# PEANUTS 2021 PLANNING BUDGETS

Mississippi State University Department of Agricultural Economics Budget Report 2020-07

October 2020

#### 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 2021 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.

# **2021 Budget Committees**

#### Corn, Grain Sorghum, and Wheat

Will Maples, MSU-ES, Co-Chair Brian Mills, MSU-ES, Co-Chair Erick Larson, MSU-ES/MAFES Jason Bond, MSU-ES/MAFES Angus Catchot, MSU-ES Don Cook, MAFES Whitney Crow, MSU-ES Drew Gholson, MSU-ES/MAFES Bobby Golden, MSU-ES/MAFES Jeff Gore, MSU-ES/MAFES Larry Oldham, MSU-ES

#### Cotton

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#### **Peanuts**

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#### Rice

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#### Soybeans

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#### Vegetables

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#### Fruit & Nut

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# **Supporting Committees**

#### **Equipment**

Jeff Johnson, MSU-ES, Chairman Evan Gregory, MSU-ES W. Gail Gillis, MSU-ES

#### **Prices**

Jeff Johnson, MSU-ES, Chairman Evan Gregory, MSU-ES W. Gail Gillis, MSU-ES

#### **Documentation and Data Processing**

Jeff Johnson, MSU-ES, Chairman Evan Gregory, MSU-ES W. Gail Gillis, MSU-ES

#### **Publication Review**

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# 2021 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 2020. (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:

$$RPH = \underbrace{RLC \ x \ RP}_{THL}$$

RPA = RPH x PR

where:

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

PR = Performance rate

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

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

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

where:

CRCPY = Capital recovery charge per year RLC = Replacement cost SV = Salvage value (at end of useful life) This value is then converted to its per-hour and per-acre equivalent values:

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

#### CRCPA = CRCPH x PR

where:

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

#### **Estimates of 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.

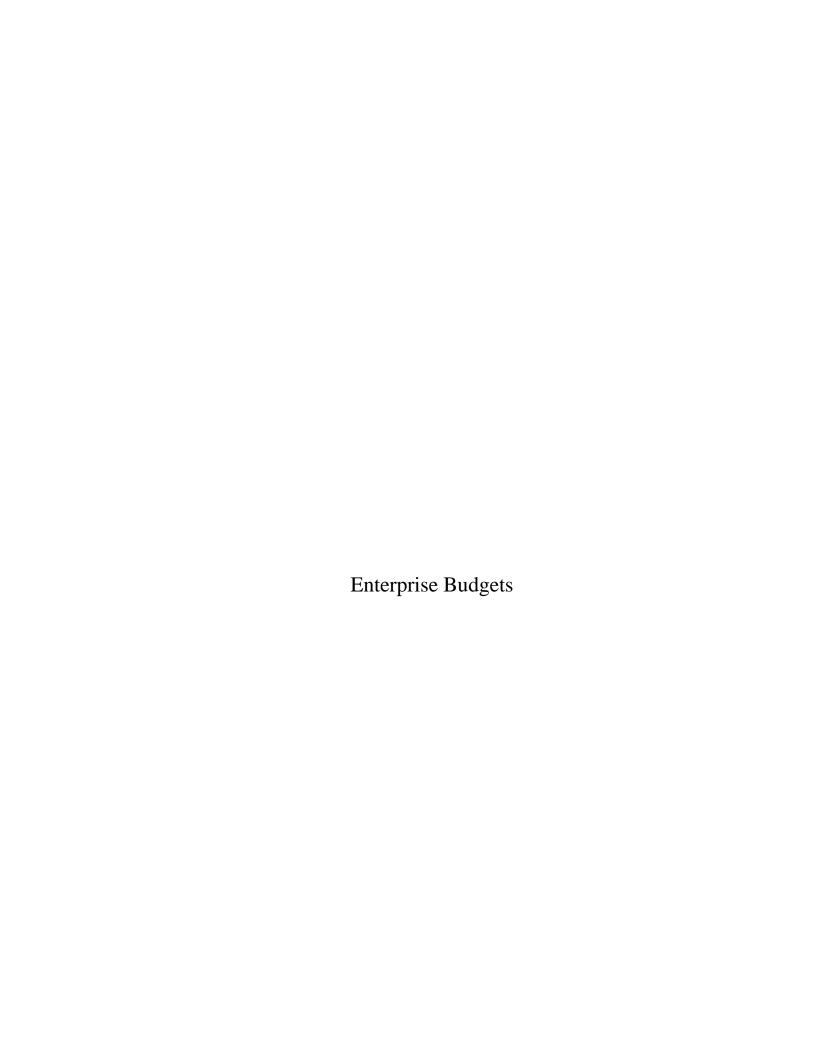


Table 1.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
	O1/1 1		~~~~~		
DIRECT EXPENSES		dollars		dollars	
FUNGICIDES					
Bravo Weather Stick	pt	5.30	5.5000	29.15	
Abound	ΟZ	1.83	36.0000	65.88	
Tebuconazole 3.6	ΟZ	0.71	7.2000	5.11	
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.11	4.0000	8.44	
Dual Magnum	pt	13.33	1.0000	13.33	
Valor SX	ΟZ	4.51	3.0000	13.53	
Storm	pt	11.91	1.5000	17.87	
Cadre	ΟZ	2.90	4.0000	11.60	
Butyrac 200 (2,4-DB)	_	3.64	2.0000	7.28	
Select Max	pt	12.74	1.0000	12.74	
INSECTICIDES		1 00	0 0000	1.6.00	
Admire Pro	OZ	1.80	9.0000	16.20	
Acephate 90%	lb	6.94	0.1375	0.95	
SEED/PLANTS		0 0 0	105 0000	100 55	
Peanut Seed	lb	0.87	125.0000	108.75	
ADJUVANTS		0 00	6 0000	17 40	
Crop Oil Conc.(Veg.)	pt	2.90	6.0000	17.40	
CLEANING		10.00	1 6000	00 16	
Cleaning Peanuts	ton	18.00	1.6200	29.16	
DRYING		04.00	1 1 1 0 0	07.06	
Dry Peanuts	ton	24.00	1.1400	27.36	
CUSTOM LIME		47 45	0 2220	15 00	
Lime (Spread)	ton	47.45	0.3330	15.80	
INOCULANT		0 50	14 0000	7 04	
Optimize LIFT	ΟZ	0.53	14.8000	7.84	
SOIL TEST		10 00	0 2220	2 22	
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR	,	14 60	1 6046	00.04	
Tractors	hour	14.68	1.6246	23.84	
Self-Propelled	hour	14.68	0.1983	2.92	
HAND LABOR	,	0.06	0 1007	1 00	
Implements	hour	9.06	0.1207	1.09	
Self-Propelled	hour	9.06	0.0991	0.90	
UNALLOCATED LABOR	hour	14.70	1.4583	21.45	
DIESEL FUEL		1 50	15 5000	0.7.00	
Tractors	gal	1.53	17.7898	27.22	
Self-Propelled	gal	1.53	1.7850	2.70	
REPAIR & MAINTENANCE		10.01	1 0000	10 01	
Implements	acre	13.01	1.0000	13.01	
Tractors	acre	11.13	1.0000	11.13	
Self-Propelled	acre	2.25	1.0000	2.25	
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	
HOMAL DIDEOM SUBSUCES					
TOTAL DIRECT EXPENSES				523.92	
FIXED EXPENSES		41 01	1 0000	45.05	
Implements	acre	41.21	1.0000	41.21	
Tractors	acre	67.88	1.0000	67.88	
Self-Propelled	acre	14.63	1.0000	14.63	
				100 = 5	
TOTAL FIXED EXPENSES				123.72	
TOTAL SPECIFIED EXPENSES				647.64	

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, 1.9 ton (3800 lb) yield, 8 row-38 inch All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	
TOTAL INCOME				760.00	
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	
HERBICIDES	acre	84.79	1.0000	84.79	
INSECTICIDES	acre	17.15	1.0000	17.15	
SEED/PLANTS	acre	108.75	1.0000	108.75	
ADJUVANTS	acre	17.40	1.0000	17.40	
CLEANING	acre	29.16	1.0000	29.16	
DRYING	acre	27.36	1.0000	27.36	
CUSTOM LIME	acre	15.80	1.0000	15.80	
INOCULANT	acre		1.0000	7.84	
SOIL TEST	acre	3.33	1.0000	3.33	
HAND LABOR	hour	9.06	0.2199	1.99	
OPERATOR LABOR	hour	14.68	1.8229		
UNALLOCATED LABOR	hour		1.4583		
DIESEL FUEL	gal	1.53	19.5748	29.92	
REPAIR & MAINTENANCE	acre	26.39	1.0000	26.39	
INTEREST ON OP. CAP.	acre	5.69	1.0000	5.69	
TOTAL DIRECT EXPENSES				523.92	
RETURNS ABOVE DIRECT EXE	PENSES			236.08	
TOTAL FIXED EXPENSES				123.72	
TOTAL SPECIFIED EXPENSES	5		-	647.64	
RETURNS ABOVE TOTAL SPEC	CIFIED E	EXPENSES		112.36	

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  $3^{\rm rd}$  year. Lime cost prorated for application every  $3^{\rm rd}$  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, 1.9 ton (3800 lb) yield, 8 row-38 inch All Areas, Mississippi, 2021

OPERATION/	SIZE/	POWER UNIT		TIMES		INPUT		POWER	ALLOC	UNALL
OPERATING INPUT	UNIT	SIZE	RATE	OVER	MTH	AMOUNT	IMPLEMENT	UNIT	LABOR	LABOR
								ho	urs	
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 31bs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	8R-38	MFWD 190	0.073		Мау		0.07	0.07	0.07	0.05
Peanut Plt&Pre Rigid	8R-38	MFWD 225	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			4 00		9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Мау	1 0000		0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	OZ		0 017	0 05	.,	3.0000		0 00	0 00	0 00
Sprayer 600-750gal	60' 175hp		0.017	0.25	May	0 1000		0.00	0.00	0.00
Acephate 90%	lb		0 017	1 00	<b>-</b> .	0.1375		0 01	0 00	0 01
Sprayer 600-750gal Storm	60' 175hp		0.017	1.00	Jun	1.5000		0.01	0.02	0.01
Cadre	pt					4.0000				
Butyrac 200 (2,4-DB)	oz pt					1.0000				
Crop Oil Conc. (Veg.)	_					2.0000				
Sprayer 600-750gal	pt 60' 175hp		0.017	1 00	Jun	2.0000		0.01	0.02	0.01
Bravo Weather Stick	pt		0.017	1.00	oun	1.5000		0.01	0.02	0.01
Sprayer 600-750gal	60' 175hp		0.017	1 00	Jul	1.5000		0.01	0.02	0.01
Abound	OZ		0.017	1.00	our	18.0000		0.01	0.02	0.01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul	10.0000		0.01	0.02	0.01
Butyrac 200 (2,4-DB)	_					1.0000				
Crop Oil Conc. (Veg.)	_					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.)	_					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 3.6	OZ					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	OZ					18.0000				
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	4R-38	MFWD 190	0.186		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					1.1400				
Cleaning Peanuts	ton					1.6200				
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

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, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2021

OPERATION/	SIZE/				DIRECT C	OST			FIXED	TOTAL
OPERATING INPUT	UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	COST	COST
						dollars-				
Soil Test	acre	3.33					0.07	3.40		3.40
Sprayer 600-750gal	-		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Glyphosate 31bs a.e	pt	8.44					0.17			8.61
Lime (Spread)	ton	15.80					0.32			16.12
Bed-Rip/Disk Fold.			1.09				0.06	3.69	3.47	7.16
Peanut Plt&Pre Rigid			2.14	2.95	4.28		0.16		9.17	18.70
Peanut Seed	lb	108.75						110.56		110.56
Optimize LIFT	OZ	7.84					0.13			7.97
Admire Pro	OZ	16.20					0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33					0.22	13.55		13.55
Valor SX	OZ	13.53					0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13			0.24	0.33	0.57
Acephate 90%	lb	0.95					0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Storm	pt	17.87					0.24	18.11		18.11
Cadre	OZ	11.60					0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64					0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80					0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	ΟZ	32.94					0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	pt	3.64					0.04	3.68		3.68
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Select Max	pt	12.74					0.13	12.87		12.87
Crop Oil Conc.(Veg.)	pt	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30					0.05	5.35		5.35
Tebuconazole 3.6	ΟZ	5.11					0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	OZ	32.94					0.22	33.16		33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick		7.95					0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.99	1.30	2.29
Bravo Weather Stick	-	7.95					0.03	7.98		7.98
Peanut Dig/Invertor	4R-38		2.79	2.68	4.92		0.03	10.42	8.67	19.09
Peanut Harvester	4R-38		16.56		24.70		0.19			128.90
Dry Peanuts	ton	27.36					0.09	27.45		27.45
Cleaning Peanuts	ton	29.16					0.10	29.26		29.26
Peanut Dump Cart			4.64	2.89	8.19		0.05		15.34	31.11
TOTALS		411.72	29.92	26.39	50.20	0.00	5.69	523.92	123.72	647.64

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  $3^{\rm rd}$  year. Lime cost prorated for application every  $3^{\rm rd}$  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, 1.9 ton (3800 lb) yield, 8 row-38 inch All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<del></del>						dolla	ars					
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	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	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	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	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	6.89	1.10	2.20	1.10	38.36
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	0.24	3.53	0.48	0.96	0.48	24.23
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	3.81	0.40	0.80	0.40	20.78
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.92	0.65	0.76	0.29	0.49
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	177.75	49.49	76.05	43.16	148.33
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-177.75	-49.49	-76.05	-43.16	611.67
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-206.89	-256.38	-332.43	-375.59	236.08

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  $3^{\rm rd}$  year. Lime cost prorated for application every  $3^{\rm rd}$  year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

<sup>\*</sup> Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8 row-38 inch
All Areas, Mississippi, 2021

								PERCENT					
PRODUCT			75	80	85	90	95 P	100	105		115	120	125
Peanut R	lunner		300.00	320.00								480.00	500.00
PERCENT	YIELD	UNIT						dollars					
50	0.95	ton	-210 -334	-191 -315	-172 -296	-153 -277	-134 -258	-115 -239	-96 -220	-77 -201	-58 -182	-39 -163	-20 -144
60	1.14	ton	-159 -282	-136 -260	-113 -237	-90 -214	-68 -191	-45 -168	-22 -146	0 -123	23 -100	45 -77	68 -54
70	1.33	ton	-107 -231	-81 -205	-54 -178	-28 -151	-1 -125	25 -98	51 -72	78 -45	104 -18	131 7	158 34
80	1.52	ton	-56 -180	-26 -149	4 -119	34 -89	65 -58	95 -28	125 2	156 32	186 62	217 93	247 123
90	1.71	ton	-5 -128	28 -94	63 -60	97 -26	131 7	165 42	199 76	234 110	268 144	302 178	336 213
100	1.90	ton	46 -77	84 -39	122 -1	160 36	198 74	236 112	274 150	312 188	350 226	388 264	426 302
110	2.09	ton	97 -26	139 15	181 57	222 99	264 140	306 182	348 224	390 266	431 308	473 349	515 391
120	2.28	ton	148 25	194 70	239 116	285 161	331 207	376 253	422 298	467 344	513 389	559 435	604 481
130	2.47	ton	200 76	249 125	298 175	348 224	397 273	447 323	496 372	545 422	595 471	644 520	694 570
140	2.66	ton	251 127	304 180	357 234	410 287	464 340	517 393	570 446	623 500	676 553	730 606	783 659
150	2.85	ton	302 179	359 236	416 293	473 350	530 407	587 464	644 521	701 578	758 635	815 692	872 749

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Note: Cost of production estimates are based on 2020 input prices.

Only the product listed has been varied to calculate net returns.

Table 2.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Bravo Weather Stick	pt	5.30	5.5000	29.15	
Abound	ΟZ	1.83	36.0000	65.88	
Tebuconazole 3.6	ΟZ	0.71	7.2000	5.11	
HERBICIDES Glyphosate 31bs a.e	n+	2.11	4 0000	8.44	
Dual Magnum	pt nt	13.33	4.0000 1.0000	13.33	
Valor SX	pt oz	4.51	3.0000	13.53	
Storm	pt	11.91	1.5000	17.87	
Cadre	οz	2.90	4.0000	11.60	
		3.64	2.0000	7.28	
Butyrac 200 (2,4-DB) Select Max	_	12.74	1.0000	12.74	
INSECTICIDES	pt	12.74	1.0000	12.74	
Admire Pro	OZ	1.80	9.0000	16.20	
Acephate 90%	lb	6.94	0.1375	0.95	
SEED/PLANTS	ID	0.94	0.1373	0.93	
Peanut Seed	lb	0.87	125.0000	108.75	
ADJUVANTS	ID	0.07	123.0000	100.75	
Crop Oil Conc. (Veg.)	n+	2.90	6.0000	17.40	
CLEANING	рt	2.90	0.0000	17.40	
Cleaning Peanuts	ton	18.00	1.6200	29.16	
DRYING	COII	10.00	1.0200	29.10	
	ton	24.00	1.1400	27.36	
Dry Peanuts CUSTOM LIME	COII	24.00	1.1400	27.30	
Lime (Spread)	ton	47.45	0.3330	15.80	
INOCULANT	COII	47.45	0.3330	13.00	
Optimize LIFT	OZ	0.53	29.6000	15.69	
SOIL TEST	02	0.33	29.0000	13.09	
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR	acre	10.00	0.3330	3.33	
	hour	14.68	1.6246	23.84	
Tractors	hour				
Self-Propelled	hour	14.68	0.1983	2.92	
HAND LABOR	hann	0.06	0 1207	1 00	
Implements	hour	9.06	0.1207	1.09	
Self-Propelled	hour	9.06	0.0991	0.90	
UNALLOCATED LABOR	hour	14.70	1.4583	21.45	
DIESEL FUEL		1 50	17 7000	07 00	
Tractors	gal	1.53	17.7898	27.22	
Self-Propelled	gal	1.53	1.7850	2.70	
REPAIR & MAINTENANCE		16 76	1 0000	16 76	
Implements	acre	16.76	1.0000	16.76	
Tractors	acre	11.13	1.0000	11.13	
Self-Propelled	acre	2.25	1.0000	2.25	
INTEREST ON OP. CAP.	acre	5.88	1.0000	5.88	<del></del>
TOTAL DIRECT EXPENSES				535.71	
FIXED EXPENSES					
Implements	acre	48.04	1.0000	48.04	
Tractors	acre	67.88	1.0000	67.88	
Self-Propelled	acre	14.63	1.0000	14.63	
TOTAL FIXED EXPENSES				130.55	
TOTAL SPECIFIED EXPENSES				666.26	

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.

<sup>60%</sup> 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, 1.9 ton (3800 lb) yield, 8R 38" Twin All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	
TOTAL INCOME				760.00	
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	
HERBICIDES	acre	84.79	1.0000	84.79	
INSECTICIDES	acre	17.15	1.0000	17.15	
SEED/PLANTS	acre	108.75	1.0000	108.75	
ADJUVANTS	acre	17.40	1.0000	17.40	
CLEANING	acre	29.16	1.0000	29.16	
DRYING	acre	27.36	1.0000	27.36	
CUSTOM LIME	acre	15.80	1.0000	15.80	
INOCULANT	acre	15.69	1.0000	15.69	
SOIL TEST	acre	3.33	1.0000		
HAND LABOR	hour	9.06	0.2199		
OPERATOR LABOR	hour	14.68	1.8229		
UNALLOCATED LABOR	hour		1.4583		
DIESEL FUEL	_	1.53			
REPAIR & MAINTENANCE				30.14	
INTEREST ON OP. CAP.	acre	5.88	1.0000	5.88	
TOTAL DIRECT EXPENSES				535.71	
RETURNS ABOVE DIRECT EXE	PENSES			224.29	
TOTAL FIXED EXPENSES				130.55	
TOTAL SPECIFIED EXPENSES	5			666.26	
RETURNS ABOVE TOTAL SPEC	CIFIED	EXPENSES		93.74	

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  $3^{\rm rd}$  year. Lime cost prorated for application every  $3^{\rm rd}$  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, 1.9 ton (3800 lb) yield, 8R 38" Twin All Areas, Mississippi, 2021

OPERATION/	SIZE/	POWER UNIT		TIMES		INPUT		POWER	ALLOC	UNALL
OPERATING INPUT	UNIT	SIZE	RATE	OVER	MTH	AMOUNT	IMPLEMENT	UNIT	LABOR	LABOR
								ho	urs	
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 31bs a.e	pt					4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Rigid	8R-38	MFWD 190	0.073		Мау		0.07	0.07	0.07	0.05
Peanut Ptlt&PreTwin	8R-30/40	MFWD 225	0.120	1.00	May		0.12	0.12	0.24	0.09
Peanut Seed	lb					125.0000				
Optimize LIFT	OZ					29.6000				
Admire Pro	OZ			4 00		9.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Мау	1 0000		0.01	0.02	0.01
Dual Magnum	pt					1.0000				
Valor SX	OZ		0 017	0 05	24.	3.0000		0 00	0 00	0 00
Sprayer 600-750gal	60' 175hp		0.017	0.25	May	0 1275		0.00	0.00	0.00
Acephate 90%	lb 60' 175hp		0.017	1 00	T	0.1375		0.01	0.02	0.01
Sprayer 600-750gal Storm	-		0.01/	1.00	Jun	1.5000		0.01	0.02	0.01
Cadre	pt oz					4.0000				
Butyrac 200 (2,4-DB)						1.0000				
Crop Oil Conc. (Veg.)	_					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1 00	Jun	2.0000		0.01	0.02	0.01
Bravo Weather Stick	pt		0.017	1.00	oun	1.5000		0.01	0.02	0.01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Abound	OZ		0.017	1.00	041	18.0000		0.01	0.02	0.01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul			0.01	0.02	0.01
Butyrac 200 (2,4-DB)	_					1.0000				
Crop Oil Conc. (Veg.)	_					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 3.6	OZ					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	OZ					18.0000				
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	4R-38	MFWD 190	0.186		Sep		0.18	0.18	0.18	0.14
Peanut Harvester	4R-38	MFWD 225	0.934	1.00	Sep	1 1 4 2 2	0.93	0.93	0.93	0.74
Dry Peanuts	ton					1.1400				
Cleaning Peanuts	ton	MEETE 100	0 010	1 00	0	1.6200	0 21	0 01	0 21	0 0 4
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

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Soil test cost is prorated for a test every  $3^{\rm rd}$  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, 1.9 ton (3800 lb) yield, 8R 38" Twin All Areas, Mississippi, 2021

OPERATION/	SIZE/				DIRECT C	OST			FIXED	TOTAL
OPERATING INPUT	UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	COST	COST
						dollars-				
Soil Test	acre	3.33					0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Glyphosate 31bs a.e	pt	8.44					0.17	8.61		8.61
Lime (Spread)	ton	15.80					0.32	16.12		16.12
Bed-Rip/Disk Rigid	8R-38		1.09	0.59	1.93		0.06		3.35	7.02
Peanut Ptlt&PreTwin	8R-30/40		2.14	6.72	4.28		0.22	13.36	16.12	29.48
Peanut Seed	lb	108.75					1.81	110.56		110.56
Optimize LIFT	OZ	15.69					0.26	15.95		15.95
Admire Pro	OZ	16.20					0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33					0.22	13.55		13.55
Valor SX	OZ	13.53					0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13			0.24	0.33	0.57
Acephate 90%	lb	0.95					0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Storm	pt	17.87					0.24	18.11		18.11
Cadre	OZ	11.60					0.15	11.75		11.75
Butyrac 200 (2,4-DB)	pt	3.64					0.05	3.69		3.69
Crop Oil Conc.(Veg.)	pt	5.80					0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.11	8.06		8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	oz	32.94					0.33	33.27		33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	<u> </u>	3.64					0.04	3.68		3.68
Crop Oil Conc.(Veg.)	_	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Select Max	pt	12.74					0.13			12.87
Crop Oil Conc.(Veg.)	-	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick		5.30	0.21	0.20	0.00		0.05	5.35	1.00	5.35
Tebuconazole 3.6	OZ	5.11					0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	OZ 17511p	32.94	0.24	0.20	0.55		0.22	33.16	1.50	33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95	0.24	0.20	0.55		0.05	8.00	1.50	8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.05	0.99	1.30	2.29
Bravo Weather Stick	-	7.95	0.24	0.20	0.55		0.03	7.98	1.30	7.98
Peanut Dig/Invertor	4R-38	7.95	2.79	2.68	4.92		0.03		8.67	19.09
Peanut Harvester	4R-38		16.56	15.01	24.70		0.03	56.46		128.90
Dry Peanuts	ton	27.36	10.00	10.01	24./0		0.19		12.44	27.45
-	ton	29.16					0.09	29.26		29.26
Cleaning Peanuts Peanut Dump Cart	6-Row	29.10	4.64	2.89	8.19		0.10	15.77	15.34	31.11
reamut namb carr	0-V0M		4.04	۷.0۶	0.19		0.03		13.34	21.11
TOTALS		419.57	29.92	30.14	50.20	0.00	5.88	535.71	130.55	666.26

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.

<sup>85%</sup> of all peanuts harvested need cleaning.

Table 2.E Estimated monthly income and expense flows per acre Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<del></del>						dolla	ars					
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	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	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	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	15.69	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	6.89	1.10	2.20	1.10	38.36
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	0.24	3.53	0.48	0.96	0.48	24.23
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	7.56	0.40	0.80	0.40	20.78
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	3.11	0.65	0.76	0.29	0.49
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	189.54	49.49	76.05	43.16	148.33
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-189.54	-49.49	-76.05	-43.16	611.67
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-218.68	-268.17	-344.22	-387.38	224.29

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  $3^{\rm rd}$  year. Lime cost prorated for application every  $3^{\rm rd}$  year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

<sup>\*</sup> Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 8R 38" Twin
All Areas, Mississippi, 2021

								PERCENT					
PRODUCT			75	80	85	90	95 B	100	105 ICE	110	115	120	125
Peanut F	Runner		300.00	320.00			380.00	400.00	420.00		460.00	480.00	500.00
PERCENT	YIELD	UNIT						dollars					
50	0.95	ton	-222 -352	-203 -333	-184 -314	-165 -295	-146 -276	-127 -257	-108 -238	-89 -219	-70 -200	-51 -181	-32 -162
60	1.14	ton	-171 -301	-148 -278	-125 -255	-102 -233	-79 -210	-57 -187	-34 -164	-11 -141	11 -119	34 -96	56 -73
70	1.33	ton	-119 -250	-93 -223	-66 -197	-39 -170	-13 -143	13 -117	39 -90	66 -64	93 -37	119 -10	146 15
80	1.52	ton	-68 -198	-37 -168	-7 -138	22 -107	53 -77	83 -46	114 -16	144 13	174 44	205 74	235 105
90	1.71	ton	-17 -147	17 -113	51 -79	85 -44	119 -10	153 23	188 57	222 91	256 126	290 160	324 194
100	1.90	ton	34 -96	72 -58	110 -20	148 17	186 55	224 93	262 131	300 169	338 207	376 245	414 283
110	2.09	ton	85 -44	127 -3	169 38	211 80	252 122	294 164	336 205	378 247	420 289	461 331	503 373
120	2.28	ton	136 6	182 51	228 97	273 143	319 188	364 234	410 279	456 325	501 371	547 416	592 462
130	2.47	ton	188 57	237 107	287 156	336 205	385 255	435 304	484 354	534 403	583 452	632 502	682 551
140	2.66	ton	239 109	292 162	346 215	399 268	452 321	505 375	558 428	612 481	665 534	718 587	771 641
150	2.85	ton	290 160	347 217	404 274	461 331	518 388	575 445	632 502	689 559	746 616	803 673	860 730

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Note: Cost of production estimates are based on 2020 input prices

Only the product listed has been varied to calculate net returns.

Table 3.A Estimated costs per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES		dollars		dollars	
FUNGICIDES					
Bravo Weather Stick	pt	5.30	5.5000	29.15	
Abound	OZ	1.83	36.0000	65.88	
Tebuconazole 3.6	ΟZ	0.71	7.2000	5.11	
HERBICIDES					
Glyphosate 3lbs a.e	pt	2.11	4.0000	8.44	
Dual Magnum	pt	13.33	1.0000	13.33	
Valor SX	ΟZ	4.51	3.0000	13.53	
Storm	pt	11.91	1.5000	17.87	
Cadre	OZ	2.90	4.0000	11.60	
Butyrac 200 (2,4-DB)	nt	3.64	2.0000	7.28	
Select Max	pt	12.74	1.0000	12.74	
INSECTICIDES	PC	12.71	1.0000	12.71	
Admire Pro	OZ	1.80	9.0000	16.20	
Acephate 90%	lb	6.94			
	ar	0.94	0.1375	0.95	
SEED/PLANTS		0 07	105 0000	100 75	
Peanut Seed	lb	0.87	125.0000	108.75	
ADJUVANTS					
Crop Oil Conc.(Veg.)	pt	2.90	6.0000	17.40	
CLEANING					
Cleaning Peanuts	ton	18.00	1.6200	29.16	
DRYING					
Dry Peanuts	ton	24.00	1.1400	27.36	
CUSTOM LIME					
Lime (Spread)	ton	47.45	0.3330	15.80	
INOCULANT	0011	17.10	0.0000	10.00	
Optimize LIFT	ΟZ	0.53	14.8000	7.84	
SOIL TEST	02	0.33	14.0000	7.04	
Soil Test	2 2 2 2 2	10.00	0.3330	3.33	
	acre	10.00	0.3330	3.33	
OPERATOR LABOR	1	14 60	1 1056	17 41	
Tractors	hour	14.68	1.1856	17.41	
Self-Propelled	hour	14.68	0.1983	2.92	
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	
Self-Propelled	hour	9.06	0.0991	0.90	
UNALLOCATED LABOR	hour	14.70	1.1072	16.28	·
DIESEL FUEL					·
Tractors	gal	1.53	12.9499	19.81	
Self-Propelled	gal	1.53	1.7850	2.70	
REPAIR & MAINTENANCE	J -				
Implements	acre	10.21	1.0000	10.21	
Tractors	acre	8.11	1.0000	8.11	
Self-Propelled	acre	2.25	1.0000	2.25	
INTEREST ON OP. CAP.					
INTEREST ON OP. CAP.	acre	5.56	1.0000	5.56	
				400.60	
TOTAL DIRECT EXPENSES				498.60	
FIXED EXPENSES					
Implements	acre	34.41	1.0000	34.41	
Tractors	acre	49.41	1.0000	49.41	
Self-Propelled	acre	14.63	1.0000	14.63	
-					
TOTAL FIXED EXPENSES				98.45	
TOTAL SPECIFIED EXPENSES				597.05	
					<del></del>

Note: Cost of production estimates are based on 2020 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, 1.9 ton (3800 lb) yield, 12 row-38inch All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	1.9000	760.00	
TOTAL INCOME				760.00	
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	
HERBICIDES	acre	84.79	1.0000	84.79	
INSECTICIDES	acre	17.15	1.0000	17.15	
SEED/PLANTS	acre	108.75	1.0000	108.75	
ADJUVANTS	acre	17.40	1.0000	17.40	
CLEANING	acre	29.16		29.16	
DRYING	acre	27.36	1.0000	27.36	
CUSTOM LIME	acre	15.80	1.0000		
INOCULANT	acre	7.84		7.84	
SOIL TEST	acre	3.33	1.0000	3.33	
HAND LABOR	hour	9.06	0.1795		
OPERATOR LABOR	hour	14.68		20.33	
UNALLOCATED LABOR	hour		1.1072		
DIESEL FUEL	gal	1.53	14.7349	22.51	
REPAIR & MAINTENANCE	acre		1.0000	20.57	
INTEREST ON OP. CAP.	acre	5.56	1.0000	5.56	
TOTAL DIRECT EXPENSES				498.60	
RETURNS ABOVE DIRECT EXP	ENSES			261.40	
TOTAL FIXED EXPENSES				98.45	
TOTAL SPECIFIED EXPENSES			•	597.05	
RETURNS ABOVE TOTAL SPEC	IFIED	EXPENSES		162.95	

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  $3^{\rm rd}$  year. Lime cost prorated for application every  $3^{\rm rd}$  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, 1.9 ton (3800 lb) yield, 12 row-38inch All Areas, Mississippi, 2021

OPERATION/	SIZE/	POWER UNIT	PERF	TIMES		INPUT		POWER	ALLOC	UNALL
OPERATING INPUT	UNIT	SIZE	RATE	OVER	MTH	AMOUNT	IMPLEMENT	UNIT	LABOR	LABOR
								ho	urs	
Q. 13 . m				0 22	3	0 2220				
Soil Test Sprayer 600-750gal	acre 60' 175hp		0.017	0.33	Apr Apr	0.3330		0.01	0.02	0.01
Glyphosate 3lbs a.e	pt pt		0.017	1.00	Apr	4.0000		0.01	0.02	0.01
Lime (Spread)	ton			0.33	Apr	0.3330				
Bed-Rip/Disk Fold.	12R-38	MFWD 225	0.046	1.00	May	0.3330	0.04	0.04	0.04	0.03
Peanut Plt&Pre Fold.	12R-38	MFWD 225	0.080	1.00	Mav		0.08	0.08	0.16	0.06
Peanut Seed	1b	111.12 220	0.000	1.00	1101	125.0000	0.00	0.00	0.10	0.00
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 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)	-					1.0000				
Crop Oil Conc.(Veg.)	-					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	40.000		0.01	0.02	0.01
Abound	OZ		0 017	1 00	- 1	18.0000		0 01	0.00	0 01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul	1 0000		0.01	0.02	0.01
Butyrac 200 (2,4-DB)	-					1.0000				
Crop Oil Conc. (Veg.) Sprayer 600-750gal	) pt 60'175hp		0.017	1 00	Jul	2.0000		0.01	0.02	0.01
Select Max			0.017	1.00	our	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.)	pt ) pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1 00	Jul	2.0000		0.01	0.02	0.01
Bravo Weather Stick	pt		0.017	1.00	our	1.0000		0.01	0.02	0.01
Tebuconazole 3.6	OZ					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug			0.01	0.02	0.01
Abound	OZ				_	18.0000				
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						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					1.1400				
Cleaning Peanuts	ton					1.6200				
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

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, 1.9 ton (3800 lb) yield, 12 row-38inch All Areas, Mississippi, 2021

OPERATION/	SIZE/				DIRECT C	OST			FIXED	TOTAL
OPERATING INPUT	UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	COST	COST
						dollare				
						uoiiais-				
Soil Test	acre	3.33					0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Glyphosate 31bs a.e	pt	8.44					0.17	8.61		8.61
Lime (Spread)	ton	15.80					0.32	16.12		16.12
Bed-Rip/Disk Fold.	12R-38		0.82	0.50	1.22		0.04	2.58	2.75	5.33
Peanut Plt&Pre Fold.	12R-38		1.42	3.39	2.85		0.13	7.79	8.72	16.51
Peanut Seed	lb	108.75					1.81	110.56		110.56
Optimize LIFT	ΟZ	7.84					0.13	7.97		7.97
Admire Pro	ΟZ	16.20					0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33					0.22	13.55		13.55
Valor SX	OZ	13.53					0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13			0.24	0.33	0.57
Acephate 90%	lb	0.95					0.02	0.97		0.97
Sprayer 600-750gal			0.24	0.20	0.55		0.01	1.00	1.30	2.30
Storm	pt	17.87					0.24	18.11		18.11
Cadre	OZ	11.60					0.15	11.75		11.75
Butyrac 200 (2,4-DB)		3.64					0.05	3.69		3.69
Crop Oil Conc. (Veg.)	_	5.80					0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	_	7.95	0.21	0.20	0.00		0.11	8.06	1.00	8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	OZ	32.94	0.21	0.20	0.00		0.33	33.27	1.00	33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Butyrac 200 (2,4-DB)	-	3.64	0.21	0.20	0.00		0.04	3.68	1.00	3.68
Crop Oil Conc. (Veg.)	_	5.80					0.06	5.86		5.86
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Select Max	pt	12.74	0.24	0.20	0.55		0.13	12.87	1.50	12.87
Crop Oil Conc. (Veg.)	-	5.80					0.13	5.86		5.86
	-		0.24	0.20	0.55			1.00	1.30	2.30
Sprayer 600-750gal	60' 175hp	5.30	0.24	0.20	0.55		0.01	5.35	1.30	5.35
Bravo Weather Stick Tebuconazole 3.6	-	5.11					0.05	5.16		5.16
	OZ		0.24	0.20	0 55				1 20	
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	OZ	32.94	0 04	0 00	0 55		0.22	33.16	1 20	33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95					0.05	8.00		8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.99	1.30	2.29
Bravo Weather Stick	-	7.95					0.03			7.98
Peanut Dig/Invertor	6R-38		1.86	1.79	3.28		0.02	6.95	6.29	13.24
Peanut Harvester	6R-38	0=	11.07	9.75	16.52		0.12		50.72	88.18
Dry Peanuts	ton	27.36					0.09			27.45
Cleaning Peanuts	ton	29.16					0.10			29.26
Peanut Dump Cart	6-Row		4.64	2.89	8.19		0.05	15.77	15.34	31.11
TOTALS		411.72	22.51	20.57	38.24	0.00		498.60	98.45	597.05

Fertilizer recommendations are based on the nutrients that the peanut crop removes. Soil test cost is prorated for a test every  $3^{\rm rd}$  year. Lime cost prorated for application every 3<sup>rd</sup> year. 60% of all peanuts harvested need drying.

<sup>85%</sup> of all peanuts harvested need cleaning.

Table 3.E Estimated monthly income and expense flows per acre Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						dolla	ars					
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	760.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	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	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.16
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.36
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	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	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.00	0.00	0.00	0.00	0.00	0.00	0.55	4.75	1.10	2.20	1.10	28.54
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	0.24	2.54	0.48	0.96	0.48	17.81
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	4.14	0.40	0.80	0.40	14.63
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	0.58	2.87	0.65	0.76	0.29	0.41
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	29.14	174.90	49.49	76.05	43.16	125.86
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-174.90	-49.49	-76.05	-43.16	634.14
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-29.14	-204.04	-253.53	-329.58	-372.74	261.40

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  $3^{\rm rd}$  year. Lime cost prorated for application every  $3^{\rm rd}$  year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

<sup>\*</sup> Lease costs are based on hourly usage costs.

Table 3.F Estimated returns for various price/yield combinations, per acre
Peanut - runner, 1.9 ton (3800 lb) yield, 12 row-38inch
All Areas, Mississippi, 2021

								PERCENT					
PRODUCT			75	80	85	90	95 P	100 RODUCT PR	105		115	120	125
Peanut R	lunner		300.00	320.00	340.00				420.00			480.00	500.00
PERCENT	YIELD	UNIT						dollars					
50	0.95	ton	-185 -283	-166 -264	-147 -245	-128 -226	-109 -207		-71 -169	-52 -150	-33 -131		4 -93
60	1.14	ton	-133 -232	-111 -209	-88 -186	-65 -163	-42 -141	-19 -118	2 -95	25 -72	48 -49	71 -27	94 -4
70	1.33	ton	-82 -181	-55 -154	-29 -127	-2 -101	23 -74	50 -48	77 -21	103 5	130 31	156 58	183 84
80	1.52	ton	-31 -129	-0 -99	29 -68	59 -38	90 -8	120 22	151 52	181 83	211 113	242 143	272 174
90	1.71	ton	20 -78	54 -44	88 -9	122 24	156 58	191 92	225 126	259 161	293 195	327 229	362 263
100	1.90	ton	71 -27	109 10	147 48	185 86	223 124	261 162	299 200	337 238	375 276	413 314	451 352
110	2.09	ton	122 24	164 66	206 107	248 149	289 191	331 233	373 275	415 316	457 358	498 400	540 442
120	2.28	ton	174 75	219 121	265 166	310 212	356 258	402 303	447 349	493 394	538 440	584 486	630 531
130	2.47	ton	225 126	274 176	324 225	373 275	422 324	472 373	521 423	571 472	620 522	669 571	719 620
140	2.66	ton	276 178	329 231	383 284	436 337	489 391	542 444	595 497	649 550	702 603	755 657	808 710
150	2.85	ton	328 229	385 286	442 343	499 400	556 457	613 514	670 571	727 628	784 685	841 742	898 799

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 2020 input prices.

Table 4.A Estimated costs per acre
Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch
Furrow irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES		0011010		0011010	
FUNGICIDES Bravo Weather Stick	n+	5.30	5.5000	29.15	
Abound	pt oz	1.83	36.0000	65.88	
Tebuconazole 3.6	OZ	0.71	7.2000	5.11	
HERBICIDES		0 11	4 0000	0 44	
Glyphosate 31bs a.e Dual Magnum	pt pt	2.11 13.33	4.0000 1.0000	8.44 13.33	
Valor SX	OZ	4.51	3.0000	13.53	
Storm	pt	11.91	1.5000	17.87	
Cadre	OZ	2.90	4.0000	11.60	
Butyrac 200 (2,4-DB)		3.64	2.0000	7.28	
Select Max INSECTICIDES	pt	12.74	1.0000	12.74	
Admire Pro	OZ	1.80	9.0000	16.20	
Acephate 90%	lb	6.94	0.1375	0.95	
IRRIGATION SUPPLIES	<b>C</b> .	0.04	22 222		
Roll-Out Pipe	ft	0.24	33.0000	7.92	
SEED/PLANTS Peanut Seed	lb	0.87	125.0000	108.75	
ADJUVANTS	10	0.07	123.0000	100.75	
Crop Oil Conc.(Veg.)	pt	2.90	6.0000	17.40	
CLEANING	_	10.00	1 0000	22.66	
Cleaning Peanuts	ton	18.00	1.8700	33.66	
DRYING Dry Peanuts	ton	24.00	1.3200	31.68	
CUSTOM LIME	COII	21.00	1.3200	31.00	
Lime (Spread)	ton	47.45	0.3330	15.80	
INOCULANT		0 50	14 0000	7 04	
Optimize LIFT SOIL TEST	ΟZ	0.53	14.8000	7.84	
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR	4010	10.00	0.0000	0.00	
Tractors	hour	14.68	1.2642	18.57	
Self-Propelled	hour	14.68	0.1983	2.92	
IRRIGATE LABOR Special Labor	hour	9.06	0.3250	2.96	
Implements	hour	9.06	0.0625	0.57	
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	
Self-Propelled	hour	9.06	0.0991	0.90	
UNALLOCATED LABOR DIESEL FUEL	hour	14.70	1.1072	16.28	
Tractors	gal	1.53	13.6762	20.93	
Self-Propelled	gal	1.53	1.7850	2.70	
Irrigate Peanuts	gal	1.53	9.7755	14.96	
REPAIR & MAINTENANCE	acre	10.40	1.0000	10.40	
Implements Tractors	acre	8.54	1.0000	8.54	
Self-Propelled	acre	2.25	1.0000	2.25	
Irrigate Peanuts	acre	7.16	1.0000	7.16	
INTEREST ON OP. CAP.	acre	6.08	1.0000	6.08	
TOTAL DIRECT EXPENSES				544.41	
FIXED EXPENSES				244.41	
Implements	acre	35.65	1.0000	35.65	
Tractors	acre	52.05	1.0000	52.05	
Self-Propelled	acre	14.63 51.84	1.0000	14.63 51.84	
Irrigate Peanuts	acre	J1.04	1.0000	J1.04	
TOTAL FIXED EXPENSES				154.17	
TOTAL SPECIFIED EXPENSES				698.58	

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 4.B Summary of estimated costs and returns per acre Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch Furrow irrigated, All Areas, Mississippi, 2021

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Peanut Runner	ton	400.00	2.2000	880.00	
TOTAL INCOME				880.00	
DIRECT EXPENSES					
FUNGICIDES	acre	100.14	1.0000	100.14	
HERBICIDES	acre	84.79	1.0000	84.79	
INSECTICIDES	acre	17.15	1.0000	17.15	
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	
SEED/PLANTS	acre	108.75	1.0000	108.75	
ADJUVANTS	acre	17.40		17.40	
CLEANING	acre	33.66	1.0000	33.66	
DRYING	acre	31.68	1.0000	31.68	
CUSTOM LIME	acre	15.80	1.0000	15.80	
INOCULANT	acre	7.84		7.84	
SOIL TEST	acre	3.33		3.33	
HAND LABOR	hour	9.06		1.63	
IRRIGATE LABOR	hour	9.06	0.3875		
OPERATOR LABOR	hour	14.68	1.4625	21.49	
UNALLOCATED LABOR	hour		1.1072	16.28	
DIESEL FUEL	gal	1.53	25.2367	38.59	
REPAIR & MAINTENANCE	acre	28.35	1.0000	28.35	
INTEREST ON OP. CAP.	acre	6.08	1.0000	6.08	
TOTAL DIRECT EXPENSES				544.41	
RETURNS ABOVE DIRECT EXP	ENSES			335.59	
TOTAL FIXED EXPENSES				154.17	
TOTAL SPECIFIED EXPENSES				698.58	
RETURNS ABOVE TOTAL SPEC	IFIED	EXPENSES		181.42	

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  $3^{\rm rd}$  year. Lime cost prorated for application every  $3^{\rm rd}$  year.

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

Table 4.C Estimated resource use for field operations, per acre Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch Furrow irrigated, All Areas, Mississippi, 2021

OPERATION/	SIZE/	POWER UNIT	PERF	TIMES		INPUT		POWER	ALLOC	UNALL
OPERATING INPUT	UNIT	SIZE	RATE	OVER	MTH	AMOUNT	IMPLEMENT	UNIT	LABOR	LABOR
								ho	urs	
Soil Test	acre			0.33	Apr	0.3330				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Apr			0.01	0.02	0.01
Glyphosate 31bs a.e	pt				=	4.0000				
Lime (Spread)	ton			0.33	Apr	0.3330				
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 225	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 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	_					1.0000				
Crop Oil Conc. (Veg.						2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jun			0.01	0.02	0.01
Bravo Weather Stick	-		0 017	1 00		1.5000		0 01	0 00	0 01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul	40.000		0.01	0.02	0.01
Abound	OZ		0 017	1 00		18.0000		0 01	0 00	0 01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Jul	1 0000		0.01	0.02	0.01
Butyrac 200 (2,4-DB	· -					1.0000				
Crop Oil Conc. (Veg. Sprayer 600-750gal	) pt 60'175hp		0.017	1 00	Jul	2.0000		0.01	0.02	0.01
Select Max	-		0.017	1.00	Jul	1.0000		0.01	0.02	0.01
Crop Oil Conc. (Veg.	pt ) pt					2.0000				
Sprayer 600-750gal	60' 175hp		0.017	1 00	Jul	2.0000		0.01	0.02	0.01
Bravo Weather Stick	-		0.017	1.00	our	1.0000		0.01	0.02	0.01
Tebuconazole 3.6	OZ					7.2000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug	7.2000		0.01	0.02	0.01
Abound	OZ		0.01	1.00	1149	18.0000		0.01	0.02	0.01
Sprayer 600-750gal	60' 175hp		0.017	1.00	Aug	10.0000		0.01	0.02	0.01
Bravo Weather Stick					5	1.5000				
Sprayer 600-750gal	60' 175hp		0.017	1.00	Sep			0.01	0.02	0.01
Bravo Weather Stick	-				-	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					1.3200				
Cleaning Peanuts	ton					1.8700				
Peanut Dump Cart	6-Row	MFWD 190	0.310	1.00	Sep		0.31	0.31	0.31	0.24
Irrigate Peanuts	acre				Jan	1.0000	0.07	0.07	0.46	
TOTALS							1.46	1.26	2.02	1.10
TOTATO							1.40	1.∠0	2.02	1.10

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.

<sup>60%</sup> of all peanuts harvested need drying. 85% of all peanuts harvested need cleaning.

Table 4.D Estimated costs for field operations, per acre Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch Furrow irrigated, All Areas, Mississippi, 2021

OPERATION/	SIZE/				DIRECT C	OST			FIXED	TOTAL
OPERATING INPUT	UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	COST	COST
						dollars-				
Soil Test	acre	3.33					0.07	3.40		3.40
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Glyphosate 31bs a.e	pt	8.44					0.17	8.61		8.61
Lime (Spread)	ton	15.80					0.32	16.12		16.12
Bed-Rip/Disk Fold.	12R-38		0.82	0.50	1.22		0.04	2.58	2.75	5.33
Peanut Plt&Pre Fold.	12R-38		1.42	3.39	2.85		0.13	7.79	8.72	16.51
Peanut Seed	lb	108.75					1.81	110.56		110.56
Optimize LIFT	OZ	7.84					0.13	7.97		7.97
Admire Pro	OZ	16.20					0.27	16.47		16.47
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.02	1.01	1.30	2.31
Dual Magnum	pt	13.33					0.22	13.55		13.55
Valor SX	OZ	13.53					0.23	13.76		13.76
Sprayer 600-750gal	60' 175hp		0.06	0.05	0.13			0.24	0.33	0.57
Acephate 90%	lb	0.95					0.02	0.97		0.97
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Storm	pt	17.87					0.24	18.11		18.11
Cadre	OZ	11.60					0.15	11.75		11.75
Butyrac 200 (2,4-DB)	-	3.64					0.05	3.69		3.69
Crop Oil Conc.(Veg.)	-	5.80					0.08	5.88		5.88
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	-	7.95	0 04	0.00	0 55		0.11	8.06	1 20	8.06
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Abound	OZ	32.94	0.24	0.20	0.55		0.33	33.27	1 20	33.27
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	
Butyrac 200 (2,4-DB)	_	3.64 5.80					0.04	3.68 5.86		3.68 5.86
Crop Oil Conc. (Veg.)	-		0.24	0.20	0.55		0.00	1.00	1.30	2.30
Sprayer 600-750gal Select Max	60' 175hp pt	12.74	0.24	0.20	0.55		0.01	12.87	1.30	12.87
Crop Oil Conc. (Veg.)	-	5.80					0.13	5.86		5.86
Sprayer 600-750gal	60 <b>'</b> 175hp		0.24	0.20	0.55		0.00	1.00	1.30	2.30
Bravo Weather Stick	pt	5.30	0.24	0.20	0.55		0.01	5.35	1.50	5.35
Tebuconazole 3.6	OZ	5.11					0.05	5.16		5.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.03	1.00	1.30	2.30
Abound	OZ	32.94	0.21	0.20	0.00		0.22	33.16	1.00	33.16
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55		0.01	1.00	1.30	2.30
Bravo Weather Stick	pt	7.95	0.21	0.20	0.00		0.05	8.00	1.00	8.00
Sprayer 600-750gal	60' 175hp		0.24	0.20	0.55			0.99	1.30	2.29
Bravo Weather Stick	-	7.95					0.03	7.98		7.98
Peanut Dig/Invertor	6R-38		1.86	1.79	3.28		0.02	6.95	6.29	13.24
Peanut Harvester	6R-38		11.07	9.75	16.52		0.12	37.46	50.72	88.18
Dry Peanuts	ton	31.68					0.11	31.79		31.79
Cleaning Peanuts	ton	33.66					0.11	33.77		33.77
Peanut Dump Cart	6-Row		4.64	2.89	8.19		0.05	15.77	15.34	31.11
Irrigate Peanuts	acre	7.92	16.08	7.78	4.69		0.49	36.96	55.72	92.68
TOTALS		428.46	38.59	28.35	42.93	0.00	6.08	544.41	154.17	698.58

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.

<sup>60%</sup> of all peanuts harvested need drying. 85% of all peanuts harvested need cleaning.

Table 4.E Estimated monthly income and expense flows per acre Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch Furrow irrigated, All Areas, Mississippi, 2021

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						doll	ars					
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	880.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.95	43.35	40.89	7.95
HERBICIDES	0.00	0.00	0.00	0.00	0.00	0.00	8.44	26.86	33.11	16.38	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75	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	5.80	11.60	0.00	0.00
CLEANING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.66
DRYING	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.68
CUSTOM LIME	0.00	0.00	0.00	0.00	0.00	0.00	15.80	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	7.84	0.00	0.00	0.00	0.00
SOIL TEST	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00
LABOR	0.56	0.00	0.00	0.00	0.00	0.00	0.78	7.11	1.33	2.66	1.95	28.54
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	0.57	0.00	0.00	0.00	0.00	0.00	0.24	2.84	4.22	8.44	4.47	17.81
REPAIR & MAINTENANCE	0.30	0.00	0.00	0.00	0.00	0.00	0.20	7.27	1.45	2.90	1.60	14.63
INTEREST ON OP. CAP.	0.06	0.00	0.00	0.00	0.00	0.00	0.58	3.10	0.71	0.86	0.33	0.44
TOTAL DIRECT EXPENSES	1.49	0.00	0.00	0.00	0.00	0.00	29.37	188.84	54.57	86.19	49.24	134.71
NET INCOME	-1.49	0.00	0.00	0.00	0.00	0.00	-29.37	-188.84	-54.57	-86.19	-49.24	745.29
NET INCOME TO DATE	-1.49	-1.49	-1.49	-1.49	-1.49	-1.49	-30.86	-219.70	-274.27	-360.46	-409.70	335.59

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 3rd year.

Lime cost prorated for application every 3rd year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

<sup>\*</sup> Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre Peanut-runner, 2.2 ton (4,400 lb) yield, 12 row-38inch Furrow irrigated, All Areas, Mississippi, 2021

								PERCENT					
PRODUCT			75	80	85	90	95 	100 RODUCT PR	105		115	120	125
Peanut Runner		300.00	320.00		360.00			420.00			480.00	500.00	
PERCENT	YIELD	UNIT						dollars					
50	1.10	ton	-181 -335	-159 -313	-137 -291	-115 -269	-93 -247		-49 -203	-27 -181	-5 -159	16 -137	38 -115
60	1.32	ton	-122 -276	-95 -249	-69 -223	-42 -197	-16 -170	9 -144	36 -117	62 -91	89 -65	115 -38	141 -12
70	1.54	ton	-62 -216	-31 -186	-1 -155	29 -124	60 -93	91 -62	122 -32	152 -1	183 29	214 60	245 91
80	1.76	ton	-3 -157	31 -122	67 -87	102 -51	137 -16	172 18	207 53	243 88	278 124	313 159	348 194
90	1.98	ton	56 -98	95 <b>-</b> 58	135 -18	174 20	214 60	254 99	293 139	333 179	372 218	412 258	452 297
100	2.20	ton	115 -38	159 5	203 49	247 93	291 137	335 181	379 225	423 269	467 313	511 357	555 401
110	2.42	ton	175 20	223 69	271 117	320 166	368 214	417 262	465 311	513 359	562 408	610 456	659 504
120	2.64	ton	234 80	287 133	340 185	392 238	445 291	498 344	551 397	604 449	656 502	709 555	762 608
130	2.86	ton	293 139	351 196	408 254	465 311	522 368	579 425	637 482	694 540	751 597	808 654	865 711
140	3.08	ton	353 199	414 260	476 322	538 383	599 445	661 507	722 568	784 630	846 691	907 753	969 815
150	3.30	ton	412 258	478 324	544 390	610 456	676 522	742 588	808 654	874 720	940 786	1006 852	1072 918

The top number in each cell is Returns Above Direct Expenses.

The bottom number in each cell is Returns Above Total Specified Expenses.

Note: Cost of production estimates are based on 2020 input prices.

Only the product listed has been varied to calculate net returns.



Appendix Table 1. Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, Mississippi, 2021

		Purchase		Useful	Fuel	Labor	Fuel	R&M	Total		Total
Item Name	Size	Price	Use	Life	Use				Direct		Cost
		dollars	hours	years	gal/hr			\$	/hour		
Combine (250-299 hp)	265 hp	391,000	300	8	13.64	14.68	20.86	40.72	76.27	155.91	232.19
Combine (300-349 hp)	325 hp	395,000	300	8	16.73		25.59			157.50	
Combine (350-399 hp)	355 hp	401,000	300	8	18.27	14.68	27.95	41.77	84.40	159.90	244.30
Combine (400-449 hp)	425 hp	436,000	300	8	21.87		33.47			173.85	
Combine (450-499hp)	475 hp	462,000	300	8	24.44	14.68	37.40	48.12	100.21	184.22	284.43
Tractor(20-39hp)CB	MFWD 30	30,100	600	8	1.54	14.68	2.36	0.94	17.98	5.46	23.44
Tractor(20-39hp)RB	MFWD 30	20,700	600	8	1.54	14.68	2.36	0.64	17.68	3.75	21.44
Tractor( 40-59hp)CB	2WD 50	30,900	600	8	2.57	14.68	3.93	0.96	19.58	5.61	25.19
Tractor( 40-59hp)CB	MFWD 50	41,400	600	8	2.57	14.68	3.93	1.29	19.91	7.51	27.43
Tractor( 40-59hp)RB	2WD 50	21,700	600	8	2.57	14.68	3.93	0.67	19.29	3.94	23.23
Tractor( 40-59hp)RB	MFWD 50	27,200	600	8	2.57	14.68	3.93	0.85	19.46	4.93	24.40
Tractor(60-89hp)CB	2WD 75	53,200	600	8	3.86	14.68	5.90	1.66	22.24	9.66	31.91
Tractor( 60-89hp)CB	MFWD 75	57 <b>,</b> 600	600	8	3.86	14.68	5.90	1.80	22.38	10.46	32.84
Tractor( 60-89hp)RB	2WD 75	38,400	600	8	3.86	14.68	5.90	1.20	21.78	6.97	28.76
Tractor( 60-89hp)RB	MFWD 75	41,800	600	8	3.86	14.68	5.90	1.30	21.89	7.59	29.48
Tractor( 90-119hp)CB	2WD 105	71,200	600	8	5.40	14.68	8.26	2.22	25.17	12.93	38.10
Tractor( 90-119hp)CB	MFWD 105	91,700	600	8	5.40	14.68	8.26	2.86	25.81	16.65	42.46
Tractor( 90-119hp)RB	2WD 105	64,600	600	8	5.40	14.68	8.26	2.01	24.96	11.73	36.69
Tractor( 90-119hp)RB	MFWD 105	71,900	600	8	5.40	14.68	8.26	2.24	25.19	13.05	38.25
Tractor (120-139hp) CB	2WD 130	113,000	600	8	6.69	14.68	10.23	3.53	28.44	20.52	48.97
Tractor (120-139hp) CB	MFWD 130	126,000	600	8	6.69	14.68	10.23	3.93	28.85	22.88	51.73
Tractor (140-159hp)	2WD 150	111,000	600	8	7.72	14.68	11.81	3.46	29.96	20.15	50.12
Tractor (140-159hp) CB	MFWD 150	143,000	600	8	7.72	14.68	11.81	4.46	30.96	25.97	56.93
Tractor (160-179hp) CB	MFWD 170	160,000	600	8	8.75	14.68	13.38	5.00	33.06	30.47	63.54
Tractor (180-199hp) CB	MFWD 190	194,000	600	8	9.77	14.68	14.96	6.06	35.70	36.95	72.66
Tractor(200-249hp)CB	MFWD 225	233,000	600	8	11.58	14.68	17.71	7.28	39.68	44.38	84.06
Tractor (250-349hp) CB	4WD 300	314,000	600	8	15.44	14.68	23.62	9.81	48.11	59.81	107.93
Tractor (250-349hp) CB	MFWD 300	321,000	600	8	15.44	14.68	23.62	10.03	48.33	61.14	109.48
Tractor (250-349hp) CB	Track 300	329,000	600	8	15.44	14.68	23.62	10.28	48.58	62.67	111.25
Tractor (350-449hp)	Track 400	453,000	600	8	20.58	14.68	31.50	14.15	60.33	86.29	146.63
Tractor(350-449hp)CB	4WD 400	366,000	600	8	20.58	14.68	31.50	11.43	57.61	69.72	127.33
Tractor(450-550hp)CB	4WD 500	412,000	600	8	25.73	14.68	39.37	12.87	66.93	78.48	145.41
Tractor (450-550hp) CB	Track 500	470,000	600	8	25.73		39.37		68.74		158.27
Utility Vehicle	800 CC	12,200	200	8	0.70	14.68	1.32	1.90	17.90	7.29	25.20
Utility Vehicle	900 CC	15,800	200	8	1.00	14.68	1.89	2.46	19.03	9.45	28.48
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Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

Appendix Table 2. Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, Mississippi, 2021

		Purchase	Annual	Useful	Fuel	Perf	Labor	Fuel	R&M	Total	Fixed	Total
Item Name	Size	Price	Use	Life	Use	Rate				Direct		Cost
		dollars	hours	years	gal/hr	hr/ac			\$	/acre		
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	6.11	5.07 1	0.79	21.98	41.32	63.3
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.11	7.10 1	4.13	27.36	54.11	81.4
Cotton Picker	4R2x1(350)	357,000	200	8	18.01	0.172	4.09	4.74	9.61	18.45	36.79	55.2
Cotton Picker	6R-30(355)	465,000	200	8	18.27	0.218	5.18	6.10 1	5.85	27.14	60.70	87.8
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.09	4.81 1	2.51	21.42	47.92	69.3
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.11	8.12 2	21.58	35.82	82.64	118.4
Cotton Picker/Module	6R-30(500)	808,000	200	8	25.73	0.218	5.18	8.59 2	27.55	41.32	105.47	146.8
Cotton Picker/Module	6R-38(500)	807,000	200	8	25.73	0.172	4.09	6.78 2	21.72	32.60	83.17	115.7
Dry Applicator SP	70'300cuft	365,000	350	8	16.98	0.015	0.29	0.39	0.29	0.97	1.88	2.8
Sprayer 600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.33	0.24	0.20	0.78	1.30	2.0
Sprayer 600-825gal	80' 175hp	225,000	350	8	11.81	0.013	0.25	0.23	0.15	0.65	1.01	1.6
Sprayer 600-825gal	90' 250hp	322,000	350	8	12.73	0.011	0.22	0.22	0.20	0.65	1.29	1.9
Sprayer 800gal	100' 250hp	324,000	350	8	14.15	0.010	0.20	0.22	0.18	0.61	1.17	1.7
Sprayer 800gal	80' 250hp	292,000	350	8	12.86	0.013	0.25	0.26	0.20	0.72	1.31	2.0
Sprayer 1000-1400gal	90' 275hp	322,000	350	8	14.15	0.010	0.20	0.22	0.18	0.61	1.16	1.7
Sprayer 1000gal	100' 300hp	365,000	350	8	15.44	0.010	0.20	0.24	0.20	0.66	1.31	1.9
Sprayer 1200+gal	120' 300hp	392,000	350	8	15.44	0.008	0.16	0.20	0.18	0.56	1.18	1.7

## 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, 2021

Item Name		Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel		M	Total Direct		ed	Total
				dollars	hours		hr/ac					/acre			
Bed-Paratill	/	4R-30	MFWD 225	18,700	150	12	0.204	2.99	3.62	1.37	1.48	9.48	2.29		20.85
Bed-Paratill		4R-38	MFWD 225	18,700	150	12	0.160	2.36	2.85	1.08	1.17	7.47	1.81	7.14	16.42
Bed-Paratill		6R-38	MFWD 225	25,500	150	12	0.107	1.57	1.90	0.99	0.78	5.25	1.65	4.77	11.68
Bed-Rip/Disk		8R-38	MFWD 190	46,900	300	20	0.073	1.07	1.09	0.17	0.44	2.78	0.76	2.70	6.24
Bed-Rip/Disk	Fold.	12R-30	MFWD 225	67,900	300	20	0.061	0.90	1.09	0.20	0.44	2.65	0.93	2.73	6.32
Bed-Rip/Disk		12R-38	MFWD 225	67,900	300	20	0.046	0.67	0.81	0.15	0.33	1.99	0.70	2.05	4.74
Bed-Rip/Disk		4R-30	MFWD 190	21,300	300	20	0.184	2.71	2.76	0.19	1.12	6.79	0.88	6.83	14.51
Bed-Rip/Disk	_	4R-38	MFWD 190	21,300	300	20	0.146	2.15	2.19	0.15	0.88	5.39	0.70	5.42	11.51
Bed-Rip/Disk	_	6R-30	MFWD 190	29,700	300	20	0.123	1.80	1.84	0.18	0.74	4.58	0.82	4.55	9.95
Bed-Rip/Disk	-	6R-38	MFWD 190	29,700	300	20	0.097	1.42	1.45	0.14	0.58	3.61	0.64	3.59	7.86
Bed-Rip/Disk Bed-Rip/Disk	_	8R-30	MFWD 190	39,800 39,800	300 300	20 20	0.139	2.04	2.07	0.27	0.84	5.23 2.75	1.24	5.13	11.61
Bed-Rip/Disk/ Bed-Rip/Disk/	_	8R-38 6-Row	MFWD 190 MFWD 225	24,800	150	12	0.107	1.57	1.90	0.14	0.44	5.23	0.65	4.77	11.60
Bed-Rip/Disk/ Bed-Rip/Disk/		8-Row	MFWD 225	33,000	150	12	0.080	1.18	1.43	0.96	0.58	4.16	1.60	3.58	9.35
Bed-Subsoil	Fold	8R-38	MFWD 225	46,900	150	12	0.080	1.18	1.43	1.36	0.58	4.57	2.27	3.58	10.43
Bed-Subsoil	Fold	8R-38 2x1	MFWD 225	67,900	150	12	0.053	0.78	0.95	1.31	0.39	3.45	2.19	2.38	8.03
Bed-Subsoil	Fold	12R-38	MFWD 225	67,900	150	12	0.053	0.78	0.95	1.31	0.39	3.45	2.19	2.38	8.03
Bed-Subsoil	Rigid	4R-30	MFWD 225	17,500	150	12	0.204	2.99	3.62	1.29	1.48	9.39	2.15	9.06	20.62
Bed-Subsoil	Rigid	4R-38	MFWD 225	16,800	150	12	0.160	2.36	2.85	0.97	1.17	7.36	1.62	7.14	16.12
Bed-Subsoil	Rigid	6R-30	MFWD 225	24,300	150	12	0.136	1.99	2.41	1.19	0.99	6.60	1.99	6.04	14.63
Bed-Subsoil	Rigid	6R-38	MFWD 225	25,300	150	12	0.107	1.57	1.90	0.98	0.78	5.24	1.63	4.77	11.66
Bed-Subsoil	Rigid	8R-30	MFWD 225	32,500	150	12	0.102	1.49	1.81	1.19	0.74	5.25	1.99	4.53	11.78
Bed-Subsoil	Rigid	8R-38	MFWD 225	33,600	150	12	0.080	1.18	1.43	0.97	0.58	4.18	1.63	3.58	9.40
	ipper)	4R-38 6R-38	MFWD 150 MFWD 170	10,500 16,200	160 160	10 10	0.147	2.16	1.74	0.38	0.65	4.95 3.66	0.98	3.83	9.78 7.68
	ipper) ipper)	6R-38 8R-30	MFWD 170	20,800	160	10	0.098	1.44	1.32	0.39	0.49	3.83	1.01	3.46	8.54
	ipper)	8R-38 2x1	MFWD 190 MFWD 190	51,400	160	10	0.093	0.72	0.73	0.48	0.29	2.39	1.61	1.82	5.83
	ipper)	12R-30	MFWD 225	40,100	160	10	0.062	0.91	1.10	0.62	0.45	3.10	1.59	2.77	7.47
	ipper)	12R-38	MFWD 225	51,400	160	10	0.049	0.72	0.87	0.63	0.35	2.59	1.61	2.18	6.39
	ipper)	16R40	MFWD 300	60,800	160	10	0.035	0.51	0.83	0.53	0.35	2.24	1.37	2.16	5.78
Bed/Disk (Hi	ipper)Fl	8R-38	MFWD 190	22,000	160	10	0.074	1.08	1.10	0.40	0.44	3.05	1.03	2.73	6.83
Bed/Disk (Hi	ipper)Rd	8R-38	MFWD 190	19,700	160	10	0.074	1.08	1.10	0.36	0.44	3.01	0.93	2.73	6.68
Bed/Disk w/r	roller	8R-30	MFWD 190	26,900	160	10	0.093	1.37	1.40	0.63	0.56	3.97	1.60	3.46	9.04
	roller	8R-38	MFWD 190	30,800	160	10	0.074	1.08	1.10	0.57	0.44	3.21	1.45	2.73	7.41
Bed/Disk w/r	roller	12R-30/40	MFWD 225	50,900	160	10	0.062	0.91	1.10	0.79	0.45	3.27	2.02	2.77	8.07
Bed/Lister		4R-38	MFWD 150	18,100	160	8	0.228	3.35	2.69	0.96	1.02	8.03	2.95	5.93	16.92
Bed/Lister		6R-38	MFWD 150	20,400	160	8	0.120	1.76	1.41	0.57	0.53	4.29	1.75	3.12	9.16
Bed/Lister		8R-30	MFWD 190	24,900	160	8	0.114	1.67	1.70	0.66	0.69	4.74	2.03	4.21	10.99
Bed/Lister Bed/Lister		8R-38 8R-38 2x1	MFWD 190 MFWD 190	25,000 40,400	160 160	8	0.060	1.32	1.35	0.52	0.54	3.75 2.71	1.61	3.33	6.67
Bed/Lister		12R-38	MFWD 225	40,400	160	8	0.060	0.88	1.06	0.56	0.43	2.95	1.73	2.66	7.35
Bed/Lister		16R-30	MFWD 225	54,700	160	8	0.035	0.51	0.62	0.45	0.25	1.84	1.37	1.55	4.77
Bed/Lister		16R40	MFWD 300	57,000	160	8	0.043	0.63	1.01	0.57	0.43	2.65	1.75	2.63	7.04
Bed/Lister-Ro	oll-Fo	8R-38	MFWD 190	24,300	160	10	0.095	1.40	1.43	0.58	0.58	4.00	1.48	3.54	9.03
Bed/Lister-Ro	oll-Fo	12R-30	MFWD 225	37,800	160	10	0.080	1.18	1.43	0.76	0.58	3.97	1.94	3.58	9.51
Bed/Lister-Ro	oll-Fo	12R-38	MFWD 225	36,700	160	10	0.063	0.93	1.13	0.58	0.46	3.11	1.49	2.83	7.44
Bed/Lister-Ro		16R-30	MFWD 225	48,700	160	10	0.060	0.89	1.07	0.73	0.44	3.14	1.88	2.69	7.72
Bed/Lister-Ro	oll-Ri	8R-38	MFWD 190	25,000	160	10	0.095	1.40	1.43	0.59	0.58	4.02	1.52	3.54	9.09
Blade-Box		6'-7'	MFWD 105	1,470	200	20	0.020	0.29	0.16	0.01	0.04	0.51	0.01	0.26	0.78
Blade-Box		8'-10'	MFWD 105	3,830	200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Box	_	12'-16' 6'-7'	MFWD 105	6,190 1,270	200	20 20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper Blade-Scraper		8'-10'	MFWD 105 MFWD 105	3,870	200 200	20	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blade-Scraper Blade-Scraper		12'-16'	MFWD 105	9,810	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)		30,500	200	10	0.257	3.78	3.85	1.96	1.56		3.84	9.52	24.54
Boll Buggy		4R-38 (350)		30,500	200	10	0.257	3.78	3.85		1.56	11.16	3.84	9.52	24.54
Boll Buggy		4R2x1(350)	MFWD 190	30,500	200	10	0.172	2.52	2.57	1.31	1.04	7.46	2.57	6.36	16.40
Boll Buggy		6R-30(355)		30,500	200	10	0.218	3.20	3.26	1.66	1.32	9.45	3.25	8.06	20.78
Boll Buggy		6R-38 (355)		30,500	200	10	0.172	2.52	2.57	1.31	1.04	7.46	2.57	6.36	16.40
Chisel Plow-E		24'	MFWD 190	43,500	150	12	0.076	1.12	1.14	1.20	0.46	3.93	2.00	2.82	8.75
Chisel Plow-E	_	32'	MFWD 225	54,500	150	12	0.057	0.84	1.02	1.13	0.42	3.42	1.89	2.56	7.88
Chisel Plow-E	_	42'	MFWD 225	65,700	150	12	0.044	0.64	0.78	1.04	0.32	2.79	1.74	1.95	6.48
Chisel Plow-F	_	50'	MFWD 225	85,900	150	12	0.036	0.54	0.65	1.14	0.26	2.61	1.91	1.64	6.16
Chisel Plow-E		61'	MFWD 225	99,100 7,790	150	12	0.030	0.44	0.53	1.08	0.22	2.28	1.80	1.34	5.44
Chisel Plow-F Chisel Plow-F	-	10' 15'	MFWD 170 2WD 130	13,200	150 150	12 12	0.184	2.71	2.47	0.52	0.92	6.63 4.09	0.86	5.63 2.52	13.13
Chisel Plow-F	-	20'	MFWD 225	13,400	150	12	0.123	1.50	1.81	0.49	0.43	4.09	0.82	4.55	9.95
Cultivate	9_4	4R-30	2WD 105	14,600	150	10	0.206	3.02	1.70	0.80	0.45	5.99	2.04		10.70
Cultivate		4R-38	2WD 105	14,200	150	10	0.162	2.38	1.34	0.61	0.32	4.66	1.56	1.90	8.14
Cultivate		6R-30	MFWD 150	18,500	150	10	0.137	2.01	1.62	0.67	0.61	4.93	1.72	3.57	10.23
Cultivate		6R-38	MFWD 150	19,300	150	10	0.108	1.59	1.28	0.55	0.48	3.91	1.42	2.81	8.16
Cultivate		8R-30	MFWD 190	23,800	150	10	0.103	1.51	1.54	0.65	0.62		1.66	3.81	9.81
Cultivate		8R-38	MFWD 190	28,400	150	10	0.073	1.08	1.10	0.55	0.44	3.18	1.42	2.72	7.33
Cultivate		8R-38 2x1	MFWD 190	35,200	150	10	0.054	0.79	0.81	0.50	0.32	2.44	1.29	2.00	5.75
Cultivate		12R-30	MFWD 225	42,500	150	10	0.068	1.00	1.21	0.77	0.50	3.50	1.98	3.05	8.54
Cultivate		12R-38	MFWD 225	43,800	150	10	0.054	0.79	0.96	0.63	0.39	2.78	1.61	2.40	6.81
Cultivate		16R-30	MFWD 225	58,400	150	10	0.051	0.75	0.91	0.80	0.37	2.84	2.04	2.28	7.18
	Post	4R-30	2WD 105	21,900	150	10	0.220	4.22	1.81	1.28	0.44	7.77	3.27	2.58	13.63
Cultivate & E Cultivate & E		4R-38	2WD 105	21,600	150	10	0.173	3.32	1.43	0.99	0.34	6.10	2.54	2.03	10.68

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel		M P.U.	Total Direct		P.U.	Total Cost
			dollars	hours	years	hr/ac				\$/	acre			
Cultivate & Post	6R-30	MFWD 150	25,900	150	10	0.146	2.81	1.73	1.01	0.65	6.21	2.58	3.80	12.60
Cultivate & Post	6R-38	MFWD 150	26,600	150	10	0.115	2.22	1.36	0.82	0.51	4.93	2.09	3.00	10.03
Cultivate & Post	8R-30	MFWD 190	31,200	150	10	0.110	2.11	1.64	0.91	0.66	5.34	2.33	4.06	11.73
Cultivate & Post Cultivate & Post	8R-38 8R-38 2x1	MFWD 190 MFWD 190	35,800 45,400	150 150	10 10	0.086	1.67 1.11	1.30	0.83	0.52	4.32	2.11	3.21	9.65 6.95
Cultivate & Post	12R-30	MFWD 190 MFWD 225	49,800	150	10	0.037	1.40	1.29	0.70	0.53	4.21	2.48	3.25	9.95
Cultivate & Post	12R-38	MFWD 225	54,000	150	10	0.057	1.11	1.02	0.83	0.42	3.39	2.12	2.56	8.08
Cultivate & Post	16R-30	MFWD 225	68,600	150	10	0.055	1.05	0.97	1.00	0.40	3.43	2.56	2.44	8.44
Disk & Incorporate	14'	2WD 130	33,700	200	10	0.149	2.87	1.53	1.51	0.52	6.44	2.57	3.07	12.09
Disk & Incorporate	20' 24'	MFWD 190	71,100	200 200	10	0.092	1.77	1.38	1.45	0.56	5.17	2.46	3.41	11.05
Disk & Incorporate Disk & Incorporate	28'	MFWD 190 MFWD 225	53,600 63,300	200	10 10	0.087	1.67 1.43	1.30	1.40	0.52	4.91 4.72	2.38	3.22	10.52
Disk & Incorporate	32'	MFWD 225	68,700	200	10	0.065	1.25	1.16	1.34	0.47	4.24	2.29	2.90	9.44
Disk Harrow	14'	2WD 130	26,400	180	10	0.140	2.05	1.43	1.02	0.49	5.02	2.09	2.87	9.99
Disk Harrow	20'	MFWD 190	45,000	180	10	0.098	1.44	1.46	1.22	0.59	4.73	2.50	3.62	10.86
Disk Harrow	24' 28'	MFWD 190 MFWD 225	46,200 56,000	180 180	10 10	0.081	1.20	1.22	1.05	0.49	3.97 3.87	2.14	3.02	9.13
Disk Harrow Disk Harrow	32'	MFWD 225	61,400	180	10	0.070	0.90	1.08	1.09	0.44	3.48	2.13	2.72	8.34
Disk Harrow	42'	MFWD 225	107,000	180	10	0.046	0.68	0.82	1.39	0.34	3.24	2.83	2.07	8.15
Disk Harrow 40-100hp	14'	2WD 75	16,700	180	10	0.140	2.05	0.82	0.65	0.16	3.70	1.32	0.97	6.01
Disk Heavy	14'	MFWD 150	26,400	180	10	0.145	2.14	1.72	1.07	0.65	5.58	2.18	3.79	11.56
Disk Heavy	20'	MFWD 190	45,000	180	10	0.097	1.42	1.45	1.21	0.58	4.69	2.48	3.59	10.76
Disk Heavy Disk Ripper	28' 15'	MFWD 225 MFWD 225	56,000 50,800	180 180	10 10	0.075	1.11	1.34	1.17 1.92	0.55	4.18 7.32	2.40	3.35 6.04	9.94 17.29
Ditcher		2WD 130	6,120	200	10	0.020	0.29	0.20	0.04	0.07	0.61	0.06	0.41	1.09
Ditcher (1m/160a)		2WD 130	6,120	200	10	0.009	0.13	0.09	0.02	0.03	0.28	0.02	0.19	0.51
Fert Appl (Liquid)	4R-38	MFWD 150	15,200	150	8	0.154	2.97	1.82	1.56	0.69	7.05	1.70	4.01	12.78
Fert Appl (Liquid)	6R-30	MFWD 170	17,900	150	8	0.130	2.51	1.75	1.56	0.65	6.48	1.70	3.99	12.18
Fert Appl (Liquid) Fert Appl (Liquid)	6R-38 8R-30	MFWD 170 MFWD 190	17,900 18,600	150 150	8	0.103	1.98	1.38	1.23	0.51	5.12 5.16	1.34	3.15	9.61
Fert Appl (Liquid)	8R-38	MFWD 190	20,600	150	8	0.077	1.49	1.16	1.06	0.47	4.19	1.16	2.86	8.22
Fert Appl (Liquid)	8R-38 2x1		21,000	150	8	0.051	0.99	0.77	0.72	0.31	2.80	0.78	1.91	5.50
Fert Appl (Liquid)	12R-30	MFWD 225	24,700	150	8	0.078	1.50	1.39	1.29	0.57	4.76	1.40	3.48	9.66
Fert Appl (Liquid)	12R-38	MFWD 225	19,300	150	8	0.051	0.99	0.91	0.66	0.37	2.95	0.72	2.29	5.96
Field Cult & Inc Field Cult & Inc	42' 50'	MFWD 225 MFWD 225	69,500 82,200	100 100	10 10	0.037	0.72	0.66	0.65	0.27	2.32	2.67	1.67	6.67 6.12
Field Cult & Inc Fld	24'	MFWD 170	38,500	100	10	0.066	1.26	0.88	0.63	0.33	3.12	2.59	2.01	7.73
Field Cult & Inc Fld	32'	MFWD 190	50,900	100	10	0.049	0.95	0.74	0.63	0.30	2.62	2.57	1.83	7.03
Field Cult & Inc Rdg	12'	2WD 150	19,600	100	10	0.132	2.53	1.56	0.64	0.45	5.20	2.64	2.66	10.51
Field Cultivate Fld	24' 32'	MFWD 170	31,100 43,500	100 100	10 10	0.062	0.91	0.83	0.48	0.31	2.54	1.97	1.89	6.41 5.96
Field Cultivate Fld Field Cultivate Fld	42'	MFWD 190 MFWD 225	59,400	100	10	0.046	0.68	0.69	0.50	0.28	1.93	2.15	1.57	5.66
Field Cultivate Fld	50 <b>'</b>	MFWD 225	69,000	100	10	0.029	0.43	0.52	0.51	0.21	1.69	2.10	1.32	5.12
Field Cultivate Rdg	12'	2WD 150	12,300	100	10	0.124	1.82	1.46	0.38	0.43	4.11	1.56	2.50	8.17
Grain Cart Corn	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.37	0.18	0.15	1.09	0.31	0.93	2.33
Grain Cart Corn	700 bu 1000 bu	MFWD 190 MFWD 225	44,000 57,900	200 200	12 12	0.025	0.37	0.37	0.30	0.15	1.20	0.50	0.93	2.64
Grain Cart Corn Grain Cart Rice	500 bu	MFWD 190	27,300	200	12	0.023	0.91	0.93	0.46	0.13	2.69	0.77	2.30	5.77
Grain Cart Rice	700 bu	MFWD 190	44,000	200	12	0.055	0.80	0.82	0.65	0.33	2.61	1.09	2.03	5.74
Grain Cart Rice	1000 bu	MFWD 190	57,900	200	12	0.045	0.67	0.68	0.71	0.27	2.35	1.19	1.69	5.24
Grain Cart Soybean	500 bu	MFWD 190	27,300	200	12	0.025	0.37	0.38	0.18	0.15	1.09	0.31	0.94	2.35
Grain Cart Soybean Grain Cart Soybean	700 bu 1000 bu	MFWD 190 MFWD 190	44,000 57,900	200 200	12 12	0.021	0.31	0.31	0.25	0.12	1.01	0.42	0.78 0.78	2.21
Grain Cart Wht/Sor	500 bu	MFWD 190	27,300	200	12	0.021	0.31	0.31	0.18	0.12	1.09	0.33	0.78	2.35
Grain Cart Wht/Sor	700 bu	MFWD 190	44,000	200	12	0.021	0.31		0.25	0.12	1.01	0.42	0.78	2.21
Grain Cart Wht/Sor	1000 bu	MFWD 190	57,900	200	12	0.021	0.31	0.31	0.33	0.12	1.09	0.55	0.78	2.43
Grain Drill	10'	2WD 130	28,000	150	8	0.188	4.47	1.93	1.97	0.66	9.05	3.64	3.86	16.57
Grain Drill Grain Drill	12' 15'	2WD 130 MFWD 150	28,100 33,900	150 150	8	0.157 0.125	3.73 2.98	1.60 1.48	1.65 1.59	0.55 0.56	7.55 6.62	3.05	3.22	13.82
Grain Drill	20'	MFWD 130	41,400	150	8	0.123	2.23		1.46	0.30	5.43	2.69	2.87	11.00
Grain Drill	24'	MFWD 190	66,800	150	8	0.078	1.86		1.96	0.47	5.48	3.62	2.90	12.01
Grain Drill	30'	MFWD 225	68,500	150	8	0.062	1.49	1.11	1.61	0.45	4.67	2.97	2.79	10.44
Grain Drill	35'	MFWD 225	91,900	150	8	0.053	1.27	0.95	1.85	0.39	4.48	3.42	2.39	10.29
Grain Drill & Pre	10'	2WD 130	35,400	150	8	0.203	4.82	2.07	2.69	0.71	10.31	4.96	4.16	19.44
Grain Drill & Pre Grain Drill & Pre	12' 15'	2WD 130 MFWD 150	35,400 41,200	150 150	8 8	0.169	4.01 3.21	1.73 1.59	2.24	0.59	8.59 7.50	4.13	3.47	16.20 14.87
Grain Drill & Pre	20'	MFWD 170	48,800	150	8	0.101	2.41		1.85	0.50	6.13	3.42	3.09	12.65
Grain Drill & Pre	24'	MFWD 190	74,200	150	8	0.084	2.00	1.26	2.35	0.51	6.14	4.33	3.12	13.60
Grain Drill & Pre	30'	MFWD 225	75,800	150	8	0.067	1.60	1.19	1.92	0.49	5.22	3.54	3.00	11.77
Grain Drill & Pre	35'	MFWD 225	101,000	150	8	0.058	1.37	1.02		0.42	5.02	4.04	2.57	11.64
Grain Drill & Pre T Harrow - Folding	8R-38 24'	MFWD 225 MFWD 190	59,000 13,800	150 200	8 10	0.062	1.49	1.11	1.39	0.45	4.45	2.56 0.45	2.79	9.80 5.46
Harrow - Folding	30'	MFWD 190 MFWD 190	15,300	200	10	0.054	0.75	0.96	0.31	0.39	2.02	0.45	1.91	4.44
Harrow - Folding	40'	MFWD 190	21,300	200	10	0.038	0.56	0.58	0.28	0.23	1.67	0.42	1.43	3.53
Harrow - Folding	48'	MFWD 225	26,000	200	10	0.032	0.47	0.57	0.29	0.23	1.57	0.42	1.43	3.44
Header - Corn	6R-30	265 hp	51,400	300	8	0.170	2.49	3.55	2.18	6.93	15.17		26.54	44.90
	6R-38	265 hp	52,300	300	8	0.134	1.97	2.80	1.75	5.47	12.01	2.55	111 95	35.52
Header - Corn Header - Corn	8R-30	265 hp	66,800	300	8	0.127	1.87		2.13		11.87			34.88

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	R&M Imp. P.U.		Fixed Imp. P.U.	Total Cost
			dollars	hours	years	hr/ac			\$	/acre		
Header - Corn	8R-38	325 hp	67,900	300	8	0.100	1.48	2.58	1.71 4.15	9.93	2.48 15.90	28.32
Header - Corn	12R-20	325 hp	102,000	300	8	0.127	1.87	3.26	3.25 5.25		4.73 20.11	38.50
Header - Corn	12R-30	325 hp	112,000	300	8	0.085	1.24	2.17	2.38 3.50	9.31	3.46 13.41	26.19
Header - Draper (CL)	25' Rigid		61,400	300	8	0.203	2.98	4.23	2.85 8.27		4.30 31.66	54.31
Header - Draper (CL)	30' Rigid	325 hp	73,700	300	8	0.169	2.48	4.33	2.85 6.96		4.30 26.65	47.60
Header - Draper (CL)	36' Rigid 40' Rigid	355 hp	77,300 82,700	300 300	8	0.141	2.07	3.94 4.24	2.49 5.89 2.40 5.76		3.76 22.55 3.62 22.06	40.71
Header - Draper (CL) Header - Draper (SL)	25' Rigid	425 hp 325 hp	61,400	300	8	0.126	2.58	4.50	2.40 3.76		3.73 27.72	48.26
Header - Draper (SL)	30' Rigid	325 hp	73,700	300	8	0.146	2.15	3.75	2.47 6.03		3.73 27.72	41.25
Header - Draper (SL)	36' Rigid	355 hp	77,300	300	8	0.122	1.79	3.41	2.16 5.10		3.26 19.54	35.28
Header - Draper (SL)	40' Rigid		82,700	300	8	0.110	1.61	3.68	2.08 4.99		3.14 19.12	34.64
Header -RiceStrp(CL)	20'	265 hp	50,600	300	8	0.253	3.72	5.29	3.21 10.33	22.57	4.66 39.57	66.81
Header -RiceStrp(CL)	24'	325 hp	54,000	300	8	0.211	3.10	5.41	2.85 8.70		4.14 33.31	57.54
Header -RiceStrp(CL)	32'	325 hp	60,800	300	8	0.158	2.32	4.06	2.41 6.52		3.50 24.98	43.82
Header -RiceStrp(SL)	20'	265 hp	50,600	300	8	0.220	3.22	4.59	2.78 8.96		4.04 34.30	57.90
Header -RiceStrp(SL) Header -RiceStrp(SL)	24' 32'	325 hp 325 hp	54,000 60,800	300 300	8	0.183	2.69	4.69 3.51	2.47 7.54 2.09 5.65		3.59 28.87 3.03 21.65	49.87 37.97
Header -Soybean	22' Flex	265 hp	33,700	300	8	0.116	1.70	2.42	0.97 4.72		1.42 18.10	29.35
Header -Soybean	25' Flex	325 hp	36,200	300	8	0.102	1.49	2.61	0.92 4.20		1.34 16.09	26.67
Header -Soybean	30' Flex	325 hp	43,800	300	8	0.085	1.24	2.17	0.93 3.50		1.35 13.41	22.62
Header -Soybean	35' Flex	355 hp	50,100	300	8	0.072	1.07	2.04	0.91 3.04		1.32 11.66	20.07
Header Wheat/Sorghum	22' Rigid	265 hp	19,800	300	8	0.116	1.70	2.42	0.57 4.72		0.83 18.10	28.36
Header Wheat/Sorghum	25' Rigid	325 hp	25,400	300	8	0.102	1.49	2.61	0.64 4.20		0.94 16.09	26.00
Header Wheat/Sorghum		325 hp	29,100	300	8	0.085	1.24	2.17	0.61 3.50		0.89 13.41	21.86
Land Plane	50'x16'	MFWD 190	9,700	200	10	0.151	2.22	2.26	0.29 0.91		0.74 5.60	12.06
Levee Pull & Seed Levee Pull (1m/80a)	8 Blade 8 blade	MFWD 170 MFWD 170	9,700 8,270	100 100	10 10	0.003	0.05	0.04	0.00 0.01 0.00 0.01		0.03 0.10 0.03 0.10	0.26
Levee Splitter (1/80	32"	MFWD 170	8,270	100	10	0.003	0.06	0.04	0.00 0.01		0.03 0.10	0.20
Module Builder	4R-38 (250)		34,700	200	10	0.257	6.11	3.85	2.23 1.56		4.37 9.52	27.68
Module Builder	4R-38 (350)		34,700	200	10	0.257	6.11	3.85	2.23 1.56		4.37 9.52	27.68
Module Builder	4R2x1(350)	MFWD 190	34,700	200	10	0.172	4.09	2.57	1.49 1.04	9.20	2.92 6.36	18.50
Module Builder	6R-30(355)	MFWD 190	34,700	200	10	0.218	5.18	3.26	1.89 1.32	11.66	3.70 8.06	23.43
Module Builder	6R-38 (355)		34,700	200	10	0.172	4.09	2.57	1.49 1.04		2.92 6.36	18.50
NT Grain Drill	10'	2WD 130	34,400	150	8	0.235	5.59	2.41	3.04 0.83		5.60 4.83	22.32
NT Grain Drill	12'	2WD 130	46,600	150	8	0.163	3.88	1.67	2.86 0.57		5.27 3.35	17.62
NT Grain Drill NT Grain Drill	15' 20'	MFWD 150 MFWD 170	56,000 67,400	150 150	8	0.130	3.10	1.54	2.74 0.58 2.48 0.49		5.06 3.40 4.57 2.99	16.45 14.18
NT Grain Drill	24'	MFWD 170	98,000	150	8	0.030	1.94	1.22	3.00 0.49		5.54 3.02	15.23
NT Grain Drill	30'	MFWD 225	104,300	150	8	0.065	1.55	1.16	2.56 0.47		4.71 2.90	13.37
NT Grain Drill & Pre	10'	2WD 130	41,800	150	8	0.211	5.02	2.16	3.31 0.74		6.10 4.34	21.70
NT Grain Drill & Pre	12'	2WD 130	54,000	150	8	0.176	4.18	1.80	3.56 0.62		6.57 3.61	20.37
NT Grain Drill & Pre	15'	MFWD 150	63,300	150	8	0.141	3.34	1.66	3.34 0.63	8.99	6.16 3.66	18.82
NT Grain Drill & Pre	20'	MFWD 170	74,700	150	8	0.105	2.51	1.41	2.96 0.52		5.45 3.22	16.10
NT Grain Drill & Pre	24'	MFWD 190	105,000	150	8	0.088	2.09	1.31	3.47 0.53		6.39 3.25	17.06
NT Grain Drill & Pre	30' 8R-38	MFWD 225	112,000	150	8	0.070	1.67	1.24	2.96 0.51		5.45 3.12	14.98
NT Plant&Pre-Folding NT Plant&Pre-Folding	8R-38 2x1	MFWD 170 MFWD 170	67,700 103,000	150 150	8	0.083	1.98 1.32	1.11	2.12 0.41 2.15 0.27	5.64 4.49	3.91 2.54 3.96 1.69	12.10 10.15
NT Plant&Pre-Folding	12R-20	MFWD 170	82,600	150	8	0.105	2.51	1.58	3.27 0.64		6.03 3.90	17.95
NT Plant&Pre-Folding	12R-30	MFWD 190	91,000	150	8	0.070	1.67	1.05	2.40 0.42		4.43 2.60	12.60
_	12R-38	MFWD 190	103,000	150	8	0.055	1.32	0.83	2.15 0.33		3.96 2.05	10.66
NT Plant&Pre-Folding	16R-30	MFWD 190	137,000	150	8	0.052	1.25	0.79	2.71 0.32	5.08	5.00 1.95	12.04
NT Plant&Pre-Folding	23R-15	MFWD 190	186,000	150	8	0.073	1.74	1.09	5.12 0.44	8.41	9.43 2.71	20.56
NT Plant&Pre-Folding	24R-20	MFWD 190	207,000	150	8	0.052	1.25	0.79	4.10 0.32			15.98
NT Plant&Pre-Folding	24R-30	MFWD 190	217,000	150	8	0.035	0.83	0.52	2.86 0.21		5.28 1.30	11.03
NT Plant&Pre-Folding	31R-15	MFWD 225	222,000	150	8	0.054	1.29	0.96	4.55 0.39			18.02
NT Plant&Pre-Folding NT Plant&Pre-Rigid	32R-15 4R-30	MFWD 225 2WD 130	216,200 34,600	150 150	8	0.052	1.25	0.93	4.28 0.38 2.74 0.74		7.89 2.34 5.05 4.34	17.11 20.07
NT Plant&Pre-Rigid	4R-38	2WD 130	36,000	150	8	0.166	3.95	1.70	2.24 0.58			16.05
NT Plant&Pre-Rigid	6R-30	MFWD 150	44,300	150	8	0.141	3.34	1.66	2.34 0.63		4.31 3.66	15.96
NT Plant&Pre-Rigid	6R-38	MFWD 150	43,500	150	8	0.111	2.64	1.31	1.81 0.49			12.51
NT Plant&Pre-Rigid	8R-30	MFWD 170	54,500	150	8	0.105	2.51	1.41	2.16 0.52	6.61	3.98 3.22	13.82
NT Plant&Pre-Rigid	8R-38	MFWD 170	52,400	150	8	0.083	1.98	1.11	1.64 0.41		3.02 2.54	10.74
NT Plant&Pre-Rigid	11R-15	MFWD 170	63,900	150	8	0.143	3.41	1.92	3.44 0.71		6.35 4.38	20.24
NT Plant&Pre-Rigid	11R-20	MFWD 170	63,200	150	8	0.115	2.74	1.54	2.73 0.57		5.04 3.52	16.17
NT Plant&Pre-Rigid	12R-20	MFWD 190	65,700	150	8	0.105	2.51	1.58	2.60 0.64		4.80 3.90	16.05
NT Plant&Pre-Rigid NT Plant&Pre-Rigid	12R-30 15R-15	MFWD 190 MFWD 190	82,800 82,000	150 150	8	0.070	1.67 2.68	1.05	2.18 0.42 3.47 0.68		4.03 2.60 6.40 4.18	11.98 19.13
NT Plant&Pre-Rigid NT Plant&Pre-TwinRow	15R-15 12R-30/40	MFWD 190 MFWD 225	170,000	150	8	0.113	1.32	0.98	3.47 0.68			15.27
NT Plant&Pre-TwinRow NT Plant&Pre-TwinRow	8R-30/40	MFWD 225	135,000	150	8	0.033	1.32	1.48	4.23 0.60			19.81
NT Plant-Folding	8R-38	MFWD 170	60,400	150	8	0.003	1.84	1.03	1.75 0.38			10.63
NT Plant-Folding	8R-38 2x1	MFWD 170	93,400	150	8	0.051	1.22	0.69	1.81 0.25		3.33 1.57	8.89
NT Plant-Folding	12R-20	MFWD 190	75,200	150	8	0.098	2.33	1.46	2.76 0.59			15.89
NT Plant-Folding	12R-30	MFWD 190	81,700	150	8	0.065	1.55	0.97			3.69 2.41	11.05
NT Plant-Folding	12R-38	MFWD 190	93,400	150	8	0.051	1.22	0.77	1.81 0.31		3.33 1.91	9.37
NT Plant-Folding	16R-30	MFWD 190	128,000	150	8	0.049	1.16	0.73	2.35 0.29			10.71
	23R-15	MFWD 190	176,000	150	8	0.068	1.61	1.02	4.50 0.41		8.29 2.52	18.36
NT Plant-Folding												
NT Plant-Folding	24R-20	MFWD 190	197,000	150	8	0.049	1.16	0.73	3.62 0.29			14.32
			197,000 204,000 213,000	150 150 150	8 8 8	0.049 0.032 0.050	1.16 0.77 1.20	0.48	3.62 0.29 2.50 0.19 4.05 0.36	3.97	6.68 1.81 4.61 1.20 7.46 2.25	9.79

Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

		Power	Purchase	ληημηί	IIcoful	Perf	Labor	Fuel	Pr	M	Total	Fi	xed	Total
Item Name	Size	Unit	Price	Use	Life	Rate	Labor	ruei			Direct		P.U.	Cost
											,			
			dollars	hours	years	hr/ac				ş	/acre			
NT Plant-Folding	32R-15	MFWD 225	207,000	150	8	0.049	1.16	0.87	3.81	0.35	6.20	7.02	2.17	15.40
NT Plant-Rigid	4R-30	2WD 130	27,200	150	8	0.196	4.66	2.01	2.00	0.69	9.37	3.69	4.03	17.09
NT Plant-Rigid	4R-38	2WD 130	28,600	150	8	0.154	3.67	1.58	1.65	0.54	7.46	3.05	3.17	13.69
NT Plant-Rigid	6R-30	MFWD 150	37,000	150	8	0.130	3.10	1.54	1.81	0.58	7.05	3.34	3.40	13.80
NT Plant-Rigid NT Plant-Rigid	6R-38 8R-30	MFWD 150 MFWD 170	36,100 47,100	150 150	8 8	0.103	2.45	1.22	1.39	0.46	5.53 5.87	2.57	2.68	10.80 12.06
NT Plant-Rigid	8R-38	MFWD 170	45,000	150	8	0.077	1.84	1.03	1.31	0.38	4.58	2.41	2.36	9.36
NT Plant-Rigid	11R-15	MFWD 170	56,500	150	8	0.133	3.17	1.78	2.83	0.66	8.46	5.21	4.07	17.74
NT Plant-Rigid	11R-20	MFWD 170	55,800	150	8	0.107	2.54	1.43	2.24	0.53	6.76	4.13	3.27	14.17
NT Plant-Rigid	12R-20	MFWD 190	58,400	150	8	0.098	2.33	1.46	2.15	0.59	6.54	3.96	3.62	14.13
NT Plant-Rigid NT Plant-Rigid	12R-30 15R-15	MFWD 190	73,500 72,700	150 150	8 8	0.065	1.55	0.97 1.57	1.80	0.39	4.73 7.56	3.32 5.27	2.41	10.48 16.72
NT Plant-TwinRow	12R-30/40	MFWD 190 MFWD 225	160,000	150	8	0.103	1.22	0.91	3.10	0.83	5.62	5.71	2.29	13.62
NT Plant-TwinRow	8R-30/40	MFWD 225	128,000	150	8	0.077	1.84	1.37	3.72	0.56	7.51	6.86	3.44	17.82
Peanut Cond.& Lifter	6-Row	MFWD 190	14,800	300	20	0.100	1.46	1.49	0.24	0.60	3.81	0.34	3.69	7.86
Peanut Conditioner	6-Row	MFWD 190	17,500	300	20	0.100	1.46	1.49	0.35	0.60	3.92	0.35	3.69	7.97
Peanut Dig/Invertor	4R-30	MFWD 190	33,500	300	15	0.235	3.46	3.52	1.96	1.42		2.26	8.71	21.36
Peanut Dig/Invertor Peanut Dig/Invertor	4R-38 6R-38	MFWD 190 MFWD 190	33,500 47,900	300 300	15 15	0.186	2.73	2.78	1.55	1.12	8.20 5.47	1.78	6.88 4.58	16.86 11.75
Peanut Dump Cart	6-Row	MFWD 190	55,800	300	20	0.310	4.55	4.63	1.00	1.87	12.07		11.45	27.41
Peanut Harvester	4R-30	MFWD 225	155,000	300	20	0.849	12.47		7.46	6.18			37.72	
Peanut Harvester	4R-38	MFWD 225	155,000	300	20	0.934	13.71	16.56	8.20	6.80	45.29	30.96	41.48	117.73
Peanut Harvester	6R-38	MFWD 225	172,000	300	20	0.625		11.07	5.19	4.55				80.71
Peanut Lifter Peanut Plt&Pre Fold.	6-Row 12R-38	MFWD 225 MFWD 190	7,440 92,700	300 150	20 8	0.100	1.46	1.77	0.15 2.79	0.72	4.12 6.39	0.15 5.14	4.43	8.71 14.51
Peanut Plt&Pre Rigid	8R-30	MFWD 190 MFWD 190	47,800	150	8	0.152	3.62	2.28	2.73	0.40	9.57	5.04	5.64	20.26
Peanut Plt&Pre Rigid	8R-38	MFWD 190	45,700	150	8	0.120	2.86	1.80	2.06	0.73	7.47	3.81	4.46	15.75
Peanut Ptlt&PreTwin	8R-30/40	MFWD 190	129,000	150	8	0.120	2.86	1.80	5.84	0.73	11.24	10.76	4.46	26.47
Pipe Spool 160ac	1/4m roll	2WD 130	5,400	15	12	0.003	0.10	0.03	0.00	0.01	0.15	0.10	0.06	0.32
Pipe Trailer 1m/160a	30'	2WD 130	2,700	100	15	0.003	0.19	0.03	0.00	0.01	0.24	0.00	0.07	0.32 11.04
Plant & Pre-Folding Plant & Pre-Folding	8R-38 8R-38 2x1	MFWD 170 MFWD 170	61,000 92,700	150 150	8	0.080	1.90 1.26	1.07	1.83	0.40	5.21 4.10	3.38	2.44	9.16
Plant & Pre-Folding	12R-20	MFWD 190	72,600	150	8	0.101	2.41	1.51	2.76	0.61	7.30	5.09	3.75	16.15
Plant & Pre-Folding	12R-30	MFWD 190	81,000	150	8	0.067	1.60	1.01	2.05	0.41	5.08	3.78	2.50	11.37
Plant & Pre-Folding	12R-38	MFWD 190	92,700	150	8	0.053	1.26	0.79	1.85	0.32	4.24	3.42	1.97	9.64
Plant & Pre-Folding	16R-30	MFWD 190	124,000	150	8	0.050	1.20	0.75	2.36	0.30	4.63	4.34	1.87	10.85
Plant & Pre-Folding Plant & Pre-Folding	23R-15 24R-20	MFWD 190 MFWD 190	166,000 187,000	150 150	8	0.070	1.67 1.20	1.05	4.38	0.42	7.54 5.83	8.08 6.55	2.60 1.87	18.23 14.26
Plant & Pre-Folding	24R-30	MFWD 190	197,000	150	8	0.033	0.80	0.50	2.50	0.20	4.01	4.60	1.25	9.87
Plant & Pre-Folding	31R-15	MFWD 225	196,000	150	8	0.052	1.24	0.92	3.85	0.38	6.41	7.10	2.32	15.84
Plant & Pre-Folding	32R-15	MFWD 225	189,000	150	8	0.050	1.20	0.89	3.59	0.36	6.07	6.62	2.25	14.95
Plant & Pre-Rigid Plant & Pre-Rigid	4R-30 4R-38	2WD 130 2WD 130	31,600 32,600	150 150	8	0.203	4.82	2.07	2.40	0.71	10.02 7.95	4.43	4.16 3.28	18.62 14.83
Plant & Pre-Rigid	6R-30	MFWD 150	39,300	150	8	0.135	3.79	1.59	1.99	0.60	7.93	3.67	3.51	14.60
Plant & Pre-Rigid	6R-38	MFWD 150	38,500	150	8	0.106	2.53	1.26	1.54	0.47	5.82	2.84	2.77	11.43
Plant & Pre-Rigid	8R-30	MFWD 170	47,800	150	8	0.101	2.41	1.35	1.82	0.50	6.09	3.35	3.09	12.54
Plant & Pre-Rigid	8R-38	MFWD 170	45,700	150	8	0.080	1.90	1.07	1.37	0.40	4.75	2.53	2.44	9.73
Plant & Pre-Rigid Plant & Pre-Rigid	11R-15 11R-20	MFWD 170 MFWD 170	54,700 54,000	150 150	8 8	0.148	3.51 2.63	1.98	3.04	0.74	9.28 6.92	5.60 4.14	4.51	19.40 14.44
Plant & Pre-Rigid	12R-20	MFWD 170	55,700	150	8	0.101	2.41	1.51		0.61	6.66	3.90	3.75	14.32
Plant & Pre-Rigid	12R-30	MFWD 190	72,700	150	8				1.84				2.50	10.77
Plant & Pre-Rigid	15R-15	MFWD 190	69,500	150	8	0.108			2.83		7.69	5.21	4.01	16.92
Plant & Pre-TwinRow	12R-30/40		160,000	150		0.053			3.20					14.09
Plant & Pre-TwinRow Plant - Folding	8R-30/40	MFWD 225	129,000 53,700	150		0.080	1.90	1.42		0.58				18.51
Plant - Folding	8R-38 8R-38 2x1	MFWD 170	83,400	150 150		0.074		0.99		0.37		2.76	2.27	9.67 8.01
Plant - Folding	12R-20	MFWD 190	65,200	150		0.045		1.41		0.57			3.48	
Plant - Folding	12R-30	MFWD 190	71,700	150		0.062	1.49	0.94	1.69	0.38	4.50	3.11	2.32	9.94
Plant - Folding	12R-38	MFWD 190	83,400	150		0.049			1.55	0.30			1.83	8.46
Plant - Folding	16R-30	MFWD 190	114,000	150		0.047			2.01	0.28			1.74	9.58
Plant - Folding Plant - Folding	23R-15 24R-20	MFWD 190 MFWD 190	157,000 177,000	150 150		0.065		0.97		0.39		7.10	1.74	16.30
Plant - Folding	24R-30	MFWD 190	184,000	150		0.031		0.47		0.19			1.16	8.73
Plant - Folding	31R-15	MFWD 225	187,000	150		0.048			3.41					14.25
Plant - Folding	32R-15	MFWD 225	180,000	150		0.047	1.11	0.83		0.34				13.43
Plant - Rigid	4R-30	2WD 130	24,200	150		0.188			1.71					15.80
Plant - Rigid	4R-38	2WD 130	25,300	150		0.148		1.52		0.52		2.59		12.62
Plant - Rigid Plant - Rigid	6R-30 6R-38	MFWD 150 MFWD 150	32,000 31,100	150 150		0.125		1.48	1.15	0.56		2.77	2.57	12.58 9.83
Plant - Rigid	8R-30	MFWD 170	40,500	150		0.094			1.43				2.87	
Plant - Rigid	8R-38	MFWD 170	38,400	150	8	0.074	1.76	0.99	1.07	0.37	4.21	1.97	2.27	8.46
Plant - Rigid	11R-15	MFWD 170	47,300	150		0.137		1.84		0.68				16.93
Plant - Rigid	11R-20	MFWD 170	46,600	150		0.103		1.37		0.51				12.59
Plant - Rigid Plant - Rigid	12R-20 12R-30	MFWD 190 MFWD 190	48,300 63,400	150 150		0.094		1.41		0.57		2.75		12.55 9.38
Plant - Rigid Plant - Rigid	15R-15	2WD 150	60,200	150		0.062		1.11		0.38				11.63
Plant - TwinRow	12R-30/40		150,000	150		0.049		0.87		0.36				12.55
Plant - TwinRow	8R-30/40	MFWD 225	121,000	150		0.074			3.38			6.23		16.55
Roller/Cultipacker	12'	2WD 130	6 <b>,</b> 720	300	12	0.124	1.82	1.27	0.19	0.43	3.73	0.26		6.55
													(con	tinued)

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Appendix Table 3. Towed equipment: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, Mississippi, 2021 (continued)

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel		P.U.	Total Direct		P.U.	Total Cost
			dollars	hours	years	hr/ac				\$	/acre			
Roller/Cultipacker	20'	MFWD 150	10,900	300	12	0.074	1.09	0.88	0.19	0.33	2.50	0.25	1.93	4.69
Roller/Cultipacker	30'	MFWD 170	14,300	300	12	0.049	0.73	0.66	0.16	0.24	1.81	0.22	1.51	3.55
Roller/Cultipacker	38'	MFWD 225	19,600	300	12	0.039	0.57	0.69	0.18	0.28	1.74	0.24	1.74	3.72
Roller/Stubble	20'	2WD 50	12,700	300	12	0.074	1.09	0.29	0.22	0.05	1.66	0.29	0.29	2.25
Roller/Stubble	32' 7'	MFWD 225	22,200	300	12	0.046	0.68	0.82	0.24	0.33	2.09	0.32	2.07	4.48
Rotary Cutter Rotary Cutter	12'	MFWD 130 2WD 150	4,500 13,100	185 185	10 10	0.168	2.47 1.44	1.72	0.61	0.66	5.47 3.98	0.41	3.85 1.97	9.74 6.67
Rotary Cutter-Flex	15'	MFWD 150	22,100	185	10	0.078	1.15	0.92	1.40	0.35	3.84	0.95	2.04	6.83
Rotary Cutter-Flex	20'	MFWD 150	30,000	185	10	0.058	0.86	0.69	1.43	0.26	3.25	0.97	1.53	5.76
Row Cond & Inc-Fold.	26'	MFWD 190	28,500	100	10	0.063	1.21	0.94	0.45	0.38	3.00	1.84	2.34	7.19
Row Cond & Inc-Fold.	38'	MFWD 225	38,000	100	10	0.043	0.83	0.76	0.41	0.31	2.33	1.68	1.92	5.94
Row Cond & Inc-Rigid	13'	2WD 130	16,000	100	10	0.126	2.43	1.29	0.50	0.44	4.69	2.07	2.60	9.36
Row Cond & Inc-Rigid	21'	2WD 170	21,600	100	10	0.078	1.50	1.05	0.42	0.29	3.27	1.73	1.78	6.78
Row Cond & Inc-Rigid	26'	MFWD 190	24,700	100	10	0.026	0.51	0.39	0.16	0.16	1.23	0.67	0.98	2.88
Row Cond Folding	26' 38'	MFWD 225 MFWD 225	21,100 27,800	100 100	10 10	0.059	0.87	1.05	0.31	0.43	2.68 1.90	1.28	2.65 1.81	6.62 4.87
Row Cond Folding Row Cond Rigid	13'	2WD 130	8,670	100	10	0.119	1.75	1.22	0.25	0.42	3.65	1.05	2.45	7.16
Row Cond Rigid	21'	2WD 130	14,200	100	10	0.073	1.08	0.99	0.26	0.27	2.61	1.03	1.67	5.36
Row Cond Rigid	26'	MFWD 190	17,300	100	10	0.059	0.87	0.89	0.25	0.36	2.39	1.05	2.20	5.65
Row Cond./Roll-Fol	30'	MFWD 190	46,200	160	10	0.062	0.91	0.93	0.72	0.37	2.95	1.84	2.30	7.10
Row Cond./Roll-Fold.	26'	MFWD 190	26,500	160	10	0.072	1.05	1.07	0.47	0.43	3.05	1.21	2.66	6.93
Row Cond./Roll-Fold.	40'	MFWD 225	34,000	160	10	0.046	0.68	0.83	0.39	0.34	2.25	1.01	2.08	5.35
Row Cond./Roll-Rig	21'	MFWD 190	25,800	160	10	0.089	1.31	1.33	0.57	0.54	3.76	1.46	3.29	8.53
Row Cond./Roll-Rig	26'	MFWD 190	28,400	160	10	0.072	1.05	1.07	0.51	0.43	3.08	1.30	2.66	7.05
Spin Spreader	5 ton	MFWD 190	11,600	100	8	0.042	0.99	0.62	0.27	0.25	2.15	0.53	1.55	4.24
Spray (ATV Ropewick)	75 <b>"</b> 20 <b>'</b>	800 CC	720	200 200	8	0.260	5.00	0.34	0.08	0.49	5.92 1.96	0.10	1.89	7.93
Spray (ATV) Spray (Band)	27' Fold	800 CC MFWD 170	1,690 7,400	200	8	0.064	1.62	0.83	0.00	0.16	2.57	0.07 0.25	0.61 1.91	2.66 4.73
Spray (Band)	40' Fold	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Band)	50' Fold	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Band)	60' Fold	MFWD 170	13,200	200	8	0.028	0.54	0.37	0.17	0.14	1.23	0.20	0.85	2.29
Spray (Bcast/HB)	13' Rigid	MFWD 150	7,860	200	8	0.130	2.50	1.53	0.47	0.58	5.09	0.55	3.38	9.03
Spray (Bcast/HB)	20' Rigid	MFWD 150	9,400	200	8	0.084	1.62	0.99	0.37	0.37	3.37	0.43	2.19	6.00
Spray (Bcast/HB)	27' Fold	MFWD 170	16,200	200	8	0.062	1.20	0.83	0.47	0.31	2.83	0.55	1.91	5.29
Spray (Bcast/HB)	27' Rigid	MFWD 170	10,900	200	8	0.062	1.20	0.83	0.32	0.31	2.67	0.37	1.91	4.95
Spray (Bcast/HB)	30' Fold 40' Fold	MFWD 170 MFWD 170	18,900 19,100	200 200	8	0.056	1.08	0.75 0.56	0.49	0.28	2.62 1.96	0.58	1.71	4.92
Spray (Bcast/HB) Spray (Broadcast)	27'	MFWD 170	7,400	200	8	0.042	1.20	0.83	0.21	0.21	2.57	0.25	1.91	4.73
Spray (Broadcast)	40'	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Broadcast)	50 <b>'</b>	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Broadcast)	60'	MFWD 170	13,200	200	8	0.028	0.54	0.37	0.17	0.14	1.23	0.20	0.85	2.29
Spray (Direct/Hood)	8R-30	MFWD 170	17,000	200	8	0.084	1.62	1.13	0.67	0.42	3.85	0.78	2.57	7.21
Spray (Direct/Hood)	8R-38	MFWD 170	17,900	200	8	0.066	1.28	0.89	0.56	0.33	3.07	0.65	2.03	5.76
Spray (Direct/Hood)	12R-30	MFWD 170	23,900	200	8	0.056	1.08	0.75	0.63	0.28	2.75	0.73	1.71	5.20
Spray (Direct/Hood)	12R-38	MFWD 170	25,100 15,500	200	8	0.044	0.85	0.59	0.52	0.22	2.19	0.60	1.35	4.16
Spray (Direct/Layby) Spray (Direct/Layby)	8R-30 8R-38	MFWD 170 MFWD 170	15,500	200 200	8	0.084	1.62	1.13	0.61	0.42	3.79	0.71	2.57	7.09 5.60
Spray (Direct/Layby)	8R-38 2x1	MFWD 170	19,400	200	8	0.044	0.85	0.59	0.40	0.22	2.07	0.47	1.35	3.90
Spray (Direct/Layby)	12R-30	MFWD 170	19,400	200	8	0.056	1.08	0.75	0.51	0.28	2.63	0.59	1.71	4.94
Spray (Direct/Layby)	12R-38	MFWD 170	19,400	200	8	0.044	0.85	0.59	0.40	0.22	2.07	0.47	1.35	3.90
Spray (Direct/Layby)	16R-20/30	MFWD 225	22,500	200	8	0.062	1.20	1.11	0.66	0.45	3.43	0.76	2.78	6.98
Spray (Levee Leaper)	50'	MFWD 225	12,800	200	8	0.033	0.65	0.59	0.20	0.24	1.69	0.23	1.50	3.43
Spray (Pull Type)	60'	MFWD 225	40,700	200	8	0.028	0.54	0.49	0.53	0.20	1.78	0.62	1.25	3.66
Spray (Pull Type)	80' 90'	MFWD 225 MFWD 225	52,000 52,900	200 200	8	0.021	0.40	0.37	0.51	0.15	1.45	0.59	0.93	2.98
Spray (Pull Type) Spray (Pull Type)	120 <b>'</b>	MFWD 225 MFWD 225	80,900	200	8	0.018	0.36	0.33	0.46	0.13	1.15	0.62	0.63	2.40
Spray (Ropewick)	20'	MFWD 190	4,100	200	8	0.014	1.62	1.26	0.16	0.51	3.56	0.18	3.12	6.88
Spray (Spot)	27'	MFWD 170	7,400	200	8	0.062	1.20	0.83	0.21	0.31	2.57	0.25	1.91	4.73
Spray (Spot)	40'	MFWD 170	9,300	200	8	0.042	0.81	0.56	0.18	0.21	1.77	0.21	1.28	3.27
Spray (Spot)	50 <b>'</b>	MFWD 170	10,100	200	8	0.033	0.65	0.45	0.16	0.16	1.43	0.18	1.03	2.65
Spray (Spot)	60 <b>'</b>	MFWD 225	13,200	200	8	0.028	0.54	0.49	0.17	0.20	1.42	0.20	1.25	2.87
Stalk Shredder	14'	MFWD 150	14,900	200	10	0.117	1.73	1.39	1.53	0.52	5.18	0.89	3.06	9.14
Stalk Shredder Flex	20'	MFWD 150	33,100	200	10	0.082	1.21	0.97	2.38	0.36	4.94	1.39	2.14	8.47
Stalk Shredder-Flail	12'	MFWD 150	21,700	200	10	0.137	2.01	1.62	2.61	0.61	6.86	1.52	3.57	11.96
Stalk Shredder-Flail Stalk Shredder-Flail	15' 18'	MFWD 150 MFWD 150	24,500 28,900	200 200	10 10	0.110	1.61	1.29	2.35	0.49	5.76 5.15	1.37	2.85	9.99 8.88
Stalk Shredder-Flail	20'	MFWD 150 MFWD 150	30,400	200	10	0.091	1.34	0.97	2.19	0.40	4.74	1.27	2.38	8.17
Stalk Shredder-Flail	25 <b>'</b>	MFWD 150	46,400	200	10	0.062	0.96	0.77	2.67	0.29	4.72	1.56	1.71	7.99
Strip Till	8R-38	MFWD 225	28,100	150	10	0.061	0.90	1.09	0.75	0.44	3.19	1.17	2.73	7.10
Strip Till	12R-30	MFWD 225	68,900	150	10	0.061	0.90	1.09	1.83	0.44	4.28	2.88	2.73	9.90
Strip Till	12R-40	MFWD 225	67,200	150	10	0.046	0.67	0.81	1.34	0.33	3.17	2.11	2.05	7.34
Subsoiler	3 shank	MFWD 190	6,360	100	15	0.204	2.99	3.05	0.43	1.23	7.72	1.02	7.55	16.30
Subsoiler	4 shank	MFWD 225	11,210	100	15	0.153	2.25	2.72	0.57	1.11	6.67	1.35	6.81	14.84
Subsoiler	5 shank	MFWD 225	14,300	100	15	0.122	1.79	2.16	0.58	0.89	5.43	1.37	5.43	12.24
Subsoiler low-till	6 shank	MFWD 225	19,400	100	15	0.102	1.49	1.81	0.66	0.74	4.71	1.55	4.53	10.80
Subsoiler low-till	8 shank	MFWD 225	21,400	100	15	0.076	1.12	1.35	0.54	0.55	٥.58	1.28	3.39	8.26

Notes:

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

Total Direct: Does not include interest on operating capital.

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021

ITEM NAME	UNIT	PRICE	ITEM NAME U	NIT	PRICE
		dollars			dollars
ADJUVANTS			Apron Maxx RTA	ΟZ	1.69
Agri-Dex	pt	2.42	Artisan	ΟZ	0.23
AMS SuperMax	pt	3.81	Avaris	ΟZ	0.35
Class Act NG	pt	1.75	Avicta Complete Bean		3.91
Crop Oil Conc. (Pet.)	-	2.86	Bravo Weather Stick	pt	5.30
Crop Oil Conc. (Veg.)	-	2.90	Captan 50 WP	lb	5.94
Dyne-A-Pak	pt	5.16	Convoy	OZ	0.95
Fire-Zone	pt	3.40	Cotton Seed Trt.	acre	
Herbimax	pt	3.99	CruiserMaxx Vibrance		4.75
Induce	-	3.48	Elatus	OZ OZ	2.94
MSO	pt n+	2.40	Flint Extra		8.88
	pt			ΟZ	
Penetrator Plus	pt	2.90	Headline EC	ΟZ	1.83
Surfactant	pt	3.30	Miravis Top	ΟZ	1.44
CLEANING			Prior Xemium	ΟZ	4.53
Cleaning Peanuts CROP CONSULTANT	ton	18.00	Propimax EC Prosaro	pt oz	11.10 2.42
Corn Consultant	acre	6.00	Provost Optimum	ΟZ	2.43
Cotton Consultant	acre	8.00	Quadris	OZ	1.50
Peanut Consultant	acre	9.25	Quadris Top	OZ	2.37
Rice Consultant	acre	8.00	Quadris Top SBX	OZ	1.99
Sorghum Consultant	acre	6.00	Quadris rop 38x Quilt	pt	16.63
_				-	19.82
Soybeans Consultant		6.50	Quilt XCEL	pt ~+	
Wheat Consultant	acre	5.50	Stratego	pt	21.97
CUSTOM FERTILIZE		o	Stratego YLD	ΟZ	3.46
App Fert by Air	cwt	7.50	Tilt 3.6 EC	ΟZ	0.76
App Fert by Air(Mi	appl	7.50	Tilt/ Bravo SE	ΟZ	0.76
Custom Apply Fert	acre	7.50	Trivapro	ΟZ	1.53
CUSTOM LIME			GINNING		
Lime (Spread)	ton	47.45	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	ΟZ	0.06
Custom Plant Air	cwt	7.50	Mepichlor 4.2%	ΟZ	0.06
CUSTOM SPRAY			Mepiquat	ΟZ	0.06
App by Air ( 3 gal)	appl	5.50	Mepstar 6	ΟZ	0.08
App by Air (5 gal)	appl	7.00	Palisade	OZ	1.13
App by Air (3 gal)	appi	9.00	Pentia	OZ	0.45
	acre	7.00	Pix WSB		1.37
Custom Spray Ground	acre	7.00		ΟZ	1.24
DRYING	1.	0 10	Stance	ΟZ	
Dry Corn	bu	0.19	Veto	ΟZ	0.06
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	ΟZ	0.99
Dry Rice	bu	0.40	Boll Buster	ΟZ	0.24
ERADICATION FEE			Def/Folex	pt	10.21
Eradication	acre	1.00	Defol 5	gal	6.77
FERTILIZERS			Display	ΟZ	9.63
Agrotain Ultra	pt	11.30	Ethephon 6E	pt	4.00
Amm Sulfate (21% N)	cwt	18.66	Finish 6	pt	8.00
Boron Plus	pt	2.56	Folex 6EC	pt	10.21
DAP	cwt	20.99	Freefall SC	OZ	1.59
Fert 10-34-0	cwt	24.08	Ginstar EC	pt	26.68
Fert 10-34-0	gal	2.80	Gramoxone SL	OZ	0.19
Fert 11-37-0	cwt	28.53	Sharpen	OZ	6.04
Fert 41-0-0-4			Sodium Chlorate 5L		
	cwt	18.22		gal	6.77
Lime	ton	37.45	SuperBoll	ΟZ	0.27
NBPT	pt	11.06	Thidiazuron 4lb	ΟZ	1.49
Phosphorus (46% P205)		17.31	Tribufos 61b	pt	10.21
Potash (60% K20)	cwt	22.11	Vacate	ΟZ	1.39
Sulfur Plus	pt	2.62	HAULING		
UAN (32% N)	cwt	12.03	Haul Corn	bu	0.23
UAN (32%)	gal	1.34	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	cwt	14.49	Haul Rice	bu	0.35
UAN + Sulfur (28%)	gal	1.61	Haul Sorghum	bu	0.25
Urea, Solid (46% N)	cwt	19.74	Haul Soybeans	bu	0.27
Zinc Plus	pt	2.99	Haul Wheat	bu	0.26
FUNGICIDES	T -	* <del>= =</del>	HERBICIDES		
Abound	OZ	1.83	2,4-D Amine 4	pt	2.25
Alfa Guard	lb	1.31	2,4-D Ester	рt	2.68
				_	
Allegiance Flowabl	OZ	5.27	AAtrex 4L	pt	2.23
Ameristar Top	OZ n+	2.51	Accent Q	ΟZ	19.09
Approach Prima	pt	28.11	Acuron	ΟZ	0.53
					(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	JNIT	PRICE
		dollars			
			Harmony Extra SG	ΟZ	11.06
Aim	OZ	5.67	Helmet	ΟZ	0.26
Anthem Flex	ΟZ	2.67	Huskie	ΟZ	0.78
Anthem Maxx Armezon Pro	oz oz	4.94 1.22	Impact Intimidator	oz oz	17.60 0.59
Atrazine 4L	pt	1.91	Leadoff	OZ OZ	5.61
Atrazine 90DF	lb	3.59	Leaque	OZ OZ	3.83
Authority First	lb	73.87	Lexar	pt	7.55
Authority Elite	pt	16.43	Liberty 280	OZ	0.44
Authority Maxx	lb	58.84	Loyant	ΟZ	2.21
Authority MTZ	lb	43.24	Makaze	ΟZ	0.14
Avatar	pt	8.50	Metolachlor	pt	5.59
Avenger	pt	4.52	Metribuzin 4L	pt	9.04
Axial XL	OZ	1.15	Metribuzin 75	lb	18.30
Axiom	OZ	1.94	MSMA	pt	3.86
Banvel	pt	6.67	Newpath	ΟZ	3.83
Barrage	pt	4.15	Obey	ΟZ	0.98
Basagran	pt	5.43	Osprey	ΟZ	3.50
Boundary	pt	11.07	Outlook	pt	17.66
Brake	ΟZ	1.46	Panther Pro	ΟZ	1.60
Broadaxe	pt	16.31	Parallel	pt	5.65
Broadhead	lb	58.21	Paraquat	ΟZ	0.18
Bucaneer Plus Buctril	pt nt	2.90 4.28	Parazone 3SL Permit	oz oz	0.18 21.99
Butyrac 200 (2,4-DE	pt 3) pt	3.64	Permit Plus	OZ OZ	21.18
Cadre	oz oz	2.90	PowerFlex	OZ OZ	6.99
Canopy	OZ	2.32	Preface	OZ	4.05
Caparol	pt	4.67	Prefix	pt	6.64
Capreno	OZ	4.93	Provisia	OZ	0.85
Cinch	pt	14.18	Prowl 3.3 EC	pt	6.49
Cinch ATZ	pt	5.20	Quelex	ΟZ	7.85
Clarity	pt	10.73	RealmQ	ΟZ	5.08
Classic	ΟZ	16.86	RebelEx	ΟZ	2.13
Clearpath	lb	60.12	Reflex	pt	6.20
Clethodim 2E	OZ	0.50	Regiment	ΟZ	43.56
Clincher SF	ΟZ	2.26	Resicore	ΟZ	0.48
Cobra	ΟZ	1.70	Resource	ΟZ	1.82
Command 3ME	pt	18.17	RiceBeaux	рt	5.95
Corvus	ΟZ	6.48	Riceshot	pt	4.69
Cotoran	pt	6.01	Ricestar HT	pt	24.49
Cotton Pro Dicamba	pt n+	3.45 5.50	Ringside Roundup Power Max	pt oz	4.88 0.20
Direx	pt pt	3.02	Roundup Fower Max	pt	3.25
Diuron	pt	3.03	Roundup PowerMax i:	-	0.19
Dual II Magnum	pt	13.98	Roundup Pro	pt	0.20
Dual Magnum	pt	13.33	Scepter 70 DG	OZ	4.82
Duet	pt	5.63	Select Max	pt	12.74
Engenia	OZ	0.89	Sencor/Tricor.Metra	-	19.00
Envive	OZ	4.76	Sequence	pt	5.45
Envoke	OZ	0.80	Sharpen	ΟZ	6.04
Facet L	pt	14.57	Sinister	pt	14.96
Fierce	ΟZ	7.40	Sonic	ΟZ	5.48
Fierce XLT	OZ	6.64	Stalwart	pt	3.95
Finesse	ΟZ	15.79	Stam 80 EDF	lb	9.45
Firestorm	pt	3.44	Stam M4	qt	7.72
First Rate	ΟZ	42.57	Staple LX	ΟZ	0.74
Flexstar Flexstar GT	pt n+	8.33	Storm	pt	11.91
Flexstar GT Fusilade DX	pt 07	4.66	Strada Strada Pro	OZ	7.34 7.70
Gambit	oz oz	1.15 16.32	Strada Pro Strada XT2	oz pt	3.20
Glyphosate 31bs a.e		2.11	Strada XIZ Superwham	gt qt	8.61
Glyphosate 31bs a.e	-	0.13	Suprend	lb	13.52
Goal 2XL	pt	7.52	SureStart II	OZ	0.56
Gramoxone SL 2.0	οz	0.19	Surveil	OZ	6.32
Grandstand R	pt	15.39	Synchrony XP	OZ	11.99
Grasp	OZ	12.07	Tempest	pt	29.82
Grasp Xtra	OZ	1.58	Touchdown Total	qt	10.21
Halex GT	pt	7.13	Treflan	pt	3.49
Halomax	OZ	19.93			(continued)
		dollars			

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2021 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME UN	IIT	PRICE
		dollars			dollars
Trifluralin	pt	3.68	Malathion 8E	pt	10.56
Triflurex	pt	3.30	Mustang Max	ΟZ	1.10
Ultra Blazer	pt	8.58	Nuprid 4F	ΟZ	0.88
Valor EZ	OZ	5.04	Oberon	ΟZ	3.09
Valor SX	OZ	4.51	Orthene 90	lb	7.45
Valor XLT	ΟZ	5.28	Permethrin	ΟZ	0.48
Vamos	pt	6.49	Portal XLO	ΟZ	0.74
Verdict	OZ	1.73	Pounce 25WP	lb	16.50
Veritas	pt	7.49	Prevathon	OZ	1.05
Villain	pt	5.24	Python WDG	oz	14.32
Volunteer	pt	10.63	Radiant	OZ	5.74
Warrant	pt	4.39	Sevin 4F	pt	6.97
XtendiMax	οz	0.56	Sevin 4r Sevin XLR Plus	qt	15.43
Zidua DF	OZ OZ	8.72	Sivanto Prime	qt oz	2.67
Zidua Dr Zidua SC		5.55			1.86
	OZ	J.J5	Tempest	OZ	
INOCULANT		1 55	Transform WG	OZ	7.35
Inoculant-Soybean	acre	1.55	Up-Cyde	ΟZ	0.44
Optimize LIFT	ΟZ	0.53	Warrior ZT	ΟZ	2.43
NSECTICIDES			Zeal	ΟZ	17.67
Abamectin .15EC	OZ	1.89	IRRIGATION SUPPLIES	_	
Acephate 90%	lb	6.94	Roll-Out Pipe	ft	0.24
Acephate 90SP	lb	6.42	SEED/PLANTS		
Admire Pro	ΟZ	1.80	Corn Seed BtRR	thous	3.99
Agri-Mek	OZ	2.72	Corn Seed Conv.	thous	2.76
Asana .66 XL	OZ	0.55	Corn Seed Op Leptra	thous	3.66
Avenger	OZ	0.28	Corn Seed RR2	thous	3.03
Baythroid XL	OZ	2.38	Corn Seed VT2P	thous	3.98
Belt	ΟZ	7.50	Cot. Seed B3XF/W3F1	E thous	2.58
Besiege	OZ	2.31	Cotton Seed B3XF	thous	2.66
Bidrin 8EC	OZ	1.16	Cotton Seed GLB2	thous	2.05
Bifenthrin	ΟZ	0.94	Cotton Seed W3FE	thous	2.49
Bifenture 2EC	ΟZ	0.91	Cotton Seed W3RF	thous	1.98
Brigade EC	pt	16.30	Peanut Seed	lb	0.87
Capture LFR	OZ	2.32	Rice Conv Hyb Trt	lb	6.19
Centric 40WG	OZ	5.08	Rice Fullpage Hyb T:		6.97
Cypermethrin	OZ	0.44	Rice Seed CF (Levees)		0.96
Declare	OZ	1.89	Rice Seed Clearfield		0.96
Diamond .83EC	OZ	1.28	Rice Seed Conv.	lb	0.32
Dimethoate 4E	pt	5.44	Rice Seed Conv.		0.32
Dimilin 2L	οz	2.16	Rice Seed Cv(Levees		1.93
Endigo	OZ	1.48	Rice Seed CVH(Levee)		2.67
Force 3G	lb	7.28	Rice Seed Frn(Levee	lb	1.23
		1.30	Rice Seed Frovisia Rice Seed Trt/Insect		0.29
Hero	OZ				
Imidacloprid 4F	OZ	1.31	Sorghum Concept	lb	2.64
Imidan 70 WSB	OZ	0.89	Sorghum Concept+ Po		3.82
<pre>IncidentalPestTrt \$</pre>		8.00	Soybean Enlist E3	lb	1.20
IncidentalPestTrt\$1		15.00	Soybean Seed LL	lb	1.16
IncidentalPestTrt\$2		22.00	Soybean Seed RR2	lb	1.16
IncidentalPestTrt\$3		30.00	Soybean Seed RR2X	lb	1.34
Intrepid 2F	OZ	1.94	Wheat Seed Private	lb	0.28
Intruder 70WSP	ΟZ	1.13	SOIL TEST		
Karate Z	ΟZ	2.52	Soil Test	acre	10.00
Lambda	OZ	0.95	SURVEY & MARK LEVEES		
Lannate LV	pt	9.00	Survey & Mark Levee:	acre	4.50
Macho	OZ	0.78	Survey & Mark Levees		4.50

Appendix Table 5. Estimated fuel prices and interest rates, Mississippi, 2021

	E
dolla	 rs
gal 1.5	3
gal 1.8	9
4.0	0
4.5	0
3	

Appendix Table 6. Labor types, wage rates and unallocated labor Multipliers for crop enterprises, Mississippi, 2021

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	14.68
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE	UNALLC	CATED LABOR MULTIP
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, 2021

Crop	uni	Futures Contrac Month	Futures Contract Price <sup>a</sup>	Basis <sup>b</sup>	Forward Contract Price <sup>C</sup>	Loan Rate <sup>d</sup>	Budget Price <sup>e</sup>
Corn	bu	Dec <b>'</b> 21	3.93	-0.20	3.73	2.35	3.73
Cotton Lint	lb	Dec '21	0.66	-0.0158	0.6442	0.52	0.6442
Cottonseed	lb						0.08f
Grain Sorghum	bu				3.55	4.08	3.55
Peanuts	ton				400.00	354.55	400.00
Soybeans	bu	Nov '21	9.69	-0.02	9.67	6.41	9.67
Rice	bu	Nov '21	5.47	-0.37	5.10	3.21	5.10
Wheat	bu	Jul <b>'</b> 21	5.90	-0.15	5.75	3.35	5.75

- Average of the daily closing futures contract prices during the first 5 trading days in October 2020 for the stated contract months.
- 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 2019 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.
- 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.
- Average Mississippi County CCC Loan Rate for 2020 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2020 Farm-stored Loan Rate for long grain rough rice. National 2020 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.
- Price used in MSU Extension Service Planning Budgets.
- f Cottonseed price is the average marketing year price over the years 2008-2020.

Appendix Table 8. Estimated costs for field operations, per acre
Peanuts irrigated with roll-out pipe
160-acre system, 12 ac-in., Delta Area, Mississippi, 2021

OPERATION/	SIZE/	DIRECT COST							FIXED	TOTAL
OPERATING INPUT	UNIT	OP INPUT	FUEL	R&M	LABOR	LEASE	INTER	TOTAL	COST	COST
						dollars-				
Land Plane	50'x16'		0.57	0.30	0.56		0.06	1.49	1.59	3.08
Set Up Engine										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Ditcher (1m/160a)			0.13	0.07	0.14		0.01	0.35	0.32	0.67
Roll-Out Pipe	ft	7.92					0.13	8.05		8.05
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m rol	1	0.17	0.10	0.41		0.01	0.69	0.79	1.48
IRRIGATE LABOR	hour				1.81		0.03	1.84		1.84
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Apply Water										
IRRIGATE LABOR	hour				0.23			0.23		0.23
Pick Up Pipe										
Pipe Spool 160ac	1/4m rol	1	0.25	0.15	0.62		0.01	1.03	1.18	2.21
Land Forming (\$450)	each								30.35	30.35
Well & Pump, Furrow	each			2.96			0.05	3.01	8.30	11.31
Main Line Pipe	each								4.59	4.59
Engine, RPF, PNUT	each								8.60	8.60
1st July Irrigation	ac-in		3.74	1.05			0.06	4.85		4.85
1st Aug Irrigation	ac-in		3.74	1.05			0.05	4.84		4.84
2nd Aug Irrigation	ac-in		3.74	1.05			0.05	4.84		4.84
1st Sep Irrigation	ac-in		3.74	1.05			0.03	4.82		4.82
TOTALS		7.92	16.08	7.78	4.69	0.00	0.49	36.96	55.72	92.68

Note: Cost of production estimates are based on 2020 input prices.

## Literature Cited

- 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 2020 Planning Budgets." Budget Report No. 2019-03, Department of Agricultural Economics, Mississippi State University, October 2019.
- 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 2020 Planning Budgets." Budget Report No. 2019-01, Department of Agricultural Economics, Mississippi State University, October 2019.
- 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 2021 Planning Budgets." Budget Report No. 2020-08, Department of Agricultural Economics, Mississippi State University, June 2020.
- 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. "Peanuts 2020Planning Budgets." Budget Report No. 2019-07, Department of Agricultural Economics, Mississippi State University, October 2019.
- 16. "Rice 2020 Planning Budgets." Budget Report No. 2019-04, Department of Agricultural Economics, Mississippi State University, October 2019.
- 17. "Soybeans 2020 Planning Budgets." Budget Report No. 2019-02, Department of Agricultural Economics, Mississippi State University, October 2019.
- 18. United States Department of Agriculture Farm Service Agency. *Commodity Loan Rates*. <a href="https://www.fsa.usda.gov/programs-and-services/price-support/commodity-loan-rates/index">https://www.fsa.usda.gov/programs-and-services/price-support/commodity-loan-rates/index</a>. Accessed October 7, 2020.
- 19. "Vegetables 2018 Planning Budgets." Budget Report No. 2017-09, Department of Agricultural Economics, Mississippi State University December 2017.



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