.78	2.34	15.33	
NT Plant&Pre-Folding	32R-15	MFWD 225	192,000	150	8	0.052	1.17	1.04	3.80	0.36	6.38	7.28	2.26	15.93	
NT Plant&Pre-Rigid	4R-30	2WD 130	28,200	150	8	0.211	4.69	2.40	2.23	1.17	10.50	4.27	7.04	21.83	
NT Plant&Pre-Rigid	4R-38	2WD 130	30,500	150	8	0.166	3.69	1.89	1.90	0.92	8.41	3.64	5.54	17.60	
NT Plant&Pre-Rigid	6R-30	MFWD 150	39,600	150	8	0.141	3.13	1.85	2.09	0.63	7.70	4.00	3.79	15.50	
NT Plant&Pre-Rigid	6R-38	MFWD 150	35,400	150	8	0.111	2.47	1.46	1.47	0.49	5.90	2.82	2.99	11.73	
NT Plant&Pre-Rigid	8R-30	MFWD 170	45,600	150	8	0.105	2.34	1.57	1.80	0.56	6.29	3.45	3.53	13.29	
NT Plant&Pre-Rigid	8R-38	MFWD 170	42,900	150	8	0.083	1.85	1.24	1.34	0.44	4.88	2.57	2.79	10.25	
NT Plant&Pre-Rigid	10R-30	MFWD 190	47,400	150	8	0.084	1.87	1.40	1.50	0.49	5.28	2.87	3.09	11.25	
NT Plant&Pre-Rigid	11R-15	MFWD 170	55,200	150	8	0.143	3.19	2.14	2.97	0.76	9.07	5.69	4.81	19.59	
NT Plant&Pre-Rigid	11R-20	MFWD 170	50,700	150	8	0.115	2.56	1.71	2.19	0.61	7.09	4.20	3.86	15.16	
NT Plant&Pre-Rigid	12R-20	MFWD 190	57,100	150	8	0.105	2.34	1.75	2.26	0.61	6.98	4.33	3.87	15.18	
NT Plant&Pre-Rigid	12R-30	MFWD 190	72,000	150	8	0.070	1.56	1.17	1.90	0.40	5.05	3.64	2.58	11.27	
NT Plant&Pre-Rigid	13R-18/20	MFWD 225	6,210	150	8	0.097	2.16	1.91	0.22	0.66	4.97	0.43	4.18	9.59	
NT Plant&Pre-Rigid	15R-15	MFWD 190	71,000	150	8	0.113	2.51	1.88	3.01	0.65	8.06	5.76	4.14	17.96	
NT Plant&Pre-TwinRow	12R-30/40	MFWD 225	159,000	150	8	0.055	1.23	1.09	3.31	0.37	6.03	6.34	2.38	14.76	
NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	129,000	150	8	0.083	1.85	1.64	4.04	0.56	8.11	7.73	3.58	19.43	
NT Plant&Pre-Folding	8R-38	MFWD 170	48,000	150	8	0.077	1.72	1.15	1.39	0.41	4.68	2.67	2.59	9.95	

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (continued)

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-----							
NT Plant-Folding	8R-38 2x1	MFWD 170	79,100	150	8	0.051	1.14	0.76	1.53	0.27	3.72	2.93	1.72	8.38
NT Plant-Folding	12R-20	MFWD 190	66,100	150	8	0.098	2.18	1.63	2.43	0.57	6.81	4.65	3.59	15.06
NT Plant-Folding	12R-30	MFWD 190	70,300	150	8	0.065	1.45	1.08	1.72	0.38	4.64	3.30	2.39	10.34
NT Plant-Folding	12R-38	MFWD 190	79,100	150	8	0.051	1.14	0.85	1.53	0.30	3.84	2.93	1.89	8.66
NT Plant-Folding	16R-30	MFWD 190	101,000	150	8	0.049	1.09	0.81	1.86	0.28	4.05	3.55	1.79	9.40
NT Plant-Folding	23R-15	MFWD 190	133,000	150	8	0.068	1.51	1.13	3.40	0.39	6.44	6.50	2.49	15.44
NT Plant-Folding	24R-15	MFWD 225	140,000	150	8	0.065	1.45	1.28	3.43	0.44	6.62	6.57	2.80	16.01
NT Plant-Folding	24R-20	MFWD 190	156,000	150	8	0.049	1.09	0.81	2.87	0.28	5.06	5.49	1.79	12.35
NT Plant-Folding	24R-30	MFWD 190	180,000	150	8	0.032	0.72	0.54	2.20	0.19	3.67	4.22	1.19	9.09
NT Plant-Folding	31R-15	MFWD 225	154,000	150	8	0.050	1.12	0.99	2.93	0.34	5.40	5.60	2.17	13.18
NT Plant-Folding	32R-15	MFWD 225	173,000	150	8	0.049	1.09	0.96	3.18	0.33	5.57	6.09	2.10	13.77
NT Plant-Rigid	4R-30	2WD 130	22,700	150	8	0.196	4.36	2.23	1.67	1.08	9.35	3.19	6.53	19.09
NT Plant-Rigid	4R-38	2WD 130	25,100	150	8	0.154	3.43	1.75	1.45	0.85	7.50	2.78	5.14	15.43
NT Plant-Rigid	6R-30	MFWD 150	34,100	150	8	0.130	2.90	1.71	1.67	0.58	6.88	3.20	3.52	13.61
NT Plant-Rigid	6R-38	MFWD 150	29,900	150	8	0.103	2.29	1.35	1.15	0.46	5.27	2.21	2.78	10.27
NT Plant-Rigid	8R-30	MFWD 170	40,200	150	8	0.098	2.18	1.46	1.48	0.52	5.64	2.83	3.28	11.76
NT Plant-Rigid	8R-38	MFWD 170	37,500	150	8	0.077	1.72	1.15	1.09	0.41	4.38	2.08	2.59	9.06
NT Plant-Rigid	10R-30	MFWD 190	41,900	150	8	0.078	1.74	1.30	1.23	0.45	4.74	2.36	2.87	9.97
NT Plant-Rigid	11R-15	MFWD 170	49,800	150	8	0.133	2.96	1.98	2.49	0.70	8.15	4.77	4.46	17.40
NT Plant-Rigid	11R-20	MFWD 170	45,300	150	8	0.107	2.38	1.59	1.82	0.57	6.37	3.48	3.59	13.45
NT Plant-Rigid	12R-20	MFWD 190	51,700	150	8	0.098	2.18	1.63	1.90	0.57	6.28	3.64	3.59	13.52
NT Plant-Rigid	12R-30	MFWD 190	56,200	150	8	0.065	1.45	1.08	1.37	0.38	4.30	2.63	2.39	9.33
NT Plant-Rigid	13R-18/20	MFWD 225	56,600	150	8	0.090	2.01	1.79	1.93	0.61	6.35	3.69	3.90	13.95
NT Plant-Rigid	15R-15	MFWD 190	63,200	150	8	0.105	2.33	1.74	2.48	0.61	7.17	4.76	3.84	15.78
NT Plant-TwinRow	12R-30/40	MFWD 225	140,000	150	8	0.051	1.14	1.01	2.71	0.35	5.23	5.19	2.21	12.63
NT Plant-TwinRow	8R-30/40	MFWD 225	123,000	150	8	0.077	1.72	1.52	3.58	0.52	7.36	6.85	3.33	17.54
Peanut Cond. & Lifter	6-Row	MFWD 190	12,900	300	20	0.100	1.31	1.66	0.21	0.58	3.77	0.31	3.66	7.75
Peanut Conditioner	6-Row	MFWD 190	14,900	300	20	0.100	1.31	1.66	0.29	0.58	3.85	0.32	3.66	7.83
Peanut Dig/Invertor	4R-30	MFWD 190	29,000	300	15	0.235	3.09	3.92	1.70	1.37	10.09	2.03	8.63	20.76
Peanut Dig/Invertor	4R-38	MFWD 190	29,000	300	15	0.186	2.44	3.09	1.34	1.08	7.96	1.60	6.81	16.39
Peanut Dig/Invertor	6R-38	MFWD 190	42,100	300	15	0.124	1.63	2.06	0.91	0.72	5.33	1.55	4.54	11.42
Peanut Dump Cart	6-Row	MFWD 190	47,500	300	20	0.310	4.07	5.15	0.85	1.80	11.88	3.49	11.34	26.72
Peanut Harvester	4R-30	MFWD 225	133,000	300	20	0.849	11.16	16.73	6.40	5.79	40.10	24.53	36.46	101.10
Peanut Harvester	4R-38	MFWD 225	133,000	300	20	0.934	12.28	18.40	7.04	6.36	44.09	28.23	40.09	112.41
Peanut Harvester	6R-38	MFWD 225	147,000	300	20	0.625	8.21	12.30	4.44	4.25	29.21	20.86	26.81	76.89
Peanut Lifter	6-Row	MFWD 225	6,300	300	20	0.100	1.31	1.96	0.13	0.68	4.09	0.13	4.28	8.52
Peanut Plt&Pre Fold.	12R-38	MFWD 190	79,800	150	8	0.080	1.78	1.33	2.40	0.46	5.99	4.60	2.94	13.54
Peanut Plt&Pre Rigid	8R-30	MFWD 190	41,000	150	8	0.152	3.39	2.54	2.34	0.88	9.16	4.49	5.59	19.25
Peanut Plt&Pre Rigid	8R-38	MFWD 190	38,200	150	8	0.120	2.68	2.00	1.73	0.70	7.12	3.30	4.42	14.85
Pipe Spool 160ac	1/4m roll	2WD 130	3,600	15	12	0.003	0.09	0.03	0.00	0.01	0.15	0.07	0.10	0.33
Pipe Trailer 1m/160a	30'	2WD 130	1,380	100	15	0.003	0.18	0.04	0.00	0.02	0.24	0.00	0.12	0.37
Plant & Pre-Folding	8R-38	MFWD 170	48,700	150	8	0.080	1.78	1.19	1.46	0.42	4.86	2.80	2.68	10.35
Plant & Pre-Folding	8R-38 2x1	MFWD 170	79,800	150	8	0.053	1.18	0.79	1.59	0.28	3.86	3.05	1.78	8.71
Plant & Pre-Folding	12R-20	MFWD 190	64,600	150	8	0.101	2.25	1.68	2.45	0.59	6.99	4.70	3.71	15.41
Plant & Pre-Folding	12R-30	MFWD 190	71,100	150	8	0.067	1.50	1.12	1.80	0.39	4.82	3.45	2.47	10.75
Plant & Pre-Folding	12R-38	MFWD 190	79,800	150	8	0.053	1.18	0.88	1.59	0.31	3.98	3.05	1.95	8.99
Plant & Pre-Folding	16R-30	MFWD 190	99,600	150	8	0.050	1.12	0.84	1.89	0.29	4.16	3.62	1.85	9.64
Plant & Pre-Folding	23R-15	MFWD 190	127,000	150	8	0.070	1.56	1.17	3.35	0.40	6.50	6.42	2.58	15.50
Plant & Pre-Folding	24R-15	MFWD 225	134,000	150	8	0.067	1.50	1.33	3.40	0.46	6.69	6.50	2.90	16.10
Plant & Pre-Folding	24R-20	MFWD 190	149,000	150	8	0.050	1.12	0.84	2.83	0.29	5.10	5.42	1.85	12.38
Plant & Pre-Folding	24R-30	MFWD 190	185,000	150	8	0.033	0.75	0.56	2.34	0.19	3.85	4.49	1.23	9.59
Plant & Pre-Folding	31R-15	MFWD 225	155,000	150	8	0.052	1.16	1.03	3.04	0.35	5.60	5.83	2.25	13.68
Plant & Pre-Folding	32R-15	MFWD 225	173,000	150	8	0.050	1.12	0.99	3.29	0.34	5.76	6.30	2.17	14.24
Plant & Pre-Rigid	4R-30	2WD 130	25,800	150	8	0.203	4.50	2.31	1.96	1.12	9.90	3.75	6.75	20.42
Plant & Pre-Rigid	4R-38	2WD 130	28,200	150	8	0.159	3.54	1.81	1.69	0.88	7.94	3.23	5.32	16.50
Plant & Pre-Rigid	6R-30	MFWD 150	36,000	150	8	0.135	3.00	1.77	1.82	0.60	7.21	3.49	3.64	14.35
Plant & Pre-Rigid	6R-38	MFWD 150	31,900	150	8	0.106	2.37	1.40	1.27	0.47	5.53	2.44	2.87	10.85
Plant & Pre-Rigid	8R-30	MFWD 170	41,000	150	8	0.101	2.25	1.51	1.56	0.53	5.86	2.98	3.39	12.24
Plant & Pre-Rigid	8R-38	MFWD 170	38,200	150	8	0.080	1.78	1.19	1.14	0.42	4.55	2.19	2.68	9.43
Plant & Pre-Rigid	10R-30	MFWD 190	41,500	150	8	0.081	1.80	1.35	1.26	0.47	4.89	2.41	2.97	10.28
Plant & Pre-Rigid	11R-15	MFWD 170	48,800	150	8	0.148	3.29	2.20	2.71	0.78	8.99	5.18	4.95	19.14
Plant & Pre-Rigid	11R-20	MFWD 170	44,300	150	8	0.110	2.46	1.65	1.84	0.58	6.54	3.52	3.71	13.78
Plant & Pre-Rigid	12R-20	MFWD 190	50,100	150	8	0.101	2.25	1.68	1.90	0.59	6.44	3.64	3.71	13.80
Plant & Pre-Rigid	12R-30	MFWD 190	65,000	150	8	0.067	1.50	1.12	1.64	0.39	4.67	3.15	2.47	10.30
Plant & Pre-Rigid	13R-18/20	MFWD 225	54,500	150	8	0.093	2.07	1.84	1.91	0.63	6.46	3.65	4.01	14.14
Plant & Pre-Rigid	15R-15	MFWD 190	62,200	150	8	0.108	2.41	1.80	2.53	0.63	7.38	4.84	3.97	16.20
Plant & Pre-TwinRow	12R-30/40	MFWD 225	145,000	150	8	0.053	1.18	1.05	2.90	0.36	5.50	5.55	2.29	13.35
Plant & Pre-TwinRow	8R-30/40	MFWD 225	119,000	150	8	0.080	1.78	1.58	3.58	0.54	7.49	6.85	3.44	17.78
Plant - Folding	8R-38	MFWD 170	43,300	150	8	0.074	1.65	1.10	1.21	0.39	4.36	2.31	2.49	9.17
Plant - Folding	8R-38 2x1	MFWD 170	72,000	150	8	0.049	1.10	0.73	1.33	0.26	3.44	2.56	1.65	7.66
Plant - Folding	12R-20	MFWD 190	59,100	150	8	0.094	2.09	1.56	2.08	0.54	6.29	3.99	3.45	13.74
Plant - Folding	12R-30	MFWD 190	63,300	150	8	0.062	1.39	1.04	1.49	0.36	4.29	2.85	2.30	9.45
Plant - Folding	12R-38	MFWD 190	72,000	150	8	0.049	1.10	0.82	1.33	0.28	3.55	2.56	1.81	7.93
Plant - Folding	16R-30	MFWD 190	91,800	150	8	0.047	1.04	0.78	1.62	0.27	3.72	3.10	1.72	8.55
Plant - Folding	23R-15	MFWD 190	119,000	150	8	0.065	1.45	1.08	2.92	0.38	5.84	5.58	2.39	13.83
Plant - Folding	24R-15	MFWD 225	126,000	150	8	0.062	1.39	1.23	2.97	0.42	6.03	5.68	2.69	14.40
Plant - Folding	24R-20	MFWD 190	142,000	150	8	0.047	1.04	0.78	2.51	0.27	4.61	4.80	1.72	11.14
Plant - Folding	24R-30	MFWD 190	166,000	150	8	0.031	0.69	0.52	1.95	0.18	3.35	3.74	1.15	8.25

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (continued)

Item Name	Size	Power Unit	Purchase	Annual	Useful	Perf	Labor	Fuel	---R&M---		Total	--Fixed--		Total
			Price	Use	Life	Rate			Imp.	P.U.	Direct	Imp.	P.U.	
			dollars	hours	years	hr/acre	-----\$/acre-----							
Plant - Folding	31R-15	MFWD 225	136,000	150	8	0.048	1.08	0.95	2.48	0.33	4.85	4.75	2.09	11.70
Plant - Folding	32R-15	MFWD 225	155,000	150	8	0.047	1.04	0.92	2.74	0.32	5.03	5.24	2.02	12.29
Plant - Rigid	4R-30	2WD 130	20,400	150	8	0.188	4.18	2.14	1.44	1.04	8.81	2.75	6.27	17.85
Plant - Rigid	4R-38	2WD 130	22,700	150	8	0.148	3.29	1.68	1.26	0.82	7.07	2.41	4.94	14.43
Plant - Rigid	6R-30	MFWD 150	30,600	150	8	0.125	2.79	1.65	1.44	0.56	6.44	2.75	3.38	12.58
Plant - Rigid	6R-38	MFWD 150	26,400	150	8	0.099	2.20	1.30	0.98	0.44	4.93	1.87	2.66	9.48
Plant - Rigid	8R-30	MFWD 170	35,500	150	8	0.094	2.09	1.40	1.25	0.50	5.25	2.40	3.15	10.80
Plant - Rigid	8R-38	MFWD 170	32,800	150	8	0.074	1.65	1.10	0.91	0.39	4.07	1.75	2.49	8.32
Plant - Rigid	10R-30	MFWD 190	36,100	150	8	0.075	1.67	1.25	1.02	0.43	4.38	1.95	2.76	9.10
Plant - Rigid	11R-15	MFWD 170	43,400	150	8	0.137	3.05	2.04	2.24	0.73	8.07	4.28	4.60	16.96
Plant - Rigid	11R-20	MFWD 170	38,900	150	8	0.103	2.28	1.53	1.50	0.54	5.87	2.87	3.44	12.19
Plant - Rigid	12R-20	MFWD 190	44,600	150	8	0.094	2.09	1.56	1.57	0.54	5.78	3.01	3.45	12.25
Plant - Rigid	12R-30	MFWD 190	57,200	150	8	0.062	1.39	1.04	1.34	0.36	4.15	2.57	2.30	9.03
Plant - Rigid	13R-18/20	MFWD 225	49,000	150	8	0.086	1.92	1.71	1.59	0.59	5.82	3.05	3.72	12.61
Plant - Rigid	15R-15	2WD 150	54,400	150	8	0.094	2.09	1.23	1.92	0.31	5.57	3.67	1.91	11.16
Plant - TwinRow	12R-30/40	MFWD 225	126,000	150	8	0.049	1.10	0.97	2.34	0.33	4.76	4.48	2.12	11.37
Plant - TwinRow	8R-30/40	MFWD 225	114,000	150	8	0.074	1.65	1.46	3.18	0.50	6.81	6.09	3.19	16.10
Roller/Cultipacker	12'	2WD 130	6,520	300	12	0.124	1.63	1.41	0.19	0.68	3.93	0.26	4.14	8.33
Roller/Cultipacker	20'	MFWD 150	17,000	300	12	0.074	0.98	0.97	0.29	0.33	2.59	0.41	2.00	5.01
Roller/Cultipacker	30'	MFWD 170	18,700	300	12	0.049	0.65	0.74	0.21	0.26	1.87	0.30	1.66	3.84
Roller/Cultipacker	38'	MFWD 225	20,600	300	12	0.039	0.51	0.77	0.19	0.26	1.74	0.26	1.68	3.69
Roller/Stubble	20'	2WD 50	13,500	300	12	0.074	0.98	0.32	0.23	0.04	1.59	0.32	0.29	2.21
Roller/Stubble	32'	MFWD 225	22,800	300	12	0.046	0.61	0.91	0.25	0.31	2.10	0.34	2.00	4.44
Rotary Cutter	7'	MFWD 130	4,690	185	10	0.168	2.21	1.91	0.64	0.64	5.41	0.45	3.89	9.76
Rotary Cutter	12'	2WD 150	16,000	185	10	0.098	1.29	1.28	1.27	0.33	4.18	0.89	1.99	7.07
Rotary Cutter-Flex	15'	MFWD 150	19,400	185	10	0.078	1.03	1.03	1.23	0.35	3.65	0.87	2.11	6.63
Rotary Cutter-Flex	20'	MFWD 150	28,100	185	10	0.058	0.77	0.77	1.34	0.26	3.15	0.94	1.58	5.68
Row Cond & Inc-Fold.	26'	MFWD 190	24,700	100	10	0.063	1.12	1.05	0.39	0.36	2.93	1.65	2.32	6.91
Row Cond & Inc-Fold.	38'	MFWD 225	32,400	100	10	0.043	0.76	0.85	0.35	0.29	2.26	1.48	1.86	5.61
Row Cond & Inc-Rigid	13'	2WD 130	13,300	100	10	0.126	2.24	1.44	0.42	0.70	4.81	1.78	4.22	10.81
Row Cond & Inc-Rigid	21'	2WD 170	16,700	100	10	0.078	1.38	1.16	0.32	0.29	3.17	1.38	1.83	6.40
Row Cond & Inc-Rigid	26'	MFWD 190	19,600	100	10	0.026	0.47	0.44	0.13	0.15	1.19	0.55	0.97	2.72
Row Cond Folding	26'	MFWD 225	19,300	100	10	0.059	0.78	1.17	0.28	0.40	2.65	1.21	2.56	6.43
Row Cond Folding	38'	MFWD 225	24,600	100	10	0.040	0.53	0.80	0.25	0.27	1.87	1.06	1.75	4.68
Row Cond Rigid	13'	2WD 130	7,840	100	10	0.119	1.56	1.35	0.23	0.66	3.82	0.98	3.97	8.78
Row Cond Rigid	21'	2WD 170	11,200	100	10	0.073	0.97	1.10	0.20	0.27	2.55	0.87	1.73	5.16
Row Cond Rigid	26'	MFWD 190	14,200	100	10	0.059	0.78	0.99	0.21	0.34	2.33	0.89	2.18	5.41
Row Cond./Roll-Fold.	26'	MFWD 190	22,200	160	10	0.072	0.94	1.19	0.40	0.41	2.96	1.05	2.63	6.66
Row Cond./Roll-Fold.	30'	MFWD 190	35,600	160	10	0.062	0.82	1.03	0.55	0.36	2.77	1.46	2.28	6.53
Row Cond./Roll-Fold.	40'	MFWD 225	34,300	160	10	0.046	0.61	0.92	0.40	0.31	2.26	1.06	2.01	5.33
Row Cond./Roll-Rigid	21'	MFWD 190	23,000	160	10	0.089	1.17	1.48	0.51	0.51	3.69	1.35	3.26	8.31
Row Cond./Roll-Rigid	26'	MFWD 190	25,800	160	10	0.072	0.94	1.19	0.46	0.41	3.03	1.22	2.63	6.89
Spin Spreader	5 ton	MFWD 190	11,800	100	8	0.042	0.93	0.69	0.27	0.24	2.15	0.56	1.54	4.25
Spray (ATV Ropewick)	75"	800 CC	660	200	8	0.260	4.60	0.34	0.08	0.39	5.42	0.09	1.55	7.07
Spray (ATV)	12'/17'	800 CC	2,280	200	8	0.112	1.99	0.15	0.12	0.17	2.43	0.14	0.67	3.25
Spray (ATV)	20'	800 CC	1,950	200	8	0.084	1.49	0.11	0.07	0.12	1.81	0.09	0.50	2.41
Spray (Band)	27' Fold	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82
Spray (Band)	40' Fold	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Band)	50' Fold	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Band)	53' Fold	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Band)	60' Fold	MFWD 170	18,600	200	8	0.028	0.49	0.41	0.24	0.14	1.31	0.29	0.94	2.55
Spray (Bcast/HB)	13' Rigid	MFWD 150	5,480	200	8	0.130	2.30	1.70	0.33	0.58	4.92	0.40	3.50	8.82
Spray (Bcast/HB)	20' Rigid	MFWD 150	6,450	200	8	0.084	1.49	1.11	0.25	0.37	3.23	0.30	2.27	5.82
Spray (Bcast/HB)	27' Fold	MFWD 170	10,700	200	8	0.062	1.10	0.93	0.31	0.33	2.68	0.37	2.09	5.16
Spray (Bcast/HB)	27' Rigid	MFWD 170	7,830	200	8	0.062	1.10	0.93	0.23	0.33	2.60	0.27	2.09	4.97
Spray (Bcast/HB)	30' Fold	MFWD 170	16,500	200	8	0.056	0.99	0.83	0.43	0.29	2.57	0.52	1.88	4.98
Spray (Bcast/HB)	40' Fold	MFWD 170	16,100	200	8	0.042	0.74	0.62	0.31	0.22	1.92	0.38	1.41	3.72
Spray (Broadcast)	27'	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82
Spray (Broadcast)	40'	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Broadcast)	50'	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Broadcast)	53'	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Broadcast)	60'	MFWD 170	18,600	200	8	0.028	0.49	0.41	0.24	0.14	1.31	0.29	0.94	2.55
Spray (Direct/Hood)	8R-30	MFWD 170	15,600	200	8	0.084	1.49	1.25	0.61	0.44	3.82	0.74	2.83	7.39
Spray (Direct/Hood)	8R-38	MFWD 170	16,600	200	8	0.066	1.18	0.99	0.52	0.35	3.05	0.62	2.23	5.91
Spray (Direct/Hood)	12R-30	MFWD 170	22,200	200	8	0.056	0.99	0.83	0.58	0.29	2.72	0.70	1.88	5.31
Spray (Direct/Hood)	12R-38	MFWD 170	22,500	200	8	0.044	0.78	0.66	0.46	0.23	2.15	0.56	1.48	4.21
Spray (Direct/Layby)	8R-30	MFWD 170	12,700	200	8	0.084	1.49	1.25	0.50	0.44	3.70	0.60	2.83	7.14
Spray (Direct/Layby)	8R-38	MFWD 170	12,700	200	8	0.066	1.18	0.99	0.39	0.35	2.93	0.47	2.23	5.64
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	17,300	200	8	0.044	0.78	0.66	0.36	0.23	2.04	0.43	1.48	3.97
Spray (Direct/Layby)	12R-30	MFWD 170	17,400	200	8	0.056	0.99	0.83	0.46	0.29	2.59	0.55	1.88	5.03
Spray (Direct/Layby)	12R-38	MFWD 170	17,300	200	8	0.044	0.78	0.66	0.36	0.23	2.04	0.43	1.48	3.97
Spray (Direct/Layby)	16R-20	2WD 50	10,000	200	8	0.062	1.10	0.27	0.29	0.04	1.71	0.35	0.24	2.31
Spray (Levee Leaper)	50'	MFWD 225	12,900	200	8	0.033	0.59	0.66	0.20	0.23	1.69	0.24	1.45	3.39
Spray (Pull Type)	60'	MFWD 225	36,400	200	8	0.028	0.49	0.55	0.48	0.19	1.72	0.57	1.21	3.51
Spray (Pull Type)	80'	MFWD 225	50,300	200	8	0.021	0.37	0.41	0.49	0.14	1.43	0.60	0.90	2.94
Spray (Pull Type)	90'	2WD 50	51,000	200	8	0.018	0.33	0.08	0.44	0.01	0.87	0.54	0.07	1.49
Spray (Pull Type)	120'	MFWD 225	76,600	200	8	0.014	0.24	0.27	0.50	0.09	1.12	0.60	0.60	2.34
Spray (Ropewick)	20'	MFWD 190	3,440	200	8	0.084	1.49	1.40	0.13	0.49	3.53	0.16	3.09	6.79
Spray (Spot)	27'	MFWD 170	5,440	200	8	0.062	1.10	0.93	0.15	0.33	2.53	0.19	2.09	4.82

(continued)

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2017 (continued)

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-----							
Spray (Spot)	40'	MFWD 170	7,810	200	8	0.042	0.74	0.62	0.15	0.22	1.75	0.18	1.41	3.35
Spray (Spot)	50'	MFWD 170	6,940	200	8	0.033	0.59	0.50	0.11	0.17	1.39	0.13	1.13	2.65
Spray (Spot)	53'	MFWD 170	9,620	200	8	0.031	0.56	0.47	0.14	0.16	1.35	0.17	1.06	2.59
Spray (Spot)	60'	MFWD 225	18,600	200	8	0.028	0.49	0.55	0.24	0.19	1.49	0.29	1.21	2.99
Stalk Shredder	14'	MFWD 150	12,800	200	10	0.117	1.54	1.54	1.32	0.52	4.94	0.79	3.16	8.90
Stalk Shredder Flex	20'	MFWD 150	29,800	200	10	0.082	1.08	1.08	2.15	0.36	4.68	1.29	2.21	8.20
Stalk Shredder-Flail	12'	MFWD 150	15,500	200	10	0.137	1.80	1.80	1.86	0.61	6.09	1.12	3.69	10.91
Stalk Shredder-Flail	15'	MFWD 150	19,800	200	10	0.110	1.44	1.44	1.90	0.49	5.28	1.15	2.95	9.39
Stalk Shredder-Flail	18'	MFWD 150	26,900	200	10	0.091	1.20	1.20	2.15	0.40	4.97	1.30	2.46	8.74
Stalk Shredder-Flail	20'	MFWD 150	27,000	200	10	0.082	1.08	1.08	1.94	0.36	4.48	1.17	2.21	7.87
Stalk Shredder-Flail	25'	MFWD 150	39,600	200	10	0.066	0.86	0.86	2.28	0.29	4.31	1.38	1.77	7.47
Strip Till	8R-38	MFWD 225	38,100	150	10	0.061	0.80	1.21	1.01	0.41	3.46	1.65	2.64	7.75
Strip Till	12R-30	MFWD 225	61,100	150	10	0.061	0.80	1.21	1.63	0.41	4.07	2.65	2.64	9.36
Strip Till	12R-40	MFWD 225	58,500	150	10	0.046	0.60	0.90	1.17	0.31	3.00	1.90	1.98	6.89
Subsoiler	3 shank	MFWD 190	3,550	100	15	0.204	2.68	3.39	0.24	1.18	7.51	0.59	7.47	15.58
Subsoiler	4 shank	MFWD 225	9,340	100	15	0.153	2.01	3.02	0.47	1.04	6.56	1.18	6.59	14.34
Subsoiler	5 shank	MFWD 225	10,800	100	15	0.122	1.60	2.40	0.44	0.83	5.29	1.08	5.24	11.62
Subsoiler low-till	4 shank	MFWD 225	10,800	100	15	0.153	2.01	3.02	0.55	1.04	6.64	1.36	6.59	14.60
Subsoiler low-till	6 shank	MFWD 225	16,600	100	15	0.102	1.34	2.01	0.56	0.69	4.61	1.39	4.38	10.39
Subsoiler low-till	8 shank	MFWD 225	20,600	100	15	0.076	1.00	1.50	0.52	0.52	3.55	1.29	3.28	8.14

## Notes:

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

Total Direct: Does not include interest on operating capital.

HB = Hooded Boom, HD = Hooded Direct

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2017

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
ADJUVANTS			Apron Maxx RTA	oz	0.93
Activator 90	pt	3.75	Apron Maxx RTA+Moly	pt	17.16
Agri-Dex	pt	2.25	Apron XL LS	oz	5.27
Crop Oil Conc. (Pet.)	pt	2.47	Artisan	oz	1.13
Crop Oil Conc. (Veg.)	pt	3.75	Bravo Ultrex	lb	9.00
Dyne-A-Pak	pt	4.63	Bravo Weather Stick	pt	6.62
Herbimax	pt	1.88	Captan 50 WP	lb	5.41
Induce	pt	3.63	Cotton Seed Trt.	acre	20.00
MSO	pt	3.75	CruiserMaxx	oz	4.60
Penetrator Plus	pt	3.50	Dithane F-45	qt	9.08
Prime Oil	pt	2.25	Dithane Rainshield	pt	4.15
SuperMax AMS	pt	2.67	Enable 2F	oz	2.17
Surfactant	pt	3.69	Headline EC	oz	2.86
CLEANING			Headline SC	oz	3.76
Cleaning Peanuts	ton	18.00	Manzate 75 DF	lb	5.54
CROP CONSULTANT			Moncut 70 DF	lb	38.35
Corn Consultant	acre	6.00	Propimax EC	pt	13.03
Cotton Consultant	acre	8.00	Prosaro	oz	2.70
Peanut Consultant	acre	9.25	Provost	oz	2.73
Rice Consultant	acre	8.00	Quadris	oz	2.08
Sorghum Consultant	acre	6.00	Quadris Top	oz	2.51
Soybeans Consultant	acre	6.50	Quilt	pt	18.82
Wheat Consultant	acre	5.50	Quilt XCEL	pt	23.07
CUSTOM FERTILIZE			Ridomil Gold	oz	7.23
App Fert by Air	cwt	7.00	Ridomil Gold PC GR	lb	5.96
App Fert by Air (Mi)	appl	7.00	Rovral 4F	pt	16.97
Custom Apply Fert	acre	7.00	Stratego	pt	22.58
CUSTOM LIME			Stratego YLD	oz	3.20
Lime (Spread)	ton	46.00	Tilt 3.6 EC	oz	0.85
CUSTOM PLANT			Tilt/ Bravo SE	oz	0.45
Custom Plant	acre	13.00	Uniform	oz	5.21
Custom Plant Air	cwt	7.00	GINNING		
CUSTOM SPRAY			Gin & Haul	lb	0.11
App by Air ( 3 gal)	appl	5.00	GROWTH REGULATORS		
App by Air ( 5 gal)	appl	6.50	Mepex	oz	0.13
App by Air (10 gal)	appl	8.50	Mepex Gin Out	oz	0.19
Custom Spray Ground	acre	7.50	Mepichlor 4.2%	oz	0.13
Custom Spray Self Pr	acre	6.25	Mepiquat	oz	0.13
Custom Spray Tractor	acre	7.75	Mepiquat Extra	oz	0.60
DRYING			Pentia	pt	7.21
Dry Corn	bu	0.19	Pix Plus	oz	0.40
Dry Grain Sorghum	cwt	0.25	Stance	oz	1.38
Dry Peanuts	ton	24.00	HARVEST AIDS		
Dry Rice	bu	0.40	Adios	oz	1.50
ERADICATION FEE			Aim 2EC	oz	5.60
Eradication	acre	1.00	CottonQuik	pt	6.06
FERTILIZERS			Def 6	pt	6.88
Agrotain Plus	lb	4.56	Def/Folex	pt	8.10
Agrotain Ultra	pt	10.23	Defol 5	gal	5.50
Amm Sulfate (21% N)	cwt	17.23	Ethephon 6E	pt	3.38
Boron Plus	pt	4.24	Finish 6	pt	10.25
DAP	cwt	24.82	First Pick	pt	3.72
Fert 10-34-0	cwt	28.58	Folex 6EC	pt	9.32
Fert 10-34-0	gal	3.33	Freefall SC	oz	1.69
Fert 11-37-0	cwt	32.70	Ginstar EC	pt	30.23
Fert 33-0-0-12S	cwt	17.50	Gramoxone SL	oz	0.27
Fert 41-0-0-4	cwt	16.85	Sharpen	oz	6.25
Lime	ton	36.00	Sodium Chlorate 5L	gal	5.50
NBPT	pt	10.23	SuperBoll	oz	0.25
Phosphorus (46% P2O5)	cwt	21.88	TDZ SC	oz	1.19
Potash (60% K2O)	cwt	16.97	Thidiazuron 4lb	oz	1.44
Sulfur Plus	pt	2.62	Tribufos 6lb	pt	9.32
UAN (32% N)	cwt	14.31	HAULING		
UAN (32%)	gal	1.58	Haul Corn	bu	0.23
UAN + Sulfur (28%)	cwt	14.48	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	gal	1.61	Haul Rice	bu	0.35
Urea, Solid (46% N)	cwt	16.78	Haul Sorghum	bu	0.25
Zinc Plus	pt	2.99	Haul Soybeans	bu	0.27
FUNGICIDES			Haul Wheat	bu	0.26
Aframe	oz	1.13	HERBICIDES		
Alfa Guard	lb	1.56	2,4-D Amine 4	pt	2.79
Allegiance Flowable	pt	51.61	AAtrex 4L	pt	2.58

(continued)



Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2017(continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
AAtrex NINE-0	lb	4.52	Newpath 2SL	oz	3.63
Accent Q	oz	24.75	Osprey	oz	3.74
Aim 2EC	oz	5.60	Outlook	pt	19.31
Assure II	oz	0.84	Paraquat	oz	0.32
Atrazine 4L	pt	1.95	Parazone 3SL	oz	0.32
Axial XL	oz	1.16	Peak Accu Pak	oz	18.18
Axiom 68DF	oz	2.13	Permit 75 DF	oz	20.59
Banvel	pt	15.02	Poast 1.53	pt	13.41
Basagran	pt	15.81	Poast Plus	pt	9.69
Beyond	oz	4.97	PowerFlex HL	lb	122.38
Bicep II Magnum	qt	11.69	Prefix	pt	6.34
Bicep Lite Magnum	pt	8.13	Prowl 3.3 EC	pt	6.86
Bolero 8EC	pt	7.65	Pursuit 2S	oz	3.97
Boundary 6.5 EC	pt	10.18	Python WDG	oz	15.58
Butyrac 175 (2,4-D)	pt	3.55	Quinstar	lb	56.17
Butyrac 200 (2,4-DB)	pt	4.77	Raptor	oz	4.96
Cadre	oz	4.21	RealmQ	oz	5.21
Callisto 4SC	oz	6.84	RebelEx	oz	2.36
Canopy 75%	oz	3.08	Reflex 2LC	pt	6.56
Canopy EX	oz	9.05	Regiment 80WP	oz	44.39
Caparol 4L	pt	4.44	Remedy Ultra	pt	10.76
Capreno	oz	6.97	Resolve SG	oz	8.26
Clarity	pt	11.18	Ricebeaux	pt	4.48
Classic	oz	16.95	Riceshot	pt	4.78
Clearpath	lb	59.53	Ricestar HT	pt	24.54
Clincher SF	oz	2.38	Roundup Power Max	oz	0.21
Cobra 2EC	oz	1.95	Roundup PowerMax	pt	3.28
Command 3ME	pt	19.34	Roundup WeatherMax	oz	0.27
Corvus	oz	6.72	Roundup WeatherMax	pt	4.29
Cotoran 4L	pt	6.31	Scepter 70 DG	oz	5.06
Cotton Pro	pt	3.98	Select Max	pt	14.99
Credit Extra	pt	2.50	Sequence	pt	5.42
Direx 4L	pt	3.29	Sharpen	oz	5.35
Diuron 4L	pt	3.36	Simazine 4L	pt	2.89
Diuron 80 DF	lb	5.81	Stalwart	pt	5.11
Diuron 80%	lb	6.20	Stam 80 EDF	lb	10.85
Dual II Magnum	pt	15.51	Stam M4	qt	8.10
Dual Magnum	pt	14.97	Staple LX	oz	8.46
Duet	pt	4.75	Steadfast	oz	12.40
Envoke	oz	103.36	Storm	pt	12.75
Expert	pt	4.95	Strada WG	oz	7.33
Facet L	pt	14.84	Strongarm	oz	62.62
Fierce	oz	6.98	Superwham	qt	9.78
Finesse	oz	15.88	Surpass EC	qt	29.04
First Rate	oz	41.21	Synchrony XP	oz	14.31
Flexstar	pt	8.81	Touchdown Total	qt	8.38
Fultime	pt	6.29	Treflan 4EC	pt	4.01
Fusilade DX	oz	1.13	Tricor DF	lb	17.81
Fusion	pt	29.86	Trifluralin 4EC	pt	4.01
Glyphosate 3lbs a.e	pt	2.29	Ultra Blazer	pt	11.65
Glyphosate 3lbs a.e	oz	0.14	Valor SX	oz	6.60
Glystar Plus	pt	2.64	Valor XLT	oz	5.77
Goal 2XL	pt	10.80	Verdict	oz	1.77
Gramoxone SL 2.0	oz	0.27	INOCULANT		
Grandstand R	qt	17.15	Optimize	oz	2.14
Grasp Xtra	oz	1.58	Optimize LIFT	oz	0.59
Halex GT	pt	7.60	Vault	oz	1.73
Halomax	oz	21.07	INSECTICIDES		
Harmony Extra SG TS	oz	14.02	Abamectin .15EC	oz	1.08
Harness XTRA	pt	9.45	Acephate 90%	lb	9.80
Impact	oz	23.68	Acephate 90SP	lb	8.69
Layby Pro	qt	14.04	Acramite-4SC	oz	1.99
Leadoff	oz	6.04	Admire Pro	oz	1.72
Lexar	pt	7.90	Asana .66 XL	oz	0.67
Liberty 280	oz	0.57	Aztec 2.1% G	lb	3.88
Linex 4L	pt	11.23	Baythroid XL	oz	2.48
Londax 60DF	oz	20.27	Belt	oz	8.77
Lorox 50DF	lb	26.36	Bidrin 8WM	oz	1.12
Metribuzin 75	lb	14.41	Bifenthrin	oz	1.03
MSMA 6.6	pt	3.66	Bifenture 2EC	pt	20.48
MSMA6 Plus	pt	3.63			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2017 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Brigade EC	pt	19.36	Steward	pt	39.51
Brigade WSB	lb	26.04	Transform WG	oz	7.90
Capture LFR	oz	2.97	Zeal Miticid I	oz	21.74
Carbaryl 4L	pt	6.32	IRRIGATION SUPPLIES		
Carbine 50WG	oz	6.66	Roll-Out Pipe	ft	0.25
Centric 40WG	oz	5.21	SEED/PLANTS		
Comite 1l	pt	9.46	Corn Seed BtRR	thous	3.89
Confirm 2F	oz	2.27	Corn Seed RR2	thous	3.17
Diamond .83EC	pt	21.84	Cotton Seed B2XF	thous	0.89
Diamond .83EC	oz	1.37	Cotton Seed GLB2	thous	2.81
Dimethoate 4E	pt	5.88	Cotton Seed LLB2	thous	1.43
Dimilin 2L	oz	2.12	Cotton Seed W3RF	thous	1.05
Dipel DF	lb	14.47	Cotton Seed WRF	thous	0.79
Dipel ES	pt	5.50	Cruiser Maxx Rice	lbseed	0.23
Endigo ZC	pt	31.11	Peanut Seed	lb	0.78
Force 3G	lb	7.41	Rice Clearfield	lb	1.05
Gaucho 600	oz	2.48	Rice Clrflld Hyb Trt	lb	5.30
Hero	pt	29.57	Rice Conv Hyb Trt	lb	5.57
Imidan 70 WSB	oz	0.70	Rice Seed CF(Levees)	lb	1.05
Incidental Pest Trt	acre	12.00	Rice Seed CFH(Levee)	lb	1.77
Incidental Pest Trt	acre	8.00	Rice Seed Conv.	lb	0.38
Intrepid 2F	oz	2.05	Rice Seed Cv(Levees)	lb	0.38
Intruder 70WSP	oz	10.99	Rice Seed CvH(Levee)	lb	1.65
Karate Z	oz	2.58	Sorghum Concept	lb	2.55
Lambda	oz	101.00	Sorghum Concept+ Po	lb	3.39
Lannate LV	pt	12.23	Soybean Seed LL	lb	1.16
Lannate SP	oz	2.42	Soybean Seed RR2	lb	1.26
Leverage 2.7	oz	1.95	Wheat Seed Private	lb	0.25
Lorsban 15G	lb	2.40	SOIL TEST		
Lorsban 4E	pt	6.66	Soil Test	acre	10.00
Macho	oz	0.71	SURVEY & MARK LEVEES		
Malathion 5E	pt	4.40	Survey & Mark Levees	acre	4.50
Malathion 8E	pt	9.30	TECHNOLOGY FEE		
Mustang Max	oz	1.44	B2 Cot Tech Fee	thous	0.76
Nuprid 4F	oz	1.20	B2 Cot Tech Fee	cap/ac	31.91
Oberon 4 SC	pt	59.84	B2XF Cot Tech Fee	thous	1.49
Orthene 97S	lb	10.90	B2XF Cot Tech Fee	cap/ac	62.69
Pounce 25WP	lb	16.80	LLB2 Cot Tech Fee	thous	0.76
Prevathon	oz	1.31	RF Cot Tech Fee	thous	1.04
Radiant	oz	6.61	RF Cot Tech Fee	cap/ac	43.66
Sevin 4F	pt	7.02	WRF Cot Tech Fee	thous	1.45
Sevin XLR Plus	qt	15.07	W3RF Cot Tech Fee	thous	1.45
Sivanto	oz	2.53			

Appendix Table 5. Estimated fuel prices  
and interest rates, Mississippi, 2017

ITEM NAME	UNIT	PRICE
		dollars
FUEL TYPES		
Diesel Fuel	gal	1.70
Gasoline	gal	1.90
LP Gas	gal	1.50
INTEREST RATES		
Short-term	%	4.75
Intermediate-term	%	5.00

Appendix Table 6. Labor types, wage rates and unallocated labor  
multipliers for crop enterprises, Mississippi, 2017

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	13.14
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLOCATED LABOR MULTIPLIERS (%)	
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2017

Crop	unit	Futures Contract Month	Futures Contract Price <sup>a</sup>	Basis	Forward Contract Price <sup>c</sup>	Loan	Budget Price <sup>e</sup>
Corn	bu	Dec '17	3.83	-0.21	3.62	2.10	3.62
Cotton Lint	lb	Dec '17	0.6899	-	0.6695	0.4946	0.67
Cottonseed	lb						0.099 <sup>f</sup>
Grain	bu				3.44	2.02	3.44
Peanuts	ton				400.00	355.00	400.00
Soybeans	bu	Nov '17	9.65	+0.09	9.74	5.19	9.74
Rice	bu	Nov '17	4.95	-0.58	4.37	2.97	4.37
Wheat	bu	Jul '17	4.43	-0.19	4.24	2.58	4.24

- <sup>a</sup> Average of the daily closing futures contract prices during the first 5 trading days in October 2016 for the stated contract months.
- <sup>b</sup> Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2009 to 2016 for corn, soybeans and wheat at Greenville, MS. Rice basis is a weekly average price for river point delivery. June harvest delivery for wheat. September harvest delivery for corn, rice and soybeans. October harvest delivery for cotton.
- <sup>c</sup> The forward contract price for corn, cotton, rice, soybeans and wheat is the futures contract price plus the basis. The forward contract price for grain sorghum is 95% of the forward contract price for corn. The forward contract price for peanuts is an estimate from a poll of Extension Peanut Marketing Specialists.
- <sup>d</sup> Average Mississippi County CCC Loan Rate for 2016 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2016 Farm-stored Loan Rate for long grain rough rice. National 2017 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.
- <sup>e</sup> Price used in MSU Extension Service Planning Budgets.
- <sup>f</sup> Cottonseed price is the average marketing year price over the years 2006-2015.

Appendix Table 8. Estimated costs for field operations, per acre  
Irrigation with a 1/4-mile center pivot system  
135-acre system, 7.5 ac-in., Delta Area, Mississippi, 2017

OPERATION/ OPERATING INPUT	SIZE/ UNIT	-----DIRECT COST-----						FIXED COST	TOTAL COST
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER		
-----dollars-----									
Set Up Engine									
IRRIGATE LABOR	hour				0.27		0.01	0.28	0.28
Maintenance									
IRRIGATE LABOR	hour				1.07		0.03	1.10	1.10
Apply Water									
IRRIGATE LABOR	hour				0.15			0.15	0.15
Apply Water									
IRRIGATE LABOR	hour				0.20			0.20	0.20
Apply Water									
IRRIGATE LABOR	hour				0.15			0.15	0.15
Pivot, 1/4 CP	each			11.23			0.22	11.45	45.07
Well & Pump, 1/4 CP	each			2.89			0.06	2.95	8.54
Engine, 1/4 CP, 65	each								9.93
June Irr. 3app@.75"	ac-in		5.71	1.39			0.14	7.24	7.24
July Irr. 4app@.75"	ac-in		7.62	1.86			0.15	9.63	9.63
Aug Irr. 3app@.75"	ac-in		5.71	1.39			0.08	7.18	7.18
TOTALS		0.00	19.04	18.76	1.84	0.00	0.69	40.33	63.54

Note: Cost of production estimates are based on 2016 input prices.



## Literature Cited

1. Agricultural Engineers Yearbook of Standards. American Society of Agricultural Engineers, St. Joseph, Michigan.
2. Boehlje, M.D. and V.R. Eidman. *Farm Management*. New York: John Wiley and Sons, 1984.
3. Bolton, Bill, J.B. Penn, Fred T. Cooke Jr., and Arthur M. Heagler. "Days Suitable for Fieldwork, Mississippi River Delta Cotton Area." D.A.E. Research Report No. 384, Louisiana State University, November 1968."
4. Budgets for Major Farm Enterprises in the Mississippi River Delta of Arkansas, Louisiana, and Mississippi." D.A.E. Circular No. 281, Department of Agricultural Economics and Agribusiness, Agricultural Experiment Station, Louisiana State University, June 1961
5. Caillavet, DeWitt F. "An Economic Assessment of Production Alternatives Resulting From Changes in the Machinery Complement of Representative Farms in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, May 1984.
6. Cooke, Fred T. Jr., J.M. Anderson, and Arthur M. Heagler. "Crop Budgets and Planning Data for Major Farm Enterprises in the Yazoo-Mississippi Delta." Mississippi Agricultural and Forestry Experiment Station Bulletin 794, July 1972.
7. Cooke, Fred T. Jr., J.M. Anderson, D.W. Parvin Jr., A.M. Heagler, Kenneth Paxton, Shelby Holders Jr., and James G. Hamill. "Crop Budgets and Planning Data for Major Farm Enterprises in the Mississippi-Louisiana Delta, 1975." Mississippi Agricultural and Forestry Experiment Station Bulletin 834, May 1975.
8. "Corn, Grain Sorghum & Wheat 2016 Planning Budgets." Budget Report No. 2015-03, Department of Agricultural Economics, Mississippi State University, October 2015.
9. "Costs of Producing Selected Crops in the U.S., 1974." Senate Committee Project No. 63-092, Committee on Agriculture and Forestry, U.S. Senate, January 8, 1976.
10. "Cotton 2016 Planning Budgets." Budget Report No. 2015-01, Department of Agricultural Economics, Mississippi State University, October 2015.
11. Cox, Laura Rebecca. "Overhead Labor Cost in the Delta Area of Mississippi." Master of Science Thesis, Department of Agricultural Economics, Mississippi State University, October 1982.
12. "Forage 2012 Planning Budgets." Budget Report No. 2012-01, Department of Agricultural Economics, Mississippi State University, May 2012.
13. Laughlin, David H. and Robert K. Mehrle. "An Economic Evaluation: Straight Versus Contour Levee Rice Production Practices in Mississippi." Mississippi Agricultural and Forestry Experiment Station Bulletin 1063. December 1996.
14. Laughlin, David H. and Stan Spurlock. "User's Guide for the Mississippi State Budget Generator Version 6.0 for Windows." AEC Staff Report No. 2003-01, Department of Agricultural Economics, Mississippi State University, March 2003.
15. "Mississippi Agricultural Statistics." Mississippi Department of Agriculture and Commerce and Department of Agriculture, Mississippi Agriculture Statistical Service, Jackson, Mississippi.
16. "Rice 2016 Planning Budgets." Budget Report No. 2015-04, Department of Agricultural Economics, Mississippi State University, October 2015.
17. "Soybeans 2016 Planning Budgets." Budget Report No. 2015-02, Department of Agricultural Economics, Mississippi State University, October 2015.
18. "Vegetables 2015 Planning Budgets." Budget Report No. 2014-08, Department of Agricultural Economics, Mississippi State University December 2014.
19. "Peanuts 2016 Planning Budgets." Budget Report No. 2015-07, Department of Agricultural Economics, Mississippi State University, October 2015.









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