

PEANUTS

2023

PLANNING BUDGETS

**Mississippi State University
Department of Agricultural Economics
Budget Report 2022-07**

November 2022

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 2023 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.

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

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

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Prices

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Documentation and Data Processing

Evan Gregory, MSU-ES
 W. Gail Gillis, MSU-ES

Publication Review

Evan Gregory, MSU-ES
 W. Gail Gillis, MSU-ES

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2023 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 2022. (Appendix Tables 1, 2, and 3).

A performance rate reflects the time required to perform a given task or operation and is expressed as that part of an hour per acre. Previous studies and expert knowledge of the equipment committee members are used to estimate performance rates for new and larger equipment (1, 4, 5, 6, 7, 9, and 13).

The hours of annual use have been modified based on information collected from the cited studies (3, 4, 6, and 7).

Repairs and maintenance as a percentage of new cost are estimated for the life of the equipment and include oil and lubricants (1, 4, and 6).

Estimates of Direct Costs

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

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

$$RPA = RPH \times PR$$

where:

RPH = R&M cost per hour of use

RLC = Replacement cost of machine

RP = R&M percentage (percent of RLC)

THL = Total hours of machine life

RPA = R&M cost per acre

PR = Performance rate

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

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

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

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

Estimates of Fixed Costs

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

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

where:

CRF = Capital recovery factor

IIR = Intermediate-term interest rate

TYL = Total years of life

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

$$+ (SV \times IIR)$$

where:

CRCPY = Capital recovery charge per year

RLC = Replacement cost

SV = Salvage value (at end of useful life)

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

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

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

where:

CRCPH = Capital recovery charge per hour

HAU = Hours of annual use

CRCPA = Capital recovery charge per acre

PR = Performance rate

Estimates of Returns

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

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

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

Irrigation Costs

Estimated costs of a $\frac{1}{4}$ 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.

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.

Enterprise Budgets

Table 1.A Estimated costs per acre
 Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES				dollars	dollars
FUNGICIDES					
Abound	oz	1.88	30.0000	56.40	_____
Convoy	oz	1.13	24.0000	27.12	_____
Bravo Weather Stick	pt	6.32	2.2500	14.22	_____
Tebuconazole 3.6	oz	0.75	7.2000	5.40	_____
Elatus	oz	3.81	9.2000	35.05	_____
Provost Silver	oz	1.41	13.0000	18.33	_____
HERBICIDES					
Glyphosate 3lbs a.e	pt	5.38	4.0000	21.52	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
Valor SX	oz	3.20	3.0000	9.60	_____
Storm	pt	12.65	1.5000	18.98	_____
Cadre	oz	1.97	4.0000	7.88	_____
Butyrac 200 (2,4-DB)	pt	4.06	2.0000	8.12	_____
Select Max	pt	13.86	1.0000	13.86	_____
INSECTICIDES					
Admire Pro	oz	1.76	9.0000	15.84	_____
Acephate 90%	lb	9.30	0.1375	1.28	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	_____
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	58.00	0.3330	19.31	_____
INOCULANT					
Optimize LIFT	oz	0.15	14.8000	2.22	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	1.2529	20.73	_____
Self-Propelled	hour	16.54	0.1321	2.14	_____
HAND LABOR					
Implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0660	0.56	_____
UNALLOCATED LABOR					
hour	16.58	1.1080	18.38	_____	
DIESEL FUEL					
Tractors	gal	4.48	13.5967	60.92	_____
Self-Propelled	gal	4.48	1.6839	7.54	_____
REPAIR & MAINTENANCE					
Implements	acre	10.49	1.0000	10.49	_____
Tractors	acre	9.85	1.0000	9.85	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.					
acre	11.51	1.0000	11.51	_____	
TOTAL DIRECT EXPENSES				635.29	_____
FIXED EXPENSES					
Implements	acre	47.57	1.0000	47.57	_____
Tractors	acre	69.70	1.0000	69.70	_____
Self-Propelled	acre	16.42	1.0000	16.42	_____
TOTAL FIXED EXPENSES				133.69	_____
TOTAL SPECIFIED EXPENSES				768.98	_____

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd 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, 2.0 ton (4000 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	575.00	2.0000	1150.00	-----
TOTAL INCOME				1150.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	156.52	1.0000	156.52	_____
HERBICIDES	acre	91.41	1.0000	91.41	_____
INSECTICIDES	acre	17.12	1.0000	17.12	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
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	19.31	1.0000	19.31	_____
INOCULANT	acre	2.22	1.0000	2.22	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1868	1.65	_____
OPERATOR LABOR	hour	16.54	1.3850	22.87	_____
UNALLOCATED LABOR	hour	16.58	1.1080	18.38	_____
DIESEL FUEL	gal	4.48	15.2806	68.46	_____
REPAIR & MAINTENANCE	acre	22.59	1.0000	22.59	_____
INTEREST ON OP. CAP.	acre	11.51	1.0000	11.51	_____
TOTAL DIRECT EXPENSES				635.29	_____
RETURNS ABOVE DIRECT EXPENSES				514.71	_____
TOTAL FIXED EXPENSES				133.69	_____
TOTAL SPECIFIED EXPENSES				768.98	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				381.02	_____

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd 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, 2.0 ton (4000 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1150.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.56	42.00	53.38	38.58	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	21.52	21.05	30.92	17.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	17.12	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	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	19.31	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	2.22	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	0.40	7.37	1.20	1.60	0.80	31.53
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	0.67	10.31	2.01	2.68	1.34	51.45
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	4.20	0.60	0.80	0.40	16.39
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	1.46	5.62	1.77	1.39	0.43	0.84
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	46.89	216.45	84.30	89.37	41.55	156.73
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-216.45	-84.30	-89.37	-41.55	993.27
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-263.34	-347.64	-437.01	-478.56	514.71

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

* Lease costs are based on hourly usage costs.

Table 1.F Estimated returns for various price/yield combinations, per acre
 Peanut - runner, 2.0 ton (4000 lb) yield, 8 row-38 inch
 All Areas, Mississippi, 2023

PRODUCT	PERCENT	PERCENT											
		75	80	85	90	95	100	105	110	115	120	125	
PRODUCT PRICE													
Peanut Runner		431.25	460.00	488.75	517.50	546.25	575.00	603.75	632.50	661.25	690.00	718.75	
PERCENT YIELD UNIT dollars													
50	1.00	ton	-175 -309	-146 -280	-118 -251	-89 -223	-60 -194	-31 -165	-3 -136	25 -108	54 -79	83 -50	111 -21
60	1.20	ton	-95 -228	-60 -194	-26 -159	8 -125	42 -90	77 -56	111 -21	146 12	180 47	215 81	249 116
70	1.40	ton	-14 -148	25 -107	66 -67	106 -27	146 12	186 53	227 93	267 133	307 173	347 214	388 254
80	1.60	ton	66 -67	112 -21	158 24	204 70	250 116	296 162	342 208	388 254	434 300	480 346	526 392
90	1.80	ton	146 12	198 64	250 116	301 168	353 219	405 271	457 323	508 375	560 426	612 478	664 530
100	2.00	ton	227 93	284 151	342 208	399 266	457 323	514 381	572 438	629 496	687 553	744 611	802 668
110	2.20	ton	307 174	371 237	434 300	497 363	560 427	624 490	687 553	750 616	813 680	877 743	940 806
120	2.40	ton	388 254	457 323	526 392	595 461	664 530	733 599	802 668	871 737	940 806	1009 875	1078 944
130	2.60	ton	468 335	543 409	618 484	693 559	767 634	842 708	917 783	992 858	1066 933	1141 1007	1216 1082
140	2.80	ton	549 415	629 496	710 576	790 657	871 737	951 818	1032 898	1112 979	1193 1059	1273 1140	1354 1220
150	3.00	ton	630 496	716 582	802 668	888 755	975 841	1061 927	1147 1013	1233 1100	1320 1186	1406 1272	1492 1358

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 2022 input prices.

Table 2.A Estimated costs per acre
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.88	30.0000	56.40	_____
Convoy	oz	1.13	24.0000	27.12	_____
Bravo Weather Stick	pt	6.32	2.2500	14.22	_____
Tebuconazole 3.6	oz	0.75	7.2000	5.40	_____
Elatus	oz	3.81	9.2000	35.05	_____
Provost Silver	oz	1.41	13.0000	18.33	_____
HERBICIDES					
Glyphosate 3lbs a.e.	pt	5.38	4.0000	21.52	_____
Dual Magnum	pt	11.45	1.0000	11.45	_____
Valor SX	oz	3.20	3.0000	9.60	_____
Storm	pt	12.65	1.5000	18.98	_____
Cadre	oz	1.97	4.0000	7.88	_____
Butyrac 200 (2,4-DB)	pt	4.06	2.0000	8.12	_____
Select Max	pt	13.86	1.0000	13.86	_____
INSECTICIDES					
Admire Pro	oz	1.76	9.0000	15.84	_____
Acephate 90%	lb	9.30	0.1375	1.28	_____
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	_____
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	58.00	0.3330	19.31	_____
INOCULANT					
Optimize LIFT	oz	0.15	29.6000	4.44	_____
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	_____
OPERATOR LABOR					
Tractors	hour	16.54	1.2529	20.73	_____
Self-Propelled	hour	16.54	0.1321	2.14	_____
HAND LABOR					
implements	hour	9.06	0.1207	1.09	_____
Self-Propelled	hour	9.06	0.0660	0.56	_____
UNALLOCATED LABOR					
hour	16.58	1.1080	18.38	_____	
DIESEL FUEL					
Tractors	gal	4.48	13.5967	60.92	_____
Self-Propelled	gal	4.48	1.6839	7.54	_____
REPAIR & MAINTENANCE					
implements	acre	14.03	1.0000	14.03	_____
Tractors	acre	9.85	1.0000	9.85	_____
Self-Propelled	acre	2.25	1.0000	2.25	_____
INTEREST ON OP. CAP.	acre	11.66	1.0000	11.66	_____
TOTAL DIRECT EXPENSES				641.20	_____
FIXED EXPENSES					
implements	acre	55.11	1.0000	55.11	_____
Tractors	acre	69.70	1.0000	69.70	_____
Self-Propelled	acre	16.42	1.0000	16.42	_____
TOTAL FIXED EXPENSES				141.23	_____
TOTAL SPECIFIED EXPENSES				782.43	_____

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

Table 2.B Summary of estimated costs and returns per acre
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	575.00	2.0000	1150.00	-----
TOTAL INCOME				1150.00	-----
DIRECT EXPENSES					
FUNGICIDES	acre	156.52	1.0000	156.52	-----
HERBICIDES	acre	91.41	1.0000	91.41	-----
INSECTICIDES	acre	17.12	1.0000	17.12	-----
SEED/PLANTS	acre	126.00	1.0000	126.00	-----
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	19.31	1.0000	19.31	-----
INOCULANT	acre	4.44	1.0000	4.44	-----
SOIL TEST	acre	3.33	1.0000	3.33	-----
HAND LABOR	hour	9.06	0.1868	1.65	-----
OPERATOR LABOR	hour	16.54	1.3850	22.87	-----
UNALLOCATED LABOR	hour	16.58	1.1080	18.38	-----
DIESEL FUEL	gal	4.48	15.2806	68.46	-----
REPAIR & MAINTENANCE	acre	26.13	1.0000	26.13	-----
INTEREST ON OP. CAP.	acre	11.66	1.0000	11.66	-----
TOTAL DIRECT EXPENSES				641.20	-----
RETURNS ABOVE DIRECT EXPENSES				508.80	-----
TOTAL FIXED EXPENSES				141.23	-----
TOTAL SPECIFIED EXPENSES				782.43	-----
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				367.57	-----

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning

Table 2.E Estimated monthly income and expense flows per acre
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin
 All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1150.00
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.56	42.00	53.38	38.58	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	21.52	21.05	30.92	17.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	17.12	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	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	19.31	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	4.44	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	0.40	7.37	1.20	1.60	0.80	31.53
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	0.67	10.31	2.01	2.68	1.34	51.45
REPAIR & MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00	0.20	7.74	0.60	0.80	0.40	16.39
INTEREST ON OP. CAP.	0.00	0.00	0.00	0.00	0.00	0.00	1.46	5.77	1.77	1.39	0.43	0.84
TOTAL DIRECT EXPENSES	0.00	0.00	0.00	0.00	0.00	0.00	46.89	222.36	84.30	89.37	41.55	156.73
NET INCOME	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-222.36	-84.30	-89.37	-41.55	993.27
NET INCOME TO DATE	0.00	0.00	0.00	0.00	0.00	0.00	-46.89	-269.25	-353.55	-442.92	-484.47	508.80

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

* Lease costs are based on hourly usage costs.

Table 2.F Estimated returns for various price/yield combinations, per acre
 Peanut - runner, 2.0 ton (4000 lb) yield, 8R 38" twin
 All Areas, Mississippi, 2023

PRODUCT	YIELD	UNIT	PERCENT										
			75	80	85	90	95	100	105	110	115	120	125
			PRODUCT PRICE										
Peanut Runner			431.25	460.00	488.75	517.50	546.25	575.00	603.75	632.50	661.25	690.00	718.75
PERCENT													
			dollars										
50	1.00	ton	-181 -322	-152 -294	-124 -265	-95 -236	-66 -207	-37 -179	-9 -150	19 -121	48 -92	77 -64	105 -35
60	1.20	ton	-100 -242	-66 -207	-31 -173	2 -138	37 -104	71 -69	106 -35	140 -0	175 33	209 68	244 102
70	1.40	ton	-20 -161	19 -121	60 -81	100 -40	140 -0	180 39	221 79	261 120	301 160	341 200	382 240
80	1.60	ton	60 -81	106 -35	152 10	198 56	244 102	290 148	336 194	382 240	428 286	474 332	520 378
90	1.80	ton	140 -0	192 51	244 103	295 154	347 206	399 258	451 310	502 361	554 413	606 465	658 517
100	2.00	ton	221 80	278 137	336 195	393 252	451 310	508 367	566 425	623 482	681 540	738 597	796 655
110	2.20	ton	301 160	365 223	428 287	491 350	554 413	618 476	681 540	744 603	807 666	871 729	934 793
120	2.40	ton	382 241	451 310	520 379	589 448	658 517	727 586	796 655	865 724	934 793	1003 862	1072 931
130	2.60	ton	463 321	537 396	612 471	687 546	762 620	836 695	911 770	986 845	1061 919	1135 994	1210 1069
140	2.80	ton	543 402	624 482	704 563	785 643	865 724	946 804	1026 885	1107 965	1187 1046	1268 1126	1348 1207
150	3.00	ton	624 482	710 569	796 655	882 741	969 827	1055 914	1141 1000	1227 1086	1314 1072	1400 1259	1486 1345

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 2022 input prices.

Table 3.A Estimated costs per acre
 Peanut - runner, 2.0 ton (4000 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
DIRECT EXPENSES					
FUNGICIDES					
Abound	oz	1.88	30.0000	56.40	
Convoy	oz	1.13	24.0000	27.12	
Bravo Weather Stick	pt	6.32	2.2500	14.22	
Tebuconazole 3.6	oz	0.75	7.2000	5.40	
Elatus	oz	3.81	9.2000	35.05	
Provost Silver	oz	1.41	13.0000	18.33	
HERBICIDES					
Glyphosate 3lbs a.e.	pt	5.38	4.0000	21.52	
Dual Magnum	pt	11.45	1.0000	11.45	
Valor SX	oz	3.20	3.0000	9.60	
Storm	pt	12.65	1.5000	18.98	
Cadre	oz	1.97	4.0000	7.88	
Butyrac 200 (2,4-DB)	pt	4.06	2.0000	8.12	
Select Max	pt	13.86	1.0000	13.86	
INSECTICIDES					
Admire Pro	oz	1.76	9.0000	15.84	
Acephate 90%	lb	9.30	0.1375	1.28	
SEED/PLANTS					
Peanut Seed	lb	0.84	150.0000	126.00	
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	58.00	0.3330	19.31	
INOCULANT					
Optimize LIFT	oz	0.15	14.8000	2.22	
SOIL TEST					
Soil Test	acre	10.00	0.3330	3.33	
OPERATOR LABOR					
Tractors	hour	16.54	1.1856	19.61	
Self-Propelled	hour	16.54	0.1321	2.14	
HAND LABOR					
Implements	hour	9.06	0.0804	0.73	
Self-Propelled	hour	9.06	0.0660	0.56	
UNALLOCATED LABOR					
UNALLOCATED LABOR	hour	16.57	1.0543	17.48	
DIESEL FUEL					
Tractors	gal	4.48	12.9499	58.02	
Self-Propelled	gal	4.48	1.6839	7.54	
REPAIR & MAINTENANCE					
Implements	acre	11.30	1.0000	11.30	
Tractors	acre	9.41	1.0000	9.41	
Self-Propelled	acre	2.25	1.0000	2.25	
INTEREST ON OP. CAP.	acre	11.38	1.0000	11.38	
<hr/>					
TOTAL DIRECT EXPENSES				630.25	
FIXED EXPENSES					
Implements	acre	49.22	1.0000	49.22	
Tractors	acre	66.56	1.0000	66.56	
Self-Propelled	acre	16.42	1.0000	16.42	
<hr/>					
TOTAL FIXED EXPENSES				132.20	
<hr/>					
TOTAL SPECIFIED EXPENSES				762.45	

Note: Cost of production estimates are based on 2022 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 3rd year.
Lime cost prorated for application every 3rd 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, 2.0 ton (4000 lb) yield, 12 row-38inch
 All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	575.00	2.0000	1150.00	_____
TOTAL INCOME				1150.00	_____
DIRECT EXPENSES					
FUNGICIDES	acre	156.52	1.0000	156.52	_____
HERBICIDES	acre	91.41	1.0000	91.41	_____
INSECTICIDES	acre	17.12	1.0000	17.12	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
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	19.31	1.0000	19.31	_____
INOCULANT	acre	2.22	1.0000	2.22	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1465	1.29	_____
OPERATOR LABOR	hour	16.54	1.3178	21.75	_____
UNALLOCATED LABOR	hour	16.57	1.0543	17.48	_____
DIESEL FUEL	gal	4.48	14.6338	65.56	_____
REPAIR & MAINTENANCE	acre	22.96	1.0000	22.96	_____
INTEREST ON OP. CAP.	acre	11.38	1.0000	11.38	_____
TOTAL DIRECT EXPENSES				630.25	_____
RETURNS ABOVE DIRECT EXPENSES				519.75	_____
TOTAL FIXED EXPENSES				132.20	_____
TOTAL SPECIFIED EXPENSES				762.45	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				387.55	_____

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd 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, 2.3 ton (4,600 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2023

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
dollars				dollars	
INCOME					
Peanut Runner	ton	575.00	2.3000	1322.50	_____
TOTAL INCOME				1322.50	_____
DIRECT EXPENSES					
FUNGICIDES	acre	156.52	1.0000	156.52	_____
HERBICIDES	acre	91.41	1.0000	91.41	_____
INSECTICIDES	acre	17.12	1.0000	17.12	_____
IRRIGATION SUPPLIES	acre	7.92	1.0000	7.92	_____
SEED/PLANTS	acre	126.00	1.0000	126.00	_____
ADJUVANTS	acre	17.40	1.0000	17.40	_____
CLEANING	acre	33.66	1.0000	33.66	_____
DRYING	acre	31.68	1.0000	31.68	_____
CUSTOM LIME	acre	19.31	1.0000	19.31	_____
INOCULANT	acre	2.22	1.0000	2.22	_____
SOIL TEST	acre	3.33	1.0000	3.33	_____
HAND LABOR	hour	9.06	0.1465	1.29	_____
IRRIGATE LABOR	hour	9.06	0.3875	3.53	_____
OPERATOR LABOR	hour	16.54	1.3964	23.06	_____
UNALLOCATED LABOR	hour	16.57	1.0543	17.48	_____
DIESEL FUEL	gal	4.48	25.1356	112.62	_____
REPAIR & MAINTENANCE	acre	30.86	1.0000	30.86	_____
INTEREST ON OP. CAP.	acre	12.78	1.0000	12.78	_____
TOTAL DIRECT EXPENSES				708.19	_____
RETURNS ABOVE DIRECT EXPENSES				614.31	_____
TOTAL FIXED EXPENSES				202.51	_____
TOTAL SPECIFIED EXPENSES				910.70	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				411.80	_____

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd year.

60% 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, 2.3 ton (4,600 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2023

ITEM	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
-----dollars-----												
TOTAL INCOME	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1322.50
DIRECT EXPENSES												
FUNGICIDES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.56	42.00	53.38	38.58	0.00
HERBICIDES	0.00	0.00	0.00	0.00	0.00	21.52	21.05	30.92	17.92	0.00	0.00	0.00
INSECTICIDES	0.00	0.00	0.00	0.00	0.00	0.00	17.12	0.00	0.00	0.00	0.00	0.00
IRRIGATION SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00	7.92	0.00	0.00	0.00	0.00	0.00
SEED/PLANTS	0.00	0.00	0.00	0.00	0.00	0.00	126.00	0.00	0.00	0.00	0.00	0.00
ADJUVANTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.80	11.60	0.00	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	19.31	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	2.22	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	0.63	0.00	0.00	0.00	0.00	0.00	0.63	7.40	1.43	2.06	1.68	31.53
LEASE *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL	1.66	0.00	0.00	0.00	0.00	0.00	0.67	8.27	12.96	24.58	13.03	51.45
REPAIR & MAINTENANCE	0.36	0.00	0.00	0.00	0.00	0.00	0.20	7.73	1.65	2.90	1.63	16.39
INTEREST ON OP. CAP.	0.17	0.00	0.00	0.00	0.00	0.00	1.47	5.88	2.03	1.77	0.58	0.88
TOTAL DIRECT EXPENSES	2.82	0.00	0.00	0.00	0.00	0.00	47.13	226.15	96.79	114.21	55.50	165.59
NET INCOME	-2.82	0.00	0.00	0.00	0.00	0.00	-47.13	-226.15	-96.79	-114.21	-55.50	1156.91
NET INCOME TO DATE	-2.82	-2.82	-2.82	-2.82	-2.82	-2.82	-49.95	-276.10	-372.89	-487.10	-542.60	614.31

Note: Cost of production estimates are based on 2022 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 3rd year.

Lime cost prorated for application every 3rd year.

60% of all peanuts harvested need drying.

85% of all peanuts harvested need cleaning.

* Lease costs are based on hourly usage costs.

Table 4.F Estimated returns for various price/yield combinations, per acre
 Peanut-runner, 2.3 ton (4,600 lb) yield, 12 row-38inch
 Furrow irrigated, All Areas, Mississippi, 2023

PRODUCT	PERCENT												
	75	80	85	90	95	100	105	110	115	120	125		
			PRODUCT PRICE										
Peanut Runner	431.25	460.00	488.75	517.50	546.25	575.00	603.75	632.50	661.25	690.00	718.75		
PERCENT	YIELD	UNIT	dollars										
50	1.15	ton	-179 -381	-146 -348	-113 -315	-80 -282	-47 -249	-14 -216	18 -183	52 -150	85 -117	118 -84	151 -51
60	1.38	ton	-86 -289	-47 -249	-7 -209	32 -170	71 -130	111 -90	151 -51	190 -11	230 28	270 67	309 107
70	1.61	ton	5 -196	52 -150	98 -104	144 -57	190 -11	237 34	283 81	329 127	376 173	422 219	468 266
80	1.84	ton	98 -104	151 -51	204 1	257 54	310 107	362 160	415 213	468 266	521 319	574 372	627 424
90	2.07	ton	191 -11	250 48	310 107	369 167	429 226	488 286	548 345	607 405	667 464	726 524	786 583
100	2.30	ton	283 81	349 147	415 213	482 279	548 345	614 411	680 477	746 544	812 610	878 676	944 742
110	2.53	ton	376 173	449 246	521 319	594 392	667 464	739 537	812 610	885 682	958 755	1030 828	1103 901
120	2.76	ton	468 266	548 345	627 425	706 504	786 583	865 663	945 742	1024 821	1103 901	1183 980	1262 1059
130	2.99	ton	561 359	647 444	733 530	819 616	905 702	991 788	1077 874	1163 960	1249 1046	1335 1132	1421 1218
140	3.22	ton	654 451	746 544	839 636	931 729	1024 821	1117 914	1209 1007	1302 1099	1394 1192	1487 1284	1579 1377
150	3.45	ton	746 544	845 643	945 742	1044 841	1143 941	1242 1040	1341 1139	1441 1238	1540 1337	1639 1436	1738 1536

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 2022 input prices.

APPENDIX

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, 2023

Item Name	Size	Purchase		Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost	
		Price	hours								\$/acre-----			
			dollars	hours	years	gal/hr	hr/ac							
Cotton Picker	4R-38 (250)	268,000	200	8	12.86	0.257	6.59	14.86	10.79	32.25	47.48	79.74		
Cotton Picker	4R-38 (350)	351,000	200	8	18.01	0.257	6.59	20.80	14.13	41.54	62.19	103.73		
Cotton Picker	4R2x1 (350)	357,000	200	8	18.01	0.172	4.41	13.90	9.61	27.92	42.28	70.21		
Cotton Picker	6R-30 (355)	465,000	200	8	18.27	0.218	5.58	17.86	15.85	39.31	69.75	109.06		
Cotton Picker	6R-38 (355)	465,000	200	8	18.27	0.172	4.41	14.10	12.51	31.03	55.07	86.11		
Cotton Picker/Modu	4R-38 (365)	536,000	200	8	20.58	0.257	6.59	23.77	21.58	51.96	94.97	146.93		
Cotton Picker/Module	6R-30 (500)	936,000	200	8	25.73	0.218	5.58	25.16	31.91	62.66	140.41	203.08		
Cotton Picker/Module	6R-38 (500)	937,000	200	8	25.73	0.172	4.41	19.86	25.22	49.50	110.97	160.48		
Dry Applicator SP	70' 300cuft	469,000	350	8	16.98	0.015	0.31	1.14	0.37	1.84	2.78	4.63		
Sprayer	600-750gal	60' 175hp	216,000	350	8	9.00	0.017	0.37	0.71	0.20	1.28	1.49	2.78	
Sprayer	600-825gal	80' 175hp	269,000	350	8	11.81	0.013	0.27	0.69	0.19	1.16	1.39	2.56	
Sprayer	600-825gal	90' 250hp	316,000	350	8	12.73	0.011	0.24	0.67	0.19	1.11	1.45	2.57	
Sprayer	800gal	100' 250hp	353,000	350	8	14.15	0.010	0.22	0.67	0.20	1.09	1.46	2.56	
Sprayer	800gal	80' 250hp	292,000	350	8	12.86	0.013	0.27	0.76	0.20	1.24	1.51	2.76	
Sprayer	1000-1400gal	90' 275hp	330,000	350	8	14.15	0.010	0.22	0.67	0.18	1.08	1.37	2.45	
Sprayer	1000gal	100' 300hp	479,000	350	8	15.44	0.010	0.22	0.73	0.27	1.22	1.99	3.21	
Sprayer	1200+gal	120' 300hp	489,000	350	8	15.44	0.008	0.18	0.60	0.23	1.02	1.69	2.71	

Notes:

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

Direct: Does not include interest on operating capital.

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2023

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
dollars					dollars
ADJUVANTS			Artisan	oz	0.23
Agri-Dex	pt	5.28	Avaris	oz	1.68
AMS SuperMax	pt	3.81	Avicta 500 Soybean	oz	2.14
Class Act NG	pt	4.75	Bravo Weather Stick	pt	6.32
Crop Oil Conc.(Pet.)	pt	2.86	Captan 50 WP	lb	6.13
Crop Oil Conc.(Veg.)	pt	2.90	Convoy	oz	1.13
Dyne-A-Pak	pt	6.01	Cotton Seed Trt.	acre	20.00
Fire-Zone	pt	2.42	CruiserMaxx Vibrance	oz	7.63
Herbimax	pt	2.75	Elatus	oz	3.81
Induce	pt	5.00	Flint Extra	oz	9.41
MSO	pt	1.34	Headline EC	oz	4.46
Penetrator Plus	pt	2.32	Miravis Top	oz	5.31
Surfactant	pt	3.30	Prior Xemium	oz	2.17
CLEANING			Propimax EC	pt	12.50
Cleaning Peanuts	ton	18.00	Prosaro	oz	1.78
CROP CONSULTANT			Provost Optimum	oz	2.17
Corn Consultant	acre	6.00	Provost Silver	oz	1.41
Cotton Consultant	acre	8.00	Quadrис	oz	6.73
Peanut Consultant	acre	9.25	Quadrис Top	oz	3.05
Rice Consultant	acre	8.00	Quadrис Top SBX	oz	3.35
Sorghum Consultant	acre	6.00	Quilt	pt	18.23
Soybeans Consultant	acre	6.50	Quilt XCEL	pt	25.08
Wheat Consultant	acre	5.50	Stratego	pt	23.93
CUSTOM FERTILIZE			Stratego YLD	oz	4.02
App Fert by Air	cwt	8.00	Tilt 3.6 EC	oz	1.00
App Fert by Air(Mi	appl	8.00	Tilt/ Bravo SE	oz	0.72
Custom Apply Fert	acre	7.50	Trivapro	oz	1.43
CUSTOM LIME			GINNING		
Lime (Spread)	ton	58.00	Gin & Haul	lb	0.11
CUSTOM PLANT			GROWTH REGULATORS		
Custom Plant	acre	7.50	Mepex	oz	0.09
Custom Plant Air	cwt	8.00	Mepichlor 4.2%	oz	0.04
CUSTOM SPRAY			Mepiquat	oz	0.22
App by Air (3 gal)	appl	6.40	Mepstar 6	oz	0.09
App by Air (5 gal)	appl	7.60	Palisade	oz	1.41
App by Air (10 gal)	appl	9.70	Pentia	oz	0.41
Custom Spray Ground	acre	7.00	Pix WSB	oz	1.26
DRYING			Stance	oz	1.40
Dry Corn	bu	0.19	Veto	oz	0.06
Dry Grain Sorghum	cwt	0.25	HARVEST AIDS		
Dry Peanuts	ton	24.00	Adios	oz	0.96
Dry Rice	bu	0.40	Boll Buster	oz	0.34
ERADICATION FEE			Def/Folex	pt	12.50
Eradication	acre	1.00	Defol 5	gal	8.61
FERTILIZERS			Display	oz	10.59
Agrotain Ultra	pt	20.99	Ethepron 6E	pt	3.56
Amm Sulfate (21% N)	cwt	50.00	Finish 6	pt	10.93
Boron Plus	pt	4.31	Folex 6EC	pt	12.50
DAP	cwt	55.40	Freefall SC	oz	1.52
Fert 10-34-0	cwt	45.99	Ginstar EC	pt	29.72
Fert 10-34-0	gal	5.36	Gramoxone SL	oz	0.37
Fert 11-37-0	cwt	50.15	Sharpen	oz	6.72
Fert 41-0-0-4	cwt	37.06	Sodium Chlorate 5L	gal	8.61
Lime	ton	48.00	SuperBoll	oz	0.32
NBPT	pt	18.00	Thidiazuron 4lb	oz	1.52
Phosphorus(46% P2O5)	cwt	50.00	Tribufos 6lb	pt	12.50
Potash (60% K2O)	cwt	46.60	Vacate	oz	1.39
Sulfur Plus	pt	2.62	HAULING		
UAN (32% N)	cwt	38.90	Haul Corn	bu	0.23
UAN (32%)	gal	4.30	Haul Peanuts	ton	14.50
UAN + Sulfur (28%)	cwt	39.65	Haul Rice	bu	0.35
UAN + Sulfur (28%)	gal	4.41	Haul Sorghum	bu	0.25
Urea, Solid (46% N)	cwt	41.58	Haul Soybeans	bu	0.27
Zinc Plus	pt	3.68	Haul Wheat	bu	0.26
FUNGICIDES			HERBICIDES		
Abound	oz	1.88	2,4-D Amine 4	pt	3.33
Alfa Guard	lb	1.41	2,4-D Ester	pt	5.03
Allegiance Flowable	oz	3.66	AAtrex 4L	pt	2.62
Ameristar Top	oz	2.41	Accent Q	oz	20.47
Approach Prima	pt	33.33	Acuron	oz	0.54
Apron Maxx RTA	oz	1.00			(continued)

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2023 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		Dollars			dollars
Aim	oz	4.90	Harmony Extra SG	oz	10.34
Anthem Flex	oz	5.57	Helmet	oz	0.48
Anthem Maxx	oz	5.26	Huskie	oz	0.96
Armezon Pro	oz	1.03	Impact	oz	13.44
Atrazine 4L	pt	3.00	Intimidator	oz	0.64
Atrazine 90DF	lb	4.50	Leadoff	oz	6.79
Authority First	lb	40.00	League	oz	4.19
Authority Elite	pt	11.92	Lexar	pt	6.76
Authority Maxx	lb	68.82	Liberty 280	oz	0.76
Authority MTZ	lb	19.75	Loyant	oz	2.29
Avatar	pt	9.62	Makaze	oz	0.21
Avenger	pt	15.00	Metolachlor	pt	7.89
Axial XL	oz	1.71	Metribuzin 4L	pt	21.13
Axiom	oz	2.10	Metribuzin 75	lb	14.80
Banvel	pt	4.81	MSMA	pt	6.35
Barrage	pt	4.13	Newpath	oz	4.15
Basagran	pt	5.43	Obey	oz	1.08
Boundary	pt	11.75	Osprey	oz	3.58
Brake	oz	1.48	Outlook	pt	14.77
Broadaxe	pt	14.17	Panther Pro	oz	6.61
Broadhead	lb	58.21	Parallel	pt	8.32
Bucaneer Plus	pt	9.81	Paraquat	oz	0.23
Buctril	pt	4.28	Parazone 3SL	oz	0.18
Butyrac 200 (2,4-DB)	pt	4.06	Permit	oz	20.07
Cadre	oz	1.97	Permit Plus	oz	22.22
Canopy	oz	3.25	PowerFlex	oz	7.21
Caparol	pt	4.97	Preface	oz	4.99
Capreno	oz	4.49	Prefix	pt	5.26
Cinch	pt	14.18	Provisia	oz	0.82
Cinch ATZ	pt	6.26	Prowl 3.3 EC	pt	6.63
Clarity	pt	14.30	Quelex	oz	11.30
Classic	oz	18.50	RealmQ	oz	4.32
Clearpath	oz	4.24	RebelEx	oz	2.00
Clethodim 2E	oz	0.53	Reflex	pt	7.34
Clincher SF	oz	1.95	Regiment	oz	45.96
Cobra	oz	1.22	Resicore	oz	0.60
Command 3ME	pt	18.00	Resource	oz	2.03
Corvus	oz	5.30	RiceBeaux	pt	6.25
Cotoran	pt	6.37	Riceshot	pt	4.68
Cotton Pro	pt	3.45	Ricestar HT	pt	26.01
Dicamba	pt	5.88	Ringside	pt	5.63
Direx	pt	5.25	Roundup Power Max	oz	0.46
Diuron	pt	3.47	Roundup PowerMax	pt	7.33
Dual II Magnum	pt	11.60	Roundup PowerMax ii	oz	0.27
Dual Magnum	pt	11.45	Roundup Pro	pt	0.20
Duet	pt	6.09	Scepter 70 DG	oz	4.64
Engenia	oz	0.83	Select Max	pt	13.86
Enlist Duo	pt	8.60	Sencor/Tricor.Metrib	lb	17.78
Enlist One	pt	6.77	Sequence	pt	7.14
Envive	oz	3.78	Sharpen	oz	6.72
Envoke	oz	88.33	Sinister	pt	13.77
Facet L	pt	17.50	Sonic	oz	4.50
Fierce	oz	7.75	Stalwart	pt	3.82
Fierce XLT	oz	4.47	Stam 80 EDF	lb	9.45
Finesse	oz	18.64	Stam M4	qt	8.00
Firestorm	pt	3.44	Staple LX	oz	3.95
First Rate	oz	37.79	Storm	pt	12.65
Flexstar	pt	9.90	Strada	oz	7.34
Flexstar GT	pt	6.77	Strada Pro	oz	8.20
Fusilade DX	oz	1.19	Strada XT2	oz	3.26
Gambit	oz	16.50	Superwham	qt	9.82
Glyphosate 3lbs a.e	pt	5.38	Suprend	lb	13.52
Glyphosate 3lbs a.e	oz	0.34	SureStart II	oz	0.39
Goal 2XL	pt	8.75	Surveil	oz	6.70
Gramoxone SL 2.0	oz	0.37	Synchrony XP	oz	13.00
Grandstand R	pt	18.68	Tempest	pt	19.50
Grasp	oz	3.17	Touchdown Total	qt	10.21
Grasp Xtra	oz	1.61	Treflan	pt	4.36
Halex GT	pt	10.50			(continued)
Halomax	oz	21.11			

Appendix Table 4. Operating inputs: estimated prices, Mississippi, 2023 (continued)

ITEM NAME	UNIT	PRICE	ITEM NAME	UNIT	PRICE
		dollars			dollars
Trifluralin	pt	4.36	Mustang Max	oz	1.17
Triflurex	pt	3.47	Nuprid 4F	oz	1.04
Ultra Blazer	pt	7.50	Oberon	oz	3.10
Valor EZ	oz	5.23	Orthene 97	lb	11.66
Valor SX	oz	3.20	Permethrin	oz	0.47
Valor XLT	oz	3.64	Portal XLO	oz	0.74
Vamos	pt	6.49	Pounce 25WP	lb	19.96
Verdict	oz	1.53	Prevathon	oz	1.16
Veritas	pt	7.49	Python WDG	oz	20.19
Villain	pt	5.24	Radiant	oz	5.77
Volunteer	pt	10.63	Sevin 4F	pt	8.55
Warrant	pt	4.84	Sevin XLR Plus	qt	17.53
XtendiMax	oz	0.44	Sivanto Prime	oz	3.36
Zidua SC	oz	6.20	Tempest	oz	1.70
Zidua WG	oz	8.76	Tenchiu SG	oz	1.13
INOCULANT			Transform WG	oz	8.82
Inoculant -Soybean	acre	1.55	Up-Cyde	oz	0.49
Optimize LIFT	oz	0.15	Warrior ZT	oz	3.13
INSECTICIDES			Zeal	oz	20.93
Abamectin .15EC	oz	0.30	IRRIGATION SUPPLIES		
Acephate 90%	lb	9.30	Roll-Out Pipe	ft	0.24
Acephate 90SP	lb	6.62	SEED/PLANTS		
Admire Pro	oz	1.76	Corn Seed BtRR	thous	3.75
Agri-Mek	oz	3.13	Corn Seed Conv.	thous	2.36
Asana .66 XL	oz	0.58	Corn Seed Op Leptra	thous	3.66
Avenger	oz	0.28	Corn Seed RR2	thous	2.93
Baythroid XL	oz	1.32	Corn Seed VT2P	thous	2.62
Belt	oz	6.80	Cot. Seed B3XF/W3FE	thous	2.34
Besiege	oz	2.75	Cotton Seed B3XF	thous	2.35
Bidrin 8EC	oz	1.43	Cotton Seed GLB2	thous	1.59
Bifenthrin	oz	1.13	Cotton Seed W3FE	thous	2.32
Bifenture 2EC	oz	0.47	Cotton Seed W3RF	thous	1.31
Brigade EC	pt	20.27	Peanut Seed	lb	0.84
Capture LFR	oz	1.37	Rice Conv Hyb Trt	lb	6.31
Centric 40WG	oz	5.95	Rice Fullpage Hyb Tr	lb	7.68
Cypermethrin	oz	1.31	Rice Seed CF(Levees)	lb	1.14
Declare	oz	2.03	Rice Seed Clearfield	lb	1.14
Diamond .83EC	oz	2.23	Rice Seed Conv.	lb	0.33
Dimethoate 4E	pt	6.45	Rice Seed Cv(Levees)	lb	0.33
Dimilin 2L	oz	1.63	Rice Seed CvH(Levee)	lb	1.93
Endigo	oz	2.10	Rice Seed FPH(Levee)	lb	7.68
Force 3G	lb	7.28	Rice Seed Provisia	lb	1.30
Hero	oz	1.35	Rice Seed Trt/Insect	lbseed	0.29
Imidacloprid 4F	oz	1.06	Sorghum Concept	lb	2.42
Imidan 70 WSB	oz	0.86	Sorghum Concept+ Po	lb	3.51
IncidentalPestTrt \$8	acre	8.00	Soybean Enlist E3	lb	1.20
IncidentalPestTrt\$15	acre	15.00	Soybean Seed LL	lb	1.16
IncidentalPestTrt\$22	acre	22.00	Soybean Seed RR2	lb	1.16
IncidentalPestTrt\$30	acre	30.00	Soybean Seed RR2X	lb	1.34
Intrepid 2F	oz	2.06	Wheat Seed Private	lb	0.38
Intruder 70WSP	oz	1.13	SOIL TEST		
Lambda	oz	2.08	Soil Test	acre	10.00
Lannate LV	pt	8.33	SURVEY & MARK LEVEES		
Macho	oz	1.28	Survey & Mark Levees	acre	4.50
Malathion 8E	pt	9.84	Survey & Mark Levees	acre	4.50

Appendix Table 5. Estimated fuel prices
and interest rates, Mississippi, 2023

ITEM NAME	UNIT	PRICE
dollars		
FUEL TYPES		
Diesel Fuel	gal	4.48
Gasoline	gal	3.19
INTEREST RATES		
Short-term	%	6.40
Intermediate-term	%	6.90

Appendix Table 6. Labor types, wage rates and unallocated labor
Multipliers for crop enterprises, Mississippi, 2023

Item name	Unit	Wage Rate
OPERATOR LABOR	hour	16.54
IRRIGATE LABOR	hour	9.06
HAND LABOR	hour	9.06
HAND. & STOR. LABOR	hour	9.06
RICE MGT. LABOR	hour	9.06
CROP ENTERPRISE		UNALLOCATED LABOR MULTIPLIERS (%)
Corn		90
Cotton		80
Grain Sorghum		90
Peanuts		80
Rice		90
Soybeans		90
Wheat		80

Appendix Table 7. Futures contract prices, basis levels, forward contract prices, and loan rates used in row crop budgets, Mississippi, 2023

Crop	unit	Futures Contract Month	Futures Contract Price ^a	Basis ^b	Forward Contract Price ^c	Loan Rate ^d	Budget Price ^e
Corn	bu	Dec '23	6.20	-0.05	6.15	2.35	6.15
Cotton Lint	lb	Dec '23	0.75	-0.011	0.7389	0.52	0.7389
Cottonseed	lb						0.11 ^f
Grain Sorghum	bu				5.84	4.09	5.84
Peanuts	ton				575.00	354.89	575.00
Soybeans	bu	Nov '23	13.54	0.12	13.66	6.41	13.66
Rice	bu	Nov '23	6.93	-0.18	6.75	3.21	6.75
Wheat	bu	Jul '23	9.03	-0.13	8.90	3.60	8.90

^a Average of the daily closing futures contract prices during the first 5 trading days in October 2022 for the stated contract months.

^b Basis is the cash price minus the futures contract price for the stated contract month. The reported basis is a daily average from 2013 to 2022 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.

^c 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.

^d Average Mississippi County CCC Loan Rate for 2022 crop year for corn, grain sorghum, soybeans and wheat. Mississippi CCC 2022 Farm-stored Loan Rate for long grain rough rice. National 2022 Upland Cotton Marketing Assistance Loan Base Rate for cotton lint.

^e Price used in MSU Extension Service Planning Budgets.

^f Cottonseed price is the average marketing year price over the years 2008-2021.

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, 2023

OPERATION/ OPERATING INPUT	SIZE/ UNIT	DIRECT COST						FIXED COST	TOTAL COST	
		OP INPUT	FUEL	R&M	LABOR	LEASE	INTER			
-----dollars-----										
Land Plane	50'x16'		1.66	0.36	0.63		0.17	2.82	2.11	4.93
Set Up Engine										
IRRIGATE LABOR	hour				0.23		0.01	0.24		0.24
Ditcher (1m/160a)			0.37	0.08	0.16		0.02	0.63	0.44	1.07
Roll-Out Pipe	ft	7.92					0.21	8.13		8.13
Lay Roll-out Pipe										
Pipe Spool 160ac	1/4m roll		0.49	0.12	0.44		0.03	1.08	1.10	2.18
IRRIGATE LABOR	hour				1.81		0.05	1.86		1.86
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 roll		0.74	0.18	0.65		0.02	1.59	1.65	3.24
Land Forming (\$450)	each								38.27	38.27
Well & Pump, Furrow	each			2.96			0.08	3.04	10.47	13.51
Main Line Pipe	each								5.79	5.79
Engine, RPF, PNUT	each								10.48	10.48
1st July Irrigation	ac-in		10.95	1.05			0.26	12.26		12.26
1st Aug Irrigation	ac-in		10.95	1.05			0.19	12.19		12.19
2nd Aug Irrigation	ac-in		10.95	1.05			0.19	12.19		12.19
1st Sep Irrigation	ac-in		10.95	1.05			0.13	12.13		12.13
TOTALS		7.92	47.06	7.90	4.84	0.00	1.36	69.08	70.31	139.39

Note: Cost of production estimates are based on 2022 input prices.

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