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Estimated Costs and Returns, Row Crops, Central Brown Loam Area of Mississippi 1981

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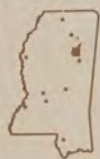
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MAFES

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In Cooperation with National Economics Division;
 Economics, Statistics and Cooperatives Service; U.S. Department of Agriculture

ESTIMATED COSTS AND RETURNS, ROW CROPS, CENTRAL BROWN
LOAM AREA OF MISSISSIPPI 1981

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APPENDIX

The first paragraph is devoted to describing the...
The second paragraph is devoted to describing the...
The third paragraph is devoted to describing the...
The fourth paragraph is devoted to describing the...
The fifth paragraph is devoted to describing the...

The sixth paragraph is devoted to describing the...
The seventh paragraph is devoted to describing the...
The eighth paragraph is devoted to describing the...
The ninth paragraph is devoted to describing the...
The tenth paragraph is devoted to describing the...

Use of trade names in this report is for identification only and neither constitutes endorsement of these products nor implies discrimination against similar products.

The eleventh paragraph is devoted to describing the...
The twelfth paragraph is devoted to describing the...
The thirteenth paragraph is devoted to describing the...
The fourteenth paragraph is devoted to describing the...
The fifteenth paragraph is devoted to describing the...

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Special appreciation is extended to cooperating producers who provided the basic information on practices used in this study. The various tractor-equipment dealers and other input dealers who provided information on current and projected prices are also gratefully acknowledged. The authors wish to acknowledge County Agents who helped to make this study possible.

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FOREWORD

Data presented in this report were developed to support research by the Department of Agricultural Economics, Mississippi Agricultural and Forestry Experiment Station and the National Economics Division, Economics, Statistics and Cooperatives Service, USDA, and to provide others with current information on production practices and costs associated with various agricultural enterprises.

This report updates Special Edition, Research Highlights, MAFES, "Estimated Costs and Returns, Row Crops, Central Brown Loam Area of Mississippi 1980," and Estimated Costs and Returns, Row Crops, Central Brown Loam Area of Mississippi 1980 AEC M.R. No. 94, available from the Department of Agricultural Economics, Mississippi State University. Users interested in data collection procedures and budget estimation techniques are referred to earlier publications, also available upon request.

Farmers should make 1981 planting decisions based on "returns above direct expenses." This would be a one-year, short-run decision. Long-run decisions must be based upon returns above "total specified expenses," which include both direct and fixed expenses (estimated in this publication) plus all other expenses such as land, management, and general farm overhead.

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ESTIMATED COSTS AND RETURNS, ROW CROPS, CENTRAL BROWN
LOAM AREA OF MISSISSIPPI, 1981

INTRODUCTION

This publication provides information on production practices, costs, and returns for specified crops grown in the Central Brown Loam Area of Mississippi. The information, essential in farm planning, is, in the main, presented in tabular form, with discussion held to a minimum. For the convenience of the user, all tables have been placed after the brief discussion. Essential information on power and machinery and on prices and costs of materials and services appears in Tables 1-4. These data were used in computing the budgets for specific crops, which appear in the remaining tables.

COSTS AND RETURNS

Total specified costs (including interest on operating capital) for each of the crops, by planting pattern and size of equipment used, are summarized in Table 5. (For a discussion of those costs not included as "specified costs" see "LIMITATIONS" section below).

Soybeans

Estimated costs per acre range from \$127.36 for "usual input practices," 8-row equipment, 38-inch row spacing to \$156.19 for "DRILLED", 4-row equipment.

Cotton

Estimated costs per acre range from \$405.39 for "usual input practices," 8-row equipment, 38-inch row spacing to \$422.53 for "usual input practices," 4-row equipment and 38-inch row spacing.

Wheat

Estimated cost per acre for producing wheat is \$127.46.

Returns Above Specified Expenses

Returns to land, management, and general farm overhead per acre are summarized in Table 6. Returns are expressed in terms of various yields and prices. For example, soybeans, usual input practices, 38-inch row spacing, using 6-row equipment would return \$71.36 per acre at the 25 bushel yield and \$8.25 per bushel price. Were the price to rise to \$9.00 per bushel the return would be \$90.11. However, if the price remained at \$8.25 per bushel and yield rose to 32 bushels the return would be \$128.34.

LIMITATIONS

Costs presented are labeled "Total Specified Costs." Charges for land, management, and general farm overhead are not included and must be subtracted from the estimated returns shown in Table 6 to obtain approximate returns above all production costs. Average charges based on latest available data for land, management, and general farm overhead are:^{1/}

	Land	Management	Overhead	Total
Cotton	\$73.04	\$47.31	\$12.59	\$132.94
Soybeans	71.73	16.00	12.59	100.32
Wheat	62.88	13.69	12.56	89.13

^{1/} Based on 1979 USDA estimates and increased fifteen percent per year.

ENTERPRISE BUDGETS

Each budget lists and describes all operations used to produce the crop. If an operation is followed by a times sign and a whole number (such as X2), it is repeated that number of times. In such cases the listed cost is the cost of a single operation multiplied by the number of times it is performed. If a fraction is used (such as X $\frac{1}{4}$), it is performed less frequently than annually --- in the example shown, once every four years. In the event the fraction follows an insecticide application, it denotes that fraction of the acreage that received treatment. The listed cost represents that fraction of the total cost of the single operation over all the acreage. All budgets assume a 10% replant (and harrow where appropriate). If a row condition operation is specified, it is assumed that 20% of the acreage must be row conditioned twice. The month in which the operation is performed is indicated along with direct and fixed tractor and equipment cost, labor, materials, and miscellaneous costs.

Interest on operating capital is charged at an annual rate of 14 percent for the time the capital is used. Operating capital is assumed to be borrowed to cover all specified costs except fixed costs. Costs for self-propelled equipment appear under equipment costs. Miscellaneous costs include charges for custom services, hauling, ginning, drying and storage where appropriate.

Tractor and machinery prices and related data are included in Table 1; prices for chemicals, seed, fertilizers and other materials are presented in Tables 2 and 3. Aerial application costs are summarized in Table 4. Expected prices for 1981 are based on estimates obtained from suppliers in major agricultural producing areas of the state in November-December 1980.

These budgets do not include taxes, insurance, drainage, bookkeeping, pick-up truck expenses, land rent charges, management or other general overhead expenses. The 90-100 DBHP (drawbar horsepower, Nebraska rating) 2-wheel drive tractor, the 100-115 DBHP 2-wheel drive tractor, and the 115-150 DBHP 2-wheel drive tractor are the prime power sources assumed for all 4-row, 6-row and 8-row budgets, respectively.

Interpretation of per-acre cost estimates summarized in this report requires definition of "usual input practices." "Usual input practices" describes the practices most commonly used by farmers in the area. This set of practices more nearly describes the most common rather than the average situation.

Labor charges are divided into three categories --- operator, special, and common. Operator labor is tractor driver labor and is charged at \$3.35 per hour, special labor is self-propelled equipment driver labor and is charged at \$4.50 per hour, and common labor is all other labor and is charged at \$3.35 per hour. Machinery charges are also divided into three categories --- special equipment, equipment, and tractor. Special equipment refers to self-propelled equipment; i.e., combines, cotton pickers, etc. Equipment refers to towed equipment.

Each budget for the production situation specified for each crop is summarized in a set of two tables --- a listing of operations and production costs in the first table, estimates of costs and returns in the second. All costs are expressed in dollars per acre. These tables allow the user to readily examine the cost of producing a crop on an operation-by-operation basis or on an item-by-item basis.

All budgets are computer generated. Non-integer numbers in the tables are rounded to two decimal places. However, within the computer

program used to generate the budgets, numbers are carried to several more decimal places. The totals are more precise than the sum of the individual items, thus the row and column sums may not exactly equal the listed numbers.

NOTE: The need for herbicides and insecticides will vary not only between producers but between fields. Costs of production can be significantly decreased by reducing the use of herbicides and/or insecticides on fields that have light pressure from weeds and/or insects. If heavy pressure from weeds and/or insects prevails, increased use of herbicides and/or insecticides may be necessary.

Soybeans

Soybeans normally are planted from May 10 to June 15. Varieties have been developed to permit some variability in both planting and harvesting dates. The crop is adapted to a wide range of soil types and conditions and meshes well into overall farm organization in the Central Brown Loam.

All operations and materials used for producing soybeans under "usual input practices", 38- and 30-inch row spacing (Tables 7-16) are identical. Differences in these budgets are reflected in the different equipment and tractor sizes. These different tractor and equipment sizes reflect the charge for labor among the various budgets.

Operations involving tractor and towed equipment are self-explanatory. Direct and fixed charges are made for tractor and equipment along with a labor charge for a tractor driver.

Budgets for soybeans, "usual input practices," drilled are reported in Tables 17-22. These budgets assume 4-row, 6-row, and 8-row equipment sizes and their accompanying tractors. All operations are the same as soybeans planted in rows except a GRAIN DRILL operation is substituted

for the PLANT operation and all cultivations are replaced by the additional use of herbicides. Budgets for drilled soybeans differ from conventionally planted soybeans because of lower tractor, equipment, and labor costs, but higher material (primarily herbicides) and miscellaneous costs.

Cotton

Cotton production practices in the Central Brown Loam of Mississippi include seedbed preparation, planting, weed control, insect control and harvesting. Seedbed preparation usually begins at the end of the previous year's harvest season and continues up to the planting date. Deep tillage is done in the fall, when possible. Most farmers intensify their seedbed preparation in February, March, and April. This is generally limited only by prevailing weather and soil type. Planting dates generally extend from April 15 to May 15. The budgets for solid cotton are reported in Tables 23-28.

Insecticide Programs--All Central Brown Loam cotton budgets use identical insecticide programs. All applications are made by air.

Early season control includes one application of 0.10 lb. of Bidrin[®] over 1/2 of the acreage, and another application of 0.07 lb. of Cygon[®] over 1/3 of the acreage.

The late season program includes three applications of 0.50 lb. methyl parathion per application, three applications of 1.60 pts. EPN-methyl parathion per application, three applications of 0.10 lb. Pydrin[®] and 0.50 lb. methyl parathion per application, one application of 1.60 pts. of EPN-methyl parathion and .33 lbs. of Lannate[®] in tank mix, and .25 lbs. of methyl parathion applied with defoliant for diapause weevil control. Total materials cost for the standard insecticide program is \$38.11.

Wheat

Inputs and costs associated with producing wheat are presented in Tables 29-30. This budget also applies to oat production except adjustments are needed to compensate for differences in seed price, costs of hauling, yield per acre, and price per bushel.

Table 1. Estimated power and machinery performance rates, estimated life, purchase price, repair cost, and direct and fixed costs per hour and per acre, Mississippi, 1981.

Item	Size or description	Performance rate	Length of life	Average annual use	Estimated 1980 price	Repair costs % of new cost	Direct Costs		Fixed Costs	
		per acre hours	years	hours	dollars	percent	per hour	per acre	per hour	per acre
-----dollars-----										
<u>Self Propelled</u>										
Tractor	90-100	---	12	700	27,700	65	6.85	---	6.07	---
Tractor	100-115	---	12	700	32,350	55	7.63	---	7.09	---
Tractor	115-150	---	12	700	39,200	52	9.20	---	8.59	---
Tractor (with heavy disk)	200	---	12	700	59,250	49	12.18	---	12.98	---
Tractor (4-wheel drive)	200	---	12	700	72,400	49	16.74	---	15.86	---
Sprayer - high clearance	14-row	.08	8	350	21,200	80	8.33	.67	11.81	.94
Cotton picker - first picking	2-row	.75	10	200	62,500	75	28.78	21.59	53.13	39.84
Cotton picker - second picking	2-row	.55	10	200	62,500	75	28.78	15.83	53.13	29.22
Combine - grain sorghum	20 ft.	.20	8	250	58,000	80	26.65	5.33	45.24	9.05
Combine - rice	16 ft.	.70	8	250	68,100	80	32.98	23.09	53.12	37.18
Combine - rice (down)	16 ft.	1.10	8	250	68,100	80	32.98	36.28	53.12	58.43
Combine - soybean/wheat	20 ft.	.23	8	250	58,000	80	26.65	6.13	45.24	10.41
Combine - soybean/wheat	13 ft.	.36	8	250	42,000	80	20.25	7.29	32.76	11.79
<u>Towed Equipment</u>										
Blade - tractor mounted	7 ft.	.12	10	100	2,420	60	1.45	.17	4.11	.49
Chisel plow	12 ft.	.30	12	150	2,550	70	.99	.30	2.61	.78
Chisel plow	16 ft.	.22	12	150	3,250	70	1.26	.28	3.32	.73
Chisel plow	21 ft.	.14	12	150	7,400	70	2.88	.40	7.56	1.06
Cultivator - early	4-row	.25	12	200	3,200	80	1.07	.27	2.45	.61
Cultivator - early	6-row	.21	12	200	4,400	80	1.47	.31	3.37	.71
Cultivator - early	6-row 30 in.	.28	12	200	3,876	80	1.29	.36	2.97	.83
Cultivator - early	8-row	.16	12	200	5,800	80	1.93	.31	4.45	.71
Cultivator - early	8-row 30 in.	.21	12	200	5,200	80	1.73	.36	3.99	.84
Cultivator - late	4-row	.20	12	200	3,200	80	1.07	.21	2.45	.49
Cultivator - late	6-row	.14	12	200	4,400	80	1.47	.21	3.37	.47
Cultivator - late	6-row 30 in.	.19	12	200	3,876	80	1.29	.25	2.97	.56
Cultivator - late	8-row	.10	12	200	5,800	80	1.93	.19	4.45	.44
Cultivator - late	8-row 30 in.	.14	12	200	5,200	80	1.73	.24	3.99	.56
Cultivator + postemerge rig - early	4-row	.35	12	200	4,685	80	1.56	.55	3.59	1.26
Cultivator + postemerge rig - early	6-row	.24	12	200	6,300	80	2.10	.50	4.83	1.16
Cultivator + postemerge rig - early	6-row 30 in.	.31	12	200	5,780	80	1.93	.60	4.43	1.37
Cultivator + postemerge rig - early	8-row	.18	12	200	7,950	80	2.65	.48	6.09	1.10
Cultivator + postemerge rig - early	8-row 30 in.	.24	12	200	6,550	80	2.18	.52	5.02	1.21

Continued--

Table 1. Estimated power and machinery performance rates, estimated life, purchase price, repair costs, and direct and fixed costs per hour and per acre, Mississippi, 1981 (Continued).

Item	Size or description	Performance rate per acre hours	Length of life years	Average annual use hours	Estimated 1980 price dollars	Repair costs % of new cost percent	Direct Costs		Fixed Costs	
							per hour	per acre	per hour	per acre
							dollars			
Towed Equipment										
Cultivator + postemerge rig - late	4-row	.28	12	200	4,685	80	1.56	.44	3.59	1.01
Cultivator + postemerge rig - late	6-row	.18	12	200	6,300	80	2.10	.38	4.83	.87
Cultivator + postemerge rig - late	6-row 30 in.	.24	12	200	5,780	80	1.93	.46	4.43	1.06
Cultivator + postemerge rig - late	8-row	.13	12	200	7,950	80	2.65	.34	6.09	.79
Cultivator + postemerge rig - late	8-row 30 in.	.17	12	200	6,550	80	2.18	.37	5.02	.85
Deep chisel	7-shank	.45	15	100	3,800	100	2.53	1.14	5.19	2.34
Deep chisel	11-shank	.40	15	100	4,800	100	3.20	1.28	6.56	2.62
Disk harrow	14 ft.	.23	10	180	4,400	80	1.96	.45	4.16	.96
Disk harrow	21 ft.	.14	10	180	9,500	80	4.22	.59	8.97	1.26
Disk harrow	28 ft.	.10	10	180	11,200	80	4.98	.50	10.58	1.06
Disk bedder (hipper)	4-row	.21	8	160	2,600	80	1.62	.34	3.17	.67
Disk bedder (hipper)	6-row	.13	8	160	3,800	80	2.37	.31	4.63	.60
Disk bedder (hipper)	8-row	.10	8	160	4,800	80	3.00	.30	5.85	.58
Disk bedder + fertilizer	4-row	.22	8	160	4,900	80	3.06	.67	5.97	1.31
Disk bedder + fertilizer	6-row	.16	8	160	6,500	80	4.06	.65	7.92	1.27
Disk bedder + fertilizer	8-row	.12	8	160	8,100	80	5.06	.61	9.87	1.18
Disk, Heavy 180 hp+	21 ft.	.14	10	180	16,500	80	7.33	1.03	15.58	2.18
Disk, Heavy 200 hp+	27 ft.	.11	10	180	21,245	80	9.44	1.04	20.06	2.21
Disk + incorporate	14 ft.	.26	10	180	6,300	80	2.80	.73	5.95	1.55
Disk + incorporate	21 ft.	.18	10	200	10,900	80	4.36	.78	9.26	1.67
Disk + incorporate	28 ft.	.13	10	200	13,500	80	5.40	.70	11.47	1.49
Field cultivator	12 ft.	.20	10	100	2,100	65	1.36	.27	3.57	.71
Field cultivator	21 ft.	.10	10	100	5,050	65	3.28	.33	8.58	.86
Field cultivator	33.5 ft.	.08	10	100	10,973	65	7.13	.57	18.65	1.49
Field cult + incorporate	12 ft.	.23	10	100	2,940	65	1.91	.44	5.00	1.15
Field cult + incorporate	21 ft.	.12	10	100	5,676	65	3.69	.44	9.65	1.16
Field cult + incorporate	33.5 ft.	.10	10	100	12,573	65	8.17	.82	21.37	2.14
Grain cart - grain sorghum	250 bu.	.10	12	200	4,860	80	1.62	.16	3.73	.37
Grain cart - rice	250 bu.	.35	12	200	4,860	80	1.62	.57	3.73	1.30
Grain cart - soybean	250 bu.	.12	12	200	4,860	80	1.62	.19	3.73	.45
Grain cart - soybean	350 bu.	.09	12	200	5,423	80	1.31	.16	4.16	.37
Grain cart - rice	500 bu.	.18	12	200	10,384	80	3.46	.62	7.96	1.43
Grain cart - rice	350 bu.	.25	12	200	5,423	80	1.81	.45	4.16	1.04

Continued--

Table 1. Estimated power and machinery performance rates, estimated life, purchase price, repair cost, and direct and fixed costs per hour and per acre, Mississippi, 1981 (Continued).

Item	Size or description	Perform-	Length	Average	Estimated	Repair	Direct Costs		Fixed Costs	
		ance rate per acre	of life	annual use	1980 price	costs % of new cost	per hour	per acre	per hour	per acre
		hours	years	hours	dollars	percent	-----dollars-----			
Grain drill	12 ft.	.24	10	100	4,640	70	3.25	.78	7.89	1.89
Grain drill	32 ft.	.09	10	100	14,300	75	10.72	.97	24.31	2.19
Grain drill	36 ft.	.08	10	100	15,280	75	11.46	.92	25.98	2.08
Levee plow	---	.05	10	100	2,420	80	1.94	.10	4.11	.21
Levee plow - last pull	---	.06	10	100	2,420	80	1.94	.12	4.11	.25
Liquid fertilizer applicator	4-row	.18	8	150	3,520	80	2.35	.42	4.58	.82
Liquid fertilizer applicator	6-row	.12	8	150	4,340	80	2.89	.35	5.64	.68
Liquid fertilizer applicator	8-row	.08	8	150	5,280	80	3.52	.28	6.86	.55
Moldboard plow (2-way)	4-bottom	.30	15	120	6,300	80	2.80	.84	7.17	2.15
Pipe	30 ft.	.10	12	100	1,425	45	.53	.05	2.18	.22
Planter	4-row	.20	12	150	5,800	70	2.26	.45	5.93	1.19
Planter	6-row	.14	12	150	8,000	70	3.11	.44	8.18	1.14
Planter	6-row 30 in.	.19	12	150	7,640	70	2.97	.56	7.81	1.48
Planter	8-row	.10	12	150	11,700	70	4.55	.45	11.96	1.20
Planter	8-row 30 in.	.14	12	150	11,340	70	4.41	.62	11.59	1.62
Planter + preemerge rig	4-row	.22	12	150	6,400	70	2.49	.55	6.54	1.44
Planter + preemerge rig	6-row	.18	12	150	8,900	70	3.46	.62	9.10	1.64
Planter + preemerge rig	6-row 30 in.	.24	12	150	8,540	70	3.32	.80	8.73	2.10
Planter + preemerge rig	8-row	.12	12	150	12,900	70	5.02	.60	13.19	1.58
Planter + preemerge rig	8-row 30 in.	.16	12	150	12,540	70	4.88	.78	12.82	2.05
Row conditioner	4-row	.20	10	100	3,062	75	2.30	.46	5.21	1.04
Row conditioner	6-row	.15	10	100	5,419	75	4.06	.61	9.21	1.38
Row conditioner	8-row	.12	10	100	7,710	75	5.78	.69	13.11	1.57
Section harrow	4-row	.14	10	200	750	75	.28	.04	.64	.09
Section harrow	6-row	.10	10	200	1,150	75	.43	.04	.98	.10
Section harrow	8-row	.08	10	200	1,600	75	.60	.05	1.36	.11
Spin spreader	300 bu.	.10	8	100	6,800	80	6.80	.68	13.26	1.33
Sprayer - tractor mounted	21 ft.	.18	8	200	1,900	100	1.19	.21	1.85	.33
Stalk shredder	2-row	.30	10	185	1,900	40	.41	.12	1.75	.52
Subsoiler - parabolic	3-shank	.40	15	100	1,900	100	1.27	.51	2.60	1.04
Subsoiler - parabolic	5-shank	.24	15	100	2,700	100	1.80	.43	3.69	.89

Table 2. Estimated product and materials prices, Mississippi, 1981.

Item	Unit ^{1/}	Estimated price
<u>PRODUCTS</u>		
		<u>dollars</u>
Cotton Lint:		
Low	1b.	.70
Expected	1b.	.78
High	1b.	.88
Cotton Seed:		
Low	1b.	.05
Expected	1b.	.06
High	1b.	.07
Grain Sorghum:		
Low	cwt.	4.50
Expected	cwt.	5.50
High	cwt.	6.50
Rice:		
Low	bu.	4.65
Expected	bu.	5.35
High	bu.	6.05
Soybeans:		
Low	bu.	7.50
Expected	bu.	8.25
High	bu.	9.00
Wheat:		
Low	bu.	4.00
Expected	bu.	4.50
High	bu.	5.00
----- <u>MATERIALS</u>		
		<u>dollars</u>
Defoliant: -		
Def	1b.	2.75
Folex	1b.	2.75
Sodium Chlorate	1b.	.66
Herbicides:		
Atrazine	1b.	2.50
Basagran	1b.	15.65
Basalin	1b.	6.15
Bladex	1b.	3.00
Caparol (WP)	1b.	4.75
Caparol + MSMA	pt.	1.86
Cotoran	1b.	5.45
Cotoran + MSMA	pt.	2.31
Dinitro	1b.	2.53
Dowpon	1b.	1.80
DSMA	1b.	3.34
Dyanap	pt.	1.03
Karmex (WP)	1b.	2.90
Lanex	1b.	5.20
Lasso	1b.	3.95
Lorox	1b.	8.50
MSMA	1b.	1.66
MSMA + Surfactant	pt.	1.80

Continued

Table 2. Estimated product and materials prices, Mississippi, 1981
(Continued).

Item	Unit ^{1/}	Estimated price
		dollars
Ordram	1b.	3.74
Paraquat	1b.	18.30
Propanil	1b.	2.57
Prowl	1b.	6.43
Roundup	1b.	19.91
Sencor	1b.	16.80
Surfactant	pt.	.56
Treflan	1b.	6.57
2,4-D	1b.	4.48
2,4-DB	1b.	5.66
2,4,5-T	1b.	5.49
Zorial	1b.	6.90
Fungicides:		
Benlate	1b.	8.65
Soil Treater XXX	1b.	1.76
Stauffer 30-30	1b.	1.76
Terrachlor Super X	1b.	.33
Insecticides:		
Ambush	1b.	44.00
Azodrin	1b.	5.28
Bidrin	1b.	4.94
Bolstar	1b.	6.60
Cygon	1b.	5.16
Dipel	1b.	6.50
EPN + Methyl Parathion	pt.	2.10
Furadan	1b.	8.65
Galecron	1b.	12.25
Guthion	1b.	7.45
Lannate	1b.	11.05
Lorsban 4E	1b.	6.90
Methyl Parathion	1b.	2.15
Orthene 75S	1b.	6.85
Pounce	1b.	44.00
Pydrin	1b.	44.00
Sevin	1b.	2.35
Toxaphene	1b.	1.08
Toxaphene + Methyl Parathion	pt.	1.23
Temik	1b.	12.33
Fuel, Diesel	gal.	.99

^{1/} Expressed on a per pound active basis except for materials priced in volume and fungicides which are priced on a basis of formulated material.

Table 3. Estimated seed, fertilizer, and lime prices, Mississippi, 1981.

Item	Unit	Estimated price
		<u>dollars</u>
Seed:		
Cotton, double treated	1b.	.375
Cotton, triple treated	1b.	.41
Grain sorghum	1b.	.76
Soybean	1b.	.27
Wheat	1b.	.16
Rice	1b.	.26
Fertilizer:		
0-15-30	cwt.	8.85
0-24-24	cwt.	8.85
8-24-24	cwt.	10.10
13-13-13	cwt.	8.25
13-13-13 + Boron	cwt.	8.45
Ammonium nitrate (32%)	cwt.	7.50
Anhydrous ammonia (82%)	cwt.	10.03
Solubor	1b.	.40
Urea, solid (45%)	cwt.	10.23
Urea, liquid (32%)	cwt.	6.18
Lime, custom application		
Delta	ton	20.00
Northern Brown Loam	ton	19.00
Sand Clay Hills	ton	15.00
Black Belt	ton	13.00
Central Brown Loam	ton	22.00
Potash	cwt.	7.50
Triple Super Phosphate	cwt.	11.25

Table 4. Summary of aerial application costs, Mississippi, 1981.

Application activity	Cost per acre	Cost per 100 pounds
	<u>dollars</u>	<u>dollars</u>
Fertilizer		3.25
Insecticide:		
2 gallon mix	1.75	
3 gallon mix	2.00	
5 gallon mix	2.50	
Defoliant	2.50	
Seed		3.25
Herbicide:		
2,4-D	5.00	
2,4,5-T	5.00	
5 gallon mix	2.50	
Ordram	3.00	
Propanil	4.25	

Table 5. Summary of estimated costs per acre for soybeans, cotton, and wheat, Central Brown Loam of Mississippi, 1981.

Crop Description	Row Space	Equipment Size	Tractor		Equipment		Labor Cost	Material Cost	Misc. Cost	Total Specified Cost	Interest on Operating Capital	Total Cost
			Direct Cost	Fixed Cost	Direct Cost	Fixed Cost						
	inches		-----dollars-----									
Soybeans - usual input practices	38	4-row	13.65	12.10	11.12	20.43	9.11	53.62	13.75	133.78	7.55	141.33
	38	6-row	10.97	10.17	11.26	20.79	7.12	53.62	13.75	127.68	7.21	134.89
	38	8-row	9.73	9.06	9.98	19.16	5.09	53.62	13.75	120.39	6.97	127.36
Soybeans - usual input practices	30	6-row	12.46	11.56	11.64	21.70	8.00	58.23	13.75	137.33	7.70	145.03
	30	8-row	11.05	10.29	10.25	19.88	5.71	58.23	13.75	129.17	7.43	136.59
Soybeans - usual input practices	Drilled	4-row	10.58	9.38	10.87	18.45	7.68	76.48	13.75	147.19	9.00	156.19
	Drilled	6-row	8.26	7.66	9.70	16.96	6.16	76.48	18.75	143.96	8.96	152.92
	Drilled	8-row	6.57	6.11	9.56	17.95	3.83	76.48	18.75	139.25	8.74	147.99
Solid Cotton - usual input practices	38	4-row	23.60	20.91	43.18	82.02	23.16	108.40	106.91	408.18	14.35	422.53
	38	6-row	19.28	17.89	43.17	82.06	19.77	108.40	106.91	397.48	13.80	411.28
	38	8-row	17.88	16.66	42.92	81.57	17.51	108.40	106.91	391.85	13.54	405.39
Wheat		115-150 DBHP	8.68	8.11	8.18	15.28	5.12	59.22	15.35	119.94	7.52	127.46

Table 6. Estimated per acre returns to land, management, and general farm overhead, for soybeans, cotton, and wheat, by equipment size and row space, for specified yields and prices, Central Brown Loam of Mississippi, 1981.

Crop Description	Row Space	Equipment Size	Yield	Price Levels ^{1/}		
				Low	Expected	High
-----dollars-----						
Soybeans - usual input practices	38	4-row	18 bushels	-5.56	7.94	21.44
			25 bushels	46.17	64.92	83.67
			32 bushels	97.90	121.90	145.90
Soybeans - usual input practices	38	6-row	18 bushels	.88	14.38	27.88
			25 bushels	52.61	71.36	90.11
			32 bushels	104.34	128.34	152.34
Soybeans - usual input practices	38	8-row	18 bushels	8.41	21.91	35.41
			25 bushels	60.14	78.89	97.64
			32 bushels	111.87	135.87	159.87
Soybeans - usual input practices	30	6-row	18 bushels	-9.26	4.24	17.74
			25 bushels	42.47	61.22	79.97
			32 bushels	94.20	118.20	142.20
Soybeans - usual input practices	30	8-row	18 bushels	-.82	12.68	26.18
			25 bushels	50.91	69.66	88.41
			32 bushels	102.64	126.64	150.64
Soybeans - usual input practices	Drilled	4-row	18 bushels	-20.42	-6.92	6.58
			25 bushels	31.31	50.06	68.81
			32 bushels	83.04	107.04	131.04
Soybeans - usual input practices	Drilled	6-row	18 bushels	-17.15	-3.65	9.85
			25 bushels	34.58	53.33	72.08
			32 bushels	86.31	110.31	134.31
Soybeans - usual input practices	Drilled	8-row	18 bushels	-12.22	1.28	14.78
			25 bushels	39.51	58.26	77.01
			32 bushels	91.24	115.24	139.24
Solid Cotton - usual input practices	38	4-row	630 lb. lint	72.29	132.46	205.22
			680 lb. lint	106.17	171.11	249.65
			720 lb. lint	162.95	237.65	326.74
Solid Cotton - usual input practices	38	6-row	630 lb. lint	83.55	143.71	216.48
			680 lb. lint	117.42	182.36	260.90
			720 lb. lint	174.20	248.90	338.00
Solid Cotton - usual input practices	38	8-row	630 lb. lint	89.43	149.60	222.36
			680 lb. lint	123.31	188.25	266.79
			720 lb. lint	180.09	254.78	343.88
Wheat		115-150 DBHP	30 bushels	-6.91	8.09	23.09
			35 bushels	12.54	30.04	47.54
			40 bushels	31.99	51.99	71.99

^{1/}Soybeans: \$7.50, \$8.25 and \$9.00/bu. for low, expected, and high price levels, respectively. Cotton: \$.70, \$.78, and \$.88/lb. lint for low, expected, and high price levels, respectively. Cottonseed was assumed to \$.05, \$.06, \$.07/lb., respectively. Wheat: \$4.00, \$4.50, and \$5.00/bu. for low, expected, and high price levels, respectively.

TABLE 7. ESTIMATED COST PER ACRE, SOYBEANS, USUAL INPUT PRACTICES, 4 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
DOLLARS									
CUSTOM LIME X1/4	11	.00	.00	.00	.00	.00	.00	11.00	11.00
DISK, 14FT.	3	1.58	1.40	.45	.96	.77	.00	.00	5.15
CHISEL PLOW, 12FT.	4	2.06	1.82	.30	.78	1.00	.00	.00	5.96
APPLY FERTILIZER	5	.68	.61	.68	1.33	.33	17.70 ^{1/}	.00	21.34
DISK + INC, 14FT.	5	1.78	1.58	.73	1.55	.87	4.93 ^{2/}	.00	11.44
HARROW	5	1.05	.93	.04	.10	.52	.00	.00	2.65
PLANT + PRE	5	1.66	1.47	.60	1.58	1.62	18.35 ^{3/}	.00	25.29
PLANTING TRAILER	5	.53	.47	.03	.07	.26	.00	.00	1.35
CULT + POST EARLY	6	2.40	2.12	.55	1.26	1.17	7.82 ^{4/}	.00	15.33
CULT + POST LATE	6	1.92	1.70	.44	1.01	.94	4.82 ^{5/}	.00	10.82
COMBINE, 13FT.	10	.00	.00	7.29	11.79	1.62	.00	.00	20.70
HAUL	10	.00	.00	.00	.00	.00	.00	2.75	2.75
TOTAL SPECIFIED COSTS		13.65	12.10	11.12	20.43	9.11	53.62	13.75	133.78
INTEREST ON OPERATING CAPITAL									7.55
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									141.33

^{1/}Fertilizer, 0-15-30. ^{2/}Treflan. ^{3/}Sencor and Seed. ^{4/}Basagran. ^{5/}Lorox and 2,4-DB.

TABLE 8 . ESTIMATED COSTS AND RETURNS PER ACRE
 SOYBEANS, USUAL INPUT PRACTICES, 4 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL
 BROWN LOAM OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
SOYBEAN SEED	BU.	8.25000	25.00	206.25
TOTAL INCOME				206.25
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	2.59	9.11
SPECIAL LABOR	HOUR	4.50	.36	1.62
CUSTOM LIME X1/4	TON	22.00	.50	11.00
0-15-30	CWT	8.85	2.00	17.70
TREFLAN	LB	6.57	.75	4.93
SENCOR	LB	16.80	.30	4.99
SEED	LB	.27	49.50	13.36
BASAGRAN	LB	15.65	.50	7.82
2,4-DB	LB	5.66	.10	.57
LOROX	LB	8.50	.50	4.25
SPECIAL EQUIPMENT	ACRE	7.29	1.00	7.29
EQUIPMENT	ACRE	3.83	1.00	3.83
TRACTOR	ACRE	13.65	1.00	13.65
INT ON OP CAP	ACRE	7.55	1.00	7.55
HAUL	BU	.11	25.00	2.75
TOTAL DIRECT EXPENSE				108.81
RETURNS ABOVE DIRECT EXPENSES				97.44
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	11.79	1.00	11.79
EQUIPMENT	ACRE	8.64	1.00	8.64
TRACTOR	ACRE	12.10	1.00	12.10
TOTAL FIXED EXPENSE				32.53
TOTAL SPECIFIED EXPENSES				141.33
RETURNS ABOVE SPECIFIED EXPENSES				64.92

TABLE 9. ESTIMATED COST PER ACRE, SOYBEANS, USUAL INPUT PRACTICES, 6 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
-----DOLLARS-----									
CUSTOM LIME X1/4	11	.00	.00	.00	.00	.00	.00	11.00	11.00
DISK, 21FT.	3	1.07	.99	.59	1.26	.47	.00	.00	4.38
CHISEL PLOW, 16FT.	4	1.68	1.56	.28	.73	.74	.00	.00	4.99
APPLY FERTILIZER	5	.76	.71	.68	1.33	.33	17.70 ^{1/}	.00	21.52
DISK + INC, 21FT.	5	1.37	1.28	.78	1.67	.60	4.93 ^{2/}	.00	10.63
HARROW	5	.84	.78	.04	.11	.37	.00	.00	2.14
PLANT + PRE	5	1.51	1.40	.68	1.80	1.33	18.35 ^{3/}	.00	25.08
PLANTING TRAILER	5	.53	.47	.03	.07	.26	.00	.00	1.35
CULT + POST EARLY	6	1.83	1.70	.50	1.16	.80	7.82 ^{4/}	.00	13.82
CULT + POST LATE	6	1.37	1.28	.38	.87	.60	4.82 ^{5/}	.00	9.32
COMBINE, 13FT.	10	.00	.00	7.29	11.79	1.62	.00	.00	20.70
HAUL	10	.00	.00	.00	.00	.00	.00	2.75	2.75
TOTAL SPECIFIED COSTS		10.97	10.17	11.26	20.79	7.12	53.62	13.75	127.68
INTEREST ON OPERATING CAPITAL									7.21
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									134.89

^{1/}Fertilizer, 0-15-30. ^{2/}Treflan. ^{3/}Sencor and Seed. ^{4/}Basagran. ^{5/}Lorox and 2,4-DB.

TABLE 10. ESTIMATED COSTS AND RETURNS PER ACRE
 SOYBEANS, USUAL INPUT PRACTICES, 6 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL
 BROWN LOAM OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
SOYBEAN SEED	BU.	8.25000	25.00	206.25
TOTAL INCOME				206.25
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	2.00	7.12
SPECIAL LABOR	HOUR	4.50	.36	1.62
CUSTOM LIME X1/4	TON	22.00	.50	11.00
0-15-30	CWT	8.85	2.00	17.70
TREFLAN	LB	6.57	.75	4.93
SENCOR	LB	16.80	.30	4.99
SEED	LB	.27	49.50	13.36
BASAGRAN	LB	15.65	.50	7.82
2,4-DB	LB	5.66	.10	.57
LOROX	LB	8.50	.50	4.25
SPECIAL EQUIPMENT	ACRE	7.29	1.00	7.29
EQUIPMENT	ACRE	3.97	1.00	3.97
TRACTOR	ACRE	10.97	1.00	10.97
INT ON OP CAP	ACRE	7.21	1.00	7.21
HAUL	BU	.11	25.00	2.75
TOTAL DIRECT EXPENSE				103.93
RETURNS ABOVE DIRECT EXPENSES				102.32
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	11.79	1.00	11.79
EQUIPMENT	ACRE	9.00	1.00	9.00
TRACTOR	ACRE	10.17	1.00	10.17
TOTAL FIXED EXPENSE				30.96
TOTAL SPECIFIED EXPENSES				134.89
RETURNS ABOVE SPECIFIED EXPENSES				71.36

TABLE 11. ESTIMATED COST PER ACRE, SOYBEANS, USUAL INPUT PRACTICES, 8 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	---TRACTOR---		---EQUIPMENT---		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
DOLLARS									
CUSTOM LIME X1/4	11	.00	.00	.00	.00	.00	.00	11.00	11.00
DISK, 28FT.	3	.92	.86	.50	1.06	.33	.00	.00	3.67
CHISEL PLOW, 21FT.	4	1.29	1.20	.40	1.06	.47	.00	.00	4.42
APPLY FERTILIZER	5	.92	.86	.68	1.33	.33	17.70 ^{1/}	.00	21.82
DISK + INC, 28FT.	5	1.20	1.12	.70	1.49	.44	4.93 ^{2/}	.00	9.87
HARROW	5	.81	.76	.05	.12	.29	.00	.00	2.04
PLANT + PRE	5	1.21	1.13	.66	1.74	.88	18.35 ^{3/}	.00	23.99
PLANTING TRAILER	5	.53	.47	.03	.07	.26	.00	.00	1.35
CULT + POST EARLY	6	1.66	1.55	.48	1.10	.60	7.82 ^{4/}	.00	13.21
CULT + POST LATE	6	1.20	1.12	.34	.79	.44	4.82 ^{5/}	.00	8.69
COMBINE, 20FT.	10	.00	.00	6.13	10.41	1.03	.00	.00	17.57
HAUL	10	.00	.00	.00	.00	.00	.00	2.75	2.75
TOTAL SPECIFIED COSTS		9.73	9.06	9.98	19.16	5.09	53.62	13.75	120.39
INTEREST ON OPERATING CAPITAL									6.97
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									127.36

^{1/}Fertilizer, 0-15-30. ^{2/}Treflan. ^{3/}Sencor and Seed. ^{4/}Basagran. ^{5/}Lorox and 2,4-DB.

TABLE 12. ESTIMATED COSTS AND RETURNS PER ACRE
 SOYBEANS, USUAL INPUT PRACTICES, 8 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL
 BROWN LOAM OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
SOYBEAN SEED	BU.	8.25000	25.00	206.25
TOTAL INCOME				206.25
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	1.44	5.09
SPECIAL LABOR	HOUR	4.50	.23	1.03
CUSTOM LIME X1/4	TON	22.00	.50	11.00
0=15=30	CWT	8.85	2.00	17.70
TREFLAN	LB	6.57	.75	4.93
SENCOR	LB	16.80	.30	4.99
SEED	LB	.27	49.50	13.36
BASAGRAN	LB	15.65	.50	7.82
2,4=DB	LB	5.66	.10	.57
LOROX	LB	8.50	.50	4.25
SPECIAL EQUIPMENT	ACRE	6.13	1.00	6.13
EQUIPMENT	ACRE	3.85	1.00	3.85
TRACTOR	ACRE	9.73	1.00	9.73
INT ON OP CAP	ACRE	6.97	1.00	6.97
HAUL	BU	.11	25.00	2.75
TOTAL DIRECT EXPENSE				99.14
RETURNS ABOVE DIRECT EXPENSES				107.11
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	10.41	1.00	10.41
EQUIPMENT	ACRE	8.75	1.00	8.75
TRACTOR	ACRE	9.06	1.00	9.06
TOTAL FIXED EXPENSE				28.22
TOTAL SPECIFIED EXPENSES				127.36
RETURNS ABOVE SPECIFIED EXPENSES				78.89

TABLE 13 .ESTIMATED COST PER ACRE, SOYBEANS, USUAL INPUT PRACTICES, 6 ROW EQUIPMENT, 30 INCH ROW SPACING, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
CUSTOM LIME X1/4	11	.00	.00	.00	.00	.00	.00	11.00	11.00
DISK 21 FT.	3	1.07	.99	.59	1.26	.47	.00	.00	4.38
CHISEL PLOW 16 FT	4	1.68	1.56	.28	.73	.74	.00	.00	4.99
APPLY FERTILIZER	5	.76	.71	.68	1.33	.33	17.70 ^{1/}	.00	21.52
DISK + INC. 21FT.	5	1.37	1.28	.78	1.67	.60	4.93 ^{2/}	.00	10.63
HARROW	5	.84	.78	.04	.11	.37	.00	.00	2.14
PLANT + PRE	5	2.01	1.87	.88	2.31	1.77	19.65 ^{3/}	.00	28.49
PLANTING TRAILER	5	.53	.47	.03	.07	.26	.00	.00	1.35
CULT POST EARLY	6	2.37	2.20	.60	1.37	1.04	9.86 ^{4/}	.00	17.43
CULT + POST LATE	6	1.83	1.70	.46	1.06	.80	6.09 ^{5/}	.00	11.95
COMBINE, 13FT	10	.00	.00	7.29	11.79	1.62	.00	.00	20.70
HAUL	10	.00	.00	.00	.00	.00	.00	2.75	2.75
TOTAL SPECIFIED COSTS		12.46	11.56	11.64	21.70	8.00	58.23	13.75	137.33
INTEREST ON OPERATING CAPITAL									7.70
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									145.03

^{1/}Fertilizer, 0-15-30. ^{2/}Treflan. ^{3/}Sencor and Seed. ^{4/}Basagran. ^{5/}Lorox and 2,4-DB.

TABLE 14 . ESTIMATED COSTS AND RETURNS PER ACRE
 SOYBEANS, USUAL INPUT PRACTICES, 6 ROW EQUIPMENT, 30 INCH ROW SPACING, CENTRAL
 BROWN LOAM OF MISSISSIPPI, 1981

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
SOYBEAN SEED	BU.	8.25000	25.00	206.25
TOTAL INCOME				206.25
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	2.26	8.00
SPECIAL LABOR	HOUR	4.50	.36	1.62
CUSTOM LIME X1/4	TON	22.00	.50	11.00
0-15-30	CWT	8.85	2.00	17.70
TREFLAN	LB	6.57	.75	4.93
SENCOR	LB	16.80	.37	6.28
SEED	LB	.27	49.50	13.36
BASAGRAN	LB	15.65	.63	9.86
LOROX	LB	8.50	.63	5.36
2,4-DB	LB	5.66	.13	.74
SPECIAL EQUIPMENT	ACRE	7.29	1.00	7.29
EQUIPMENT	ACRE	4.35	1.00	4.35
TRACTOR	ACRE	12.46	1.00	12.46
INT ON OP CAP	ACRE	7.70	1.00	7.70
HAUL	BU	.11	25.00	2.75
TOTAL DIRECT EXPENSE				111.78
RETURNS ABOVE DIRECT EXPENSES				94.47
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	11.79	1.00	11.79
EQUIPMENT	ACRE	9.91	1.00	9.91
TRACTOR	ACRE	11.56	1.00	11.56
TOTAL FIXED EXPENSE				33.25
TOTAL SPECIFIED EXPENSES				145.03
RETURNS ABOVE SPECIFIED EXPENSES				61.22

TABLE 15 ESTIMATED COST PER ACRE, SOYBEANS, USUAL INPUT PRACTICES, 8 ROW EQUIPMENT, 30 INCH ROW SPACING, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
-----DOLLARS-----									
CUSTOM LIME X1/4	11	.00	.00	.00	.00	.00	.00	11.00	11.00
DISK 28 FT.	3	.92	.86	.50	1.06	.33	.00	.00	3.67
CHISEL PLOW 21 FT.	4	1.29	1.20	.40	1.06	.47	.00	.00	4.42
APPLY FERTILIZER	5	.92	.86	.68	1.33	.33	17.70 ^{1/}	.00	21.82
DISK + INC. 28FT.	5	1.20	1.12	.70	1.49	.44	4.93 ^{2/}	.00	9.87
HARROW	5	.81	.76	.05	.12	.29	.00	.00	2.04
PLANT + PRE	5	1.62	1.51	.86	2.25	1.18	19.65 ^{3/}	.00	27.07
PLANTING TRAILER	5	.53	.47	.03	.07	.26	.00	.00	1.35
CULT POST EARLY	6	2.21	2.06	.52	1.24	.80	9.86 ^{4/}	.00	16.69
CULT + POST LATE	6	1.56	1.46	.37	.85	.57	6.09 ^{5/}	.00	10.90
COMBINE, 20FT.	10	.00	.00	6.13	10.41	1.03	.00	.00	17.57
HAUL	10	.00	.00	.00	.00	.00	.00	2.75	2.75
TOTAL SPECIFIED COSTS		11.05	10.29	10.25	19.88	5.71	58.23	13.75	129.17
INTEREST ON OPERATING CAPITAL									7.43
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									136.59

^{1/}Fertilizer, 0-15-30. ^{2/}Treflan. ^{3/}Sencor and Seed. ^{4/}Basagran. ^{5/}Lorox and 2,4-DB.

TABLE 16 . ESTIMATED COSTS AND RETURNS PER ACRE
 SOYBEANS, USUAL INPUT PRACTICES, 8 ROW EQUIPMENT, 30 INCH ROW SPACING, CENTRAL
 BROWN LOAM OF MISSISSIPPI, 1981

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
SOYBEAN SEED	BU.	8.25000	25.00	206.25
TOTAL INCOME				206.25
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	1.63	5.71
SPECIAL LABOR	HOUR	4.50	.23	1.03
CUSTOM LIME X1/4	TON	22.00	.50	11.00
0-15-30	CWT	8.85	2.00	17.70
TREFLAN	LB	6.57	.75	4.93
SENCOR	LB	16.80	.37	6.28
SEED	LB	.27	49.50	13.36
BASAGRAN	LB	15.65	.63	9.86
LOROX	LB	8.50	.63	5.36
2,4-DB	LB	5.66	.13	.74
SPECIAL EQUIPMENT	ACRE	6.13	1.00	6.13
EQUIPMENT	ACRE	4.12	1.00	4.12
TRACTOR	ACRE	11.05	1.00	11.05
INT ON OP CAP	ACRE	7.43	1.00	7.43
HAUL	BU	.11	25.00	2.75
TOTAL DIRECT EXPENSE				106.41
RETURNS ABOVE DIRECT EXPENSES				99.84
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	10.41	1.00	10.41
EQUIPMENT	ACRE	9.47	1.00	9.47
TRACTOR	ACRE	10.29	1.00	10.29
TOTAL FIXED EXPENSE				30.18
TOTAL SPECIFIED EXPENSES				136.59
RETURNS ABOVE SPECIFIED EXPENSES				69.66

TABLE 17. ESTIMATED COST PER ACRE, DRILLED SOYBEANS, USUAL INPUT PRACTICES, 4 ROW EQUIPMENT, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
-----DOLLARS-----									
CUSTOM LIME X1/4	11	.00	.00	.00	.00	.00	.00	11.00	11.00
CHISEL PLOW, 12FT.	3	2.06	1.82	.30	.78	1.00	.00	.00	5.96
DISK, 14FT.	4	1.58	1.40	.45	.96	.77	.00	.00	5.15
APPLY FERTILIZER	5	.68	.61	.68	1.33	.33	17.70 ^{1/}	.00	21.34
DISK + INC, 14FT.	5	1.78	1.58	.73	1.55	.87	22.45 ^{2/}	.00	28.97
HARROW	5	1.05	.93	.04	.10	.52	.00	.00	2.65
GRAIN DRILL, 12FT.	5	1.81	1.60	.00	.00	1.77	20.79 ^{3/}	.00	25.97
PLANTING TRAILER	5	.53	.47	.03	.07	.26	.00	.00	1.35
APPLY HERB GROUND	5	.55	.49	.67	.94	.27	3.79 ^{4/}	.00	6.71
APPLY HERB GROUND	6	.55	.49	.67	.94	.27	11.74 ^{5/}	.00	14.65
COMBINE, 13FT.	10	.00	.00	7.29	11.79	1.62	.00	.00	20.70
HAUL	10	.00	.00	.00	.00	.00	.00	2.75	2.75
TOTAL SPECIFIED COSTS		10.58	9.38	10.87	18.45	7.68	76.48	13.75	147.19
INTEREST ON OPERATING CAPITAL									9.00
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									156.19

^{1/}Fertilizer, 0-15-30. ^{2/}Sencor and Treflan. ^{3/}Seed. ^{4/}Dinitro. ^{5/}Basagran.

TABLE 18 . ESTIMATED COSTS AND RETURNS PER ACRE
 DRILLED SOYBEANS, USUAL INPUT PRACTICES, 4 ROW EQUIPMENT, CENTRAL BROWN LOAM
 OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
SOYBEAN SEED	BU.	8.25000	25.00	206.25
TOTAL INCOME				206.25
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	2.17	7.68
SPECIAL LABOR	HOUR	4.50	.36	1.62
CUSTOM LIME X1/4	TON	22.00	.50	11.00
0-15-30	CWT	8.85	2.00	17.70
SENCOR	LB	16.80	.75	12.60
TREFLAN	LB	6.57	1.50	9.85
SEED	LB	2.27	77.00	20.79
DINITRO	LB	2.53	1.50	3.79
BASAGRAN	LB	15.65	.75	11.74
SPECIAL EQUIPMENT	ACRE	7.29	1.00	7.29
EQUIPMENT	ACRE	3.58	1.00	3.58
TRACTOR	ACRE	10.58	1.00	10.58
INT ON OP CAP	ACRE	9.00	1.00	9.00
HAUL	BU	.11	25.00	2.75
TOTAL DIRECT EXPENSE				128.36
RETURNS ABOVE DIRECT EXPENSES				77.89
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	11.79	1.00	11.79
EQUIPMENT	ACRE	6.66	1.00	6.66
TRACTOR	ACRE	9.38	1.00	9.38
TOTAL FIXED EXPENSE				27.83
TOTAL SPECIFIED EXPENSES				156.19
RETURNS ABOVE SPECIFIED EXPENSES				50.06

TABLE 19 .ESTIMATED COST PER ACRE, DRILLED SOYBEANS, USUAL INPUT PRACTICES, 6 ROW EQUIPMENT, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
DOLLARS									
CUSTOM LIME X1/4	11	.00	.00	.00	.00	.00	.00	11.00	11.00
CHISEL PLOW, 16FT.	3	1.68	1.56	.28	.73	.74	.00	.00	4.99
DISK, 21FT.	4	1.07	.99	.59	1.26	.47	.00	.00	4.38
APPLY FERTILIZER	5	.76	.71	.68	1.33	.33	17.70 ^{1/}	.00	21.52
DISK + INC, 21FT.	5	1.37	1.28	.78	1.67	.60	22.45 ^{2/}	.00	28.16
HARROW	5	.84	.78	.04	.11	.37	.00	.00	2.14
GRAIN DRILL, 12FT.	5	2.01	1.87	.00	.00	1.77	20.79 ^{3/}	.00	26.44
PLANTING TRAILER	5	.53	.47	.03	.07	.26	.00	.00	1.35
APPLY HERB AIR	5	.00	.00	.00	.00	.00	3.79 ^{4/}	2.50	6.29
APPLY HERB AIR	6	.00	.00	.00	.00	.00	11.74 ^{5/}	2.50	14.24
COMBINE, 13FT.	10	.00	.00	7.29	11.79	1.62	.00	.00	20.70
HAUL	10	.00	.00	.00	.00	.00	.00	2.75	2.75
TOTAL SPECIFIED COSTS		8.26	7.66	9.70	16.96	6.16	76.48	18.75	143.96
INTEREST ON OPERATING CAPITAL									8.96
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									152.92

^{1/}Fertilizer, 0-15-30. ^{2/}Sencor and Treflan. ^{3/}Seed. ^{4/}Dinitro. ^{5/}Basagran.

TABLE 20. ESTIMATED COSTS AND RETURNS PER ACRE OF FULFILLED SOYBEANS, USUAL INPUT PRACTICES, 6 ROW EQUIPMENT, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
SOYBEAN SEED	BU.	8.25000	25.00	206.25
TOTAL INCOME				206.25
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	1.71	6.16
SPECIAL LABOR	HOUR	4.50	.36	1.62
CUSTOM LIME X1/4	TON	22.00	.50	11.00
0-15-30	CWT	8.85	2.00	17.70
SENCOR	LB	16.80	.75	12.60
TREFLAN	LB	6.57	1.50	9.85
SEED	LB	.27	77.00	20.79
DINITRO	LB	2.53	1.50	3.79
APPLY HERB AIR	ACRE	2.50	2.00	5.00
BASAGRAN	LB	15.65	.75	11.74
SPECIAL EQUIPMENT	ACRE	7.29	1.00	7.29
EQUIPMENT	ACRE	2.41	1.00	2.41
TRACTOR	ACRE	8.26	1.00	8.26
INT ON OP CAP	ACRE	8.96	1.00	8.96
HAUL	BU	.11	25.00	2.75
TOTAL DIRECT EXPENSE				128.31
RETURNS ABOVE DIRECT EXPENSES				77.94
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	11.79	1.00	11.79
EQUIPMENT	ACRE	5.17	1.00	5.17
TRACTOR	ACRE	7.66	1.00	7.66
TOTAL FIXED EXPENSE				24.61
TOTAL SPECIFIED EXPENSES				152.92
RETURNS ABOVE SPECIFIED EXPENSES				53.33

TABLE 21. ESTIMATED COST PER ACRE, DRILLED SOYBEANS, USUAL INPUT PRACTICES, 8 ROW EQUIPMENT, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
DOLLARS									
CUSTOM LIME X1/4	11	.00	.00	.00	.00	.00	.00	11.00	11.00
CHISEL PLOW, 21FT.	3	1.29	1.20	.40	1.06	.47	.00	.00	4.42
DISK, 28FT.	4	.92	.86	.50	1.06	.33	.00	.00	3.67
APPLY FERTILIZER	5	.92	.86	.68	1.33	.33	17.70 ^{1/}	.00	21.82
DISK + INC, 28FT.	5	1.20	1.12	.70	1.49	.44	22.45 ^{2/}	.00	27.39
HARROW	5	.81	.76	.05	.12	.29	.00	.00	2.04
GRAIN DRILL, 32FT.	5	.91	.85	1.07	2.41	.66	20.79 ^{3/}	.00	26.69
PLANTING TRAILER	5	.53	.47	.03	.07	.26	.00	.00	1.35
APPLY HERB AIR	5	.00	.00	.00	.00	.00	3.79 ^{4/}	2.50	6.29
APPLY HERB ATR	6	.00	.00	.00	.00	.00	11.74 ^{5/}	2.50	14.24
COMBINE, 20FT.	10	.00	.00	6.13	10.41	1.03	.00	.00	17.57
HAUL	10	.00	.00	.00	.00	.00	.00	2.75	2.75
TOTAL SPECIFIED COSTS		6.57	6.11	9.56	17.95	3.83	76.48	18.75	139.25
INTEREST ON OPERATING CAPITAL									8.74
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									147.99

^{1/}Fertilizer, 0-15-30. ^{2/}Sencor and Treflan. ^{3/}Seed. ^{4/}Dinitro. ^{5/}Basagran.

TABLE 22 .ESTIMATED COSTS AND RETURNS PER ACRE
 DRILLED SOYBEANS, USUAL INPUT PRACTICES, 8 ROW EQUIPMENT, CENTRAL BROWN LOAM
 OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
SOYBEAN SEED	BU.	8.25000	25.00	206.25
TOTAL INCOME				206.25
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	1.06	3.83
SPECIAL LABOR	HOUR	4.50	.23	1.03
CUSTOM LIME X1/4	TON	22.00	.50	11.00
0-15-30	CWT	8.85	2.00	17.70
SENCOR	LB	16.80	.75	12.60
TREFLAN	LB	6.57	1.50	9.85
SEED	LB	.27	77.00	20.79
DINITRO	LB	2.53	1.50	3.79
APPLY HERB AIR	ACRE	2.50	2.00	5.00
BASAGRAN	LB	15.65	.75	11.74
SPECIAL EQUIPMENT	ACRE	6.13	1.00	6.13
EQUIPMENT	ACRE	3.43	1.00	3.43
TRACTOR	ACRE	6.57	1.00	6.57
INT ON OP CAP	ACRE	8.74	1.00	8.74
HAUL	BU	.11	25.00	2.75
TOTAL DIRECT EXPENSE				123.93
RETURNS ABOVE DIRECT EXPENSES				82.32
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	10.41	1.00	10.41
EQUIPMENT	ACRE	7.54	1.00	7.54
TRACTOR	ACRE	6.11	1.00	6.11
TOTAL FIXED EXPENSE				24.06
TOTAL SPECIFIED EXPENSES				147.99
RETURNS ABOVE SPECIFIED EXPENSES				58.26

TABLE 23. ESTIMATED COST PER ACRE, SOLID COTTON, USUAL INPUT PRACTICES, 4 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
DOLLARS									
STALK SHREDDER, 2ROW	12	2.06	1.82	.12	.52	1.00	.00	.00	5.52
APPLY LIME X1/4	12	.00	.00	.00	.00	.00	.00	11.00	11.00
DISK, 14FT.	3	1.58	1.40	.45	.96	.77	.00	.00	5.15
CHISEL PLOW, 12FT.	4	2.06	1.82	.30	.78	1.00	.00	.00	5.96
APPLY FERTILIZER	4	.68	.61	.68	1.33	.33	25.35 ^{1/}	.00	28.99
DISK + INC, 14FT.	4	1.78	1.58	.73	1.55	.87	4.93 ^{2/}	.00	11.44
DISK BED, 4 ROW	4	1.44	1.27	.34	.67	.70	.00	.00	4.43
REBED, 4 ROW	5	1.44	1.27	.34	.67	.70	.00	.00	4.43
ROW CONDITION	5	1.05	.93	.04	.10	.52	.00	.00	2.65
PLANT + PRE	5	1.66	1.47	.60	1.58	1.62	12.10 ^{3/}	.00	19.04
PLANTING TRAILER	5	.68	.60	.03	.09	.33	.00	.00	1.73
CULTIVATE EARLY	5	1.71	1.52	.27	.61	.84	.00	.00	4.95
APPLY INS AIR X1/2	5	.00	.00	.00	.00	.00	.49 ^{4/}	1.00	1.49
CULT + POST EARLY	6	2.40	2.12	.55	1.26	1.17	1.33 ^{5/}	.00	8.83
LIQUID FERT APPL	6	1.23	1.09	.42	.82	1.21	12.36 ^{6/}	.00	17.13
INSECT SCOUTING	6	.00	.00	.00	.00	.00	.00	3.75	3.75
APPLY INS AIR X1/3	6	.00	.00	.00	.00	.00	.34 ^{7/}	.66	1.00
APPLY INS AIR X3	6	.00	.00	.00	.00	.00	3.22 ^{8/}	6.00	9.22
CULT POST LATE	6	1.92	1.70	.44	1.01	.94	2.98 ^{9/}	.00	8.98
CULT + POST LATE	7	1.92	1.70	.44	1.01	.94	8.50 ^{10/}	.00	14.51
APPLY INS AIR X3	7	.00	.00	.00	.00	.00	10.08 ^{11/}	6.00	16.08
APPLY INS AIR X3	8	.00	.00	.00	.00	.00	16.42 ^{12/}	6.00	22.42
APPLY INS AIR	9	.00	.00	.00	.00	.00	7.01 ^{13/}	2.00	9.01
APPLY DEF-AIR	9	.00	.00	.00	.00	.00	3.29 ^{14/}	2.50	5.79
1ST PICK, 2 ROW	10	.00	.00	21.59	39.84	5.89	.00	.00	67.32
HAUL	10	.00	.00	.00	.00	.00	.00	10.60	10.60
2ND PICK, 2 ROW	10	.00	.00	15.83	29.22	4.32	.00	.00	49.37
HAUL	10	.00	.00	.00	.00	.00	.00	3.00	3.00
GIN	10	.00	.00	.00	.00	.00	.00	54.40	54.40
TOTAL SPECIFIED COSTS		23.60	20.91	43.18	82.02	23.16	108.40	106.91	408.18
INTEREST ON OPERATING CAPITAL									14.35
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									422.53

^{1/}Fertilizer, 13-13-13B. ^{2/}Treflan. ^{3/}Cotoran and Seed. ^{4/}Bidrin. ^{5/}MSMA. ^{6/}Fertilizer, Liquid Urea. ^{7/}Cygon.
^{8/}Methyl Parathion. ^{9/}Caparol + MSMA. ^{10/}Lorox. ^{11/}EPN + Methyl Parathion. ^{12/}Methyl Parathion and Pydrin.
^{13/}EPN + Methyl Parathion and Lannate. ^{14/}Methyl Parathion and Defoliant.

TABLE 24 . ESTIMATED COSTS AND RETURNS PER ACRE
 SOLID COTTON, USUAL INPUT PRACTICES, 4 ROW EQUIPMENT, 38 INCH ROW SPACING,
 CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
COTTON LINT	LB.	.78000	680.00	530.40
COTTON SEED	LB.	.06000	1054.00	63.24
TOTAL INCOME				593.64
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	6.47	23.16
SPECIAL LABOR	HOUR	4.50	1.30	5.85
APPLY LIME X1/4	TON	22.00	.50	11.00
13-13-13-B	CWT	8.45	3.00	25.35
TREFLAN	LB	6.57	.75	4.93
COTORAN	LB	5.45	1.10	5.99
SEED, DBL TREATED	LB	.37	16.50	6.10
BIDRIN	LB	4.94	.10	.49
APPLY INS AIR X1/2	ACRE	2.00	.50	1.00
MSMA	LB	1.66	.80	1.33
FERT UREA LIQUID	CWT	6.18	2.00	12.36
INSECT SCOUTING	ACRE	3.75	1.00	3.75
CYGON 400	LB	5.16	.07	.34
APPLY INS AIR X1/3	ACRE	2.00	.33	.66
METHYL PARATHION	LB	2.15	3.25	6.99
APPLY INS AIR X3	ACRE	2.00	9.00	18.00
CAPAROL + MSMA	PT	1.86	1.60	2.98
LOROX	LB	8.50	1.00	8.50
EPN + METHYL PARA	PT	2.10	6.40	13.44
PYDRIN	LB	44.00	.30	13.20
LANNATE	LB	11.05	.33	3.65
APPLY INS AIR	ACRE	2.00	1.00	2.00
DEFOLIANT	LB	2.75	1.00	2.75
APPLY DEF-AIR	ACRE	2.50	1.00	2.50
SPECIAL EQUIPMENT	ACRE	37.42	1.00	37.42
EQUIPMENT	ACRE	5.76	1.00	5.76
TRACTOR	ACRE	23.60	1.00	23.60
INT ON OP CAP	ACRE	14.35	1.00	14.35
HAUL	LB	.02	680.00	13.60
GIN	LB	.08	680.00	54.40
TOTAL DIRECT EXPENSE				319.60
RETURNS ABOVE DIRECT EXPENSES				274.04
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	69.06	1.00	69.06
EQUIPMENT	ACRE	12.96	1.00	12.96
TRACTOR	ACRE	20.91	1.00	20.91
TOTAL FIXED EXPENSE				102.93
TOTAL SPECIFIED EXPENSES				422.53
RETURNS ABOVE SPECIFIED EXPENSES				171.11

TABLE 25. ESTIMATED COST PER ACRE, SOLID COTTON, USUAL INPUT PRACTICES, 6 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
DOLLARS									
STALK SHREDDER, 2ROW	12	2.29	2.13	.12	.52	1.00	.00	.00	6.06
APPLY LIME X1/4	12	.00	.00	.00	.00	.00	.00	11.00	11.00
DISK, 21FT.	3	1.07	.99	.59	1.26	.47	.00	.00	4.38
CHISEL PLOW, 16FT.	4	1.68	1.56	.28	.73	.74	.00	.00	4.99
APPLY FERTILIZER	4	.76	.71	.68	1.33	.33	25.35 ^{1/}	.00	29.17
DISK + INC, 21FT.	4	1.37	1.28	.78	1.67	.60	4.93 ^{2/}	.00	10.63
DISK BED, 6 ROW	4	.99	.92	.31	.60	.44	.00	.00	3.26
REBED, 6 ROW	5	.99	.92	.31	.60	.44	.00	.00	3.26
ROW CONDITION	5	.84	.78	.04	.11	.37	.00	.00	2.14
PLANT + PRE	5	1.51	1.40	.68	1.80	1.33	12.10 ^{3/}	.00	18.83
PLANTING TRAILER	5	.68	.60	.03	.09	.33	.00	.00	1.73
CULTIVATE EARLY	5	1.60	1.49	.31	.71	.70	.00	.00	4.81
APPLY INS AIR X1/2	5	.00	.00	.00	.00	.00	.49 ^{4/}	1.00	1.49
CULT + POST EARLY	6	1.83	1.70	.50	1.16	.80	1.33 ^{5/}	.00	7.32
LIQUID FERT APPL	6	.92	.85	.35	.68	.80	12.36 ^{6/}	.00	15.96
INSECT SCOUTING	6	.00	.00	.00	.00	.00	.00	3.75	3.75
APPLY INS AIR X1/3	6	.00	.00	.00	.00	.00	.34 ^{7/}	.66	1.00
APPLY INS AIR X3	6	.00	.00	.00	.00	.00	3.22 ^{8/}	6.00	9.22
CULT POST LATE	6	1.37	1.28	.38	.87	.60	2.98 ^{9/}	.00	7.48
CULT + POST LATE	7	1.37	1.28	.38	.87	.60	8.50 ^{10/}	.00	13.00
APPLY INS AIR X3	7	.00	.00	.00	.00	.00	10.08 ^{11/}	6.00	16.08
APPLY INS AIR X3	8	.00	.00	.00	.00	.00	16.42 ^{12/}	6.00	22.42
APPLY INS AIR	9	.00	.00	.00	.00	.00	7.01 ^{13/}	2.00	9.01
APPLY DEF-AIR	9	.00	.00	.00	.00	.00	3.29 ^{14/}	2.50	5.79
1ST PICK, 2 ROW	10	.00	.00	21.59	39.84	5.89	.00	.00	67.32
HAUL	10	.00	.00	.00	.00	.00	.00	10.60	10.60
2ND PICK, 2 ROW	10	.00	.00	15.83	29.22	4.32	.00	.00	49.37
HAUL	10	.00	.00	.00	.00	.00	.00	3.00	3.00
GIN	10	.00	.00	.00	.00	.00	.00	54.40	54.40
TOTAL SPECIFIED COSTS		19.28	17.89	43.17	82.06	19.77	108.40	106.91	397.48
INTEREST ON OPERATING CAPITAL									13.80
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									411.28

1/ Fertilizer, 13-13-13B. 2/ Treflan. 3/ Cotoran and Seed. 4/ Bidrin. 5/ MSMA. 6/ Fertilizer, Liquid Urea. 7/ Cygon.
 8/ Methyl Parathion. 9/ Caparol + MSMA. 10/ Lorox. 11/ EPN + Methyl Parathion. 12/ Methyl Parathion and Pydrin.
 13/ EPN + Methyl Parathion and Lannate. 14/ Methyl Parathion and Defoliant.

TABLE 26 . ESTIMATED COSTS AND RETURNS PER ACRE
SOLID COTTON, USUAL INPUT PRACTICES, 6 ROW EQUIPMENT, 38 INCH ROW SPACING,
CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
COTTON LINT	LB.	.78000	680.00	530.40
COTTON SEED	LB.	.06000	1054.00	63.24
TOTAL INCOME				593.64
DIRECT EXPENSES				
OPERATOR LABOR	HOURL	3.35	5.45	19.77
SPECIAL LABOR	HOURL	4.50	1.30	5.85
APPLY LIME X1/4	TON	22.00	.50	11.00
13-13-13-B	CWT	8.45	3.00	25.35
TREFLAN	LB	6.57	.75	4.93
COTORAN	LB	5.45	1.10	5.99
SEED, DBL TREATED	LB	.37	16.50	6.10
BIDRIN	LB	4.94	.10	.49
APPLY INS AIR X1/2	ACRE	2.00	.50	1.00
MSMA	LB	1.66	.80	1.33
FERT UREA LIQUID	CWT	6.18	2.00	12.36
INSECT SCOUTING	ACRE	3.75	1.00	3.75
CYCON 400	LB	5.16	.07	.34
APPLY INS AIR X1/3	ACRE	2.00	.33	.66
METHYL PARATHION	LB	2.15	3.25	6.99
APPLY INS AIR X3	ACRE	2.00	9.00	18.00
CAPAROL + MSMA	PT	1.86	1.60	2.98
LOROX	LB	8.50	1.00	8.50
EPN + METHYL PARA	PT	2.10	6.40	13.44
PYDRIN	LB	44.00	.30	13.20
LANNATE	LB	11.05	.33	3.65
APPLY INS AIR	ACRE	2.00	1.00	2.00
DEFOLIANT	LB	2.75	1.00	2.75
APPLY DEF-AIR	ACRE	2.50	1.00	2.50
SPECIAL EQUIPMENT	ACRE	37.42	1.00	37.42
EQUIPMENT	ACRE	5.75	1.00	5.75
TRACTOR	ACRE	19.28	1.00	19.28
INT ON OP CAP	ACRE	13.80	1.00	13.80
HAUL	LB	.02	680.00	13.60
GIN	LB	.08	680.00	54.40
TOTAL DIRECT EXPENSE				311.33
RETURNS ABOVE DIRECT EXPENSES				282.31
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	69.06	1.00	69.06
EQUIPMENT	ACRE	13.00	1.00	13.00
TRACTOR	ACRE	17.89	1.00	17.89
TOTAL FIXED EXPENSE				99.95
TOTAL SPECIFIED EXPENSES				411.28
RETURNS ABOVE SPECIFIED EXPENSES				182.36

TABLE 27. ESTIMATED COST PER ACRE, SOLID COTTON, USUAL INPUT PRACTICES, 8 ROW EQUIPMENT, 38 INCH ROW SPACING, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
-----DOLLARS-----									
STALK SHREDDER, 2ROW	12	2.76	2.58	.12	.52	1.00	.00	.00	6.98
APPLY LIME X1/4	12	.00	.00	.00	.00	.00	.00	11.00	11.00
DISK, 28FT.	3	.92	.86	.50	1.06	.33	.00	.00	3.67
CHISEL PLOW, 21FT.	4	1.29	1.20	.40	1.06	.47	.00	.00	4.42
APPLY FERTILIZER	4	.92	.86	.68	1.33	.33	25.35 ^{1/}	.00	29.47
DISK + INC, 28FT.	4	1.20	1.12	.70	1.49	.44	4.93 ^{2/}	.00	9.87
DISK BED, 8 ROW	4	.92	.86	.30	.58	.33	.00	.00	2.99
REBED, 8 ROW	5	.92	.86	.30	.58	.33	.00	.00	2.99
ROW CONDITION	5	.81	.76	.05	.12	.29	.00	.00	2.04
PLANT + PRE	5	1.21	1.13	.66	1.74	.88	12.10 ^{3/}	.00	17.73
PLANTING TRAILER	5	.68	.60	.03	.09	.33	.00	.00	1.73
CULTIVATE EARLY	5	1.47	1.37	.31	.71	.54	.00	.00	4.40
APPLY INS AIR X1/2	5	.00	.00	.00	.00	.00	.49 ^{4/}	1.00	1.49
CULT + POST EARLY	6	1.66	1.55	.48	1.10	.60	1.33 ^{5/}	.00	6.71
LIQUID FERT APPL	6	.74	.69	.28	.55	.54	12.36 ^{6/}	.00	15.15
INSECT SCOUTING	6	.00	.00	.00	.00	.00	.00	3.75	3.75
APPLY INS AIR X1/3	6	.00	.00	.00	.00	.00	.34 ^{7/}	.66	1.00
APPLY INS AIR X3	6	.00	.00	.00	.00	.00	3.22 ^{8/}	6.00	9.22
CULT POST LATE	6	1.20	1.12	.34	.79	.44	2.98 ^{9/}	.00	6.85
CULT + POST LATE	7	1.20	1.12	.34	.79	.44	8.50 ^{10/}	.00	12.38
APPLY INS AIR X3	7	.00	.00	.00	.00	.00	10.08 ^{11/}	6.00	16.08
APPLY INS AIR X3	8	.00	.00	.00	.00	.00	16.42 ^{12/}	6.00	22.42
APPLY INS AIR	9	.00	.00	.00	.00	.00	7.01 ^{13/}	2.00	9.01
APPLY DEF-AIR	9	.00	.00	.00	.00	.00	3.29 ^{14/}	2.50	5.79
1ST PICK, 2 ROW	10	.00	.00	21.59	39.84	5.89	.00	.00	67.32
HAUL	10	.00	.00	.00	.00	.00	.00	10.60	10.60
2ND PICK, 2 ROW	10	.00	.00	15.83	29.22	4.32	.00	.00	49.37
HAUL	10	.00	.00	.00	.00	.00	.00	3.00	3.00
GIN	10	.00	.00	.00	.00	.00	.00	54.40	54.40
TOTAL SPECIFIED COSTS		17.88	16.66	42.92	81.57	17.51	108.40	106.91	391.85
INTEREST ON OPERATING CAPITAL									13.54
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									405.39

^{1/}Fertilizer, 13-13-13B. ^{2/}Treflan. ^{3/}Cotoran and Seed. ^{4/}Bidrin. ^{5/}MSMA. ^{6/}Fertilizer, Liquid Urea. ^{7/}Cygon.
^{8/}Methyl Parathion. ^{9/}Caparol + MSMA. ^{10/}Lorox. ^{11/}EPN + Methyl Parathion. ^{12/}Methyl Parathion and Pydrin.
^{13/}EPN + Methyl Parathion. ^{14/}Methyl Parathion and Defoliant.

TABLE 28. ESTIMATED COSTS AND RETURNS PER ACRE
SOLID COTTON, USUAL INPUT PRACTICES, 8 ROW EQUIPMENT, 38 INCH ROW SPACING,
CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
COTTON LINT	LB.	.78000	680.00	530.40
COTTON SEED	LB.	.06000	1054.00	63.24
TOTAL INCOME				593.64
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	4.78	17.51
SPECIAL LABOR	HOUR	4.50	1.30	5.85
APPLY LIME X1/4	TON	22.00	.50	11.00
13-13-13-B	CWT	8.45	3.00	25.35
TREFLAN	LB	6.57	.75	4.93
COTORAN	LB	5.45	1.10	5.99
SEED, DBL TREATED	LB	.37	16.50	6.10
BIDRIN	LB	4.94	.10	.49
APPLY INS AIR X1/2	ACRE	2.00	.50	1.00
MSMA	LB	1.66	.80	1.33
FERT UREA LIQUID	CWT	6.18	2.00	12.36
INSECT SCOUTING	ACRE	3.75	1.00	3.75
CYGON 400	LB	5.16	.07	.34
APPLY INS AIR X1/3	ACRE	2.00	.33	.66
METHYL PARATHION	LB	2.15	3.25	6.99
APPLY INS AIR X3	ACRE	2.00	9.00	18.00
CAPAROL + MSMA	PT	1.86	1.60	2.98
LOROX	LB	8.50	1.00	8.50
EPN + METHYL PARA	PT	2.10	6.40	13.44
PYDRIN	LB	44.00	.30	13.20
LANNATE	LB	11.05	.33	3.65
APPLY INS AIR	ACRE	2.00	1.00	2.00
DEFOLIANT	LB	2.75	1.00	2.75
APPLY DEF-AIR	ACRE	2.50	1.00	2.50
SPECIAL EQUIPMENT	ACRE	37.42	1.00	37.42
EQUIPMENT	ACRE	5.50	1.00	5.50
TRACTOR	ACRE	17.88	1.00	17.88
INT ON OP CAP	ACRE	13.54	1.00	13.54
HAUL	LB	.02	680.00	13.60
GIN	LB	.08	680.00	54.40
TOTAL DIRECT EXPENSE				307.16
RETURNS ABOVE DIRECT EXPENSES				286.48
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	69.06	1.00	69.06
EQUIPMENT	ACRE	12.51	1.00	12.51
TRACTOR	ACRE	16.66	1.00	16.66
TOTAL FIXED EXPENSE				98.23
TOTAL SPECIFIED EXPENSES				405.39
RETURNS ABOVE SPECIFIED EXPENSES				188.25

TABLE 29. ESTIMATED COST PER ACRE, WHEAT FOR GRAIN, USUAL INPUT PRACTICES, 115=150 DBHP TRACTOR, CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

OPERATION DESCRIPTION	MONTH	TRACTOR		EQUIPMENT		LABOR COST	MATERIAL COST	MISC COST	TOTAL COST
		DIRECT COST	FIXED COST	DIRECT COST	FIXED COST				
-----DOLLARS-----									
APPLY FERT	9	.92	.86	.68	1.33	.33	20.20 ^{1/}	.00	24.32
CHISEL PLOW 21 FT X2	9	2.58	2.41	.80	2.12	.94	.00	.00	8.84
FIELD CULT 21 FT	10	.92	.86	.33	.86	.33	.00	.00	3.30
SECTION HARROW	10	.74	.69	.05	.11	.27	.00	.00	1.85
GRAIN DRILL 12 FT	10	2.43	2.27	.00	.00	1.77	14.08 ^{2/}	.00	20.55
APP FERT - AIR	3	.00	.00	.00	.00	.00	20.46 ^{3/}	6.50	26.96
APP 2,4-D - AIR	4	.00	.00	.00	.00	.00	4.48 ^{4/}	5.00	9.48
COMBINE 20 FT	6	.00	.00	6.13	10.41	1.03	.00	.00	17.57
GRAIN CART (250 BU)	6	1.10	1.03	.19	.45	.40	.00	.00	3.18
HAUL	6	.00	.00	.00	.00	.00	.00	3.85	3.85
BURN	6	.00	.00	.00	.00	.03	.00	.00	.03
TOTAL SPECIFIED COSTS		8.68	8.11	8.18	15.28	5.12	59.22	15.35	119.94
INTEREST ON OPERATING CAPITAL									7.52
TOTAL SPECIFIED COSTS INCLUDING INTEREST ON OPERATING CAPITAL									127.46

^{1/}Fertilizer, 8-24-24. ^{2/}Seed. ^{3/}Fertilizer, Solid Urea. ^{4/}2,4-D.

TABLE 30 .ESTIMATED COSTS AND RETURNS PER ACRE
WHEAT FOR GRAIN, USUAL INPUT PRACTICES, 115-150 DBHP TRACTOR,
CENTRAL BROWN LOAM OF MISSISSIPPI, 1981.

ITEM	UNIT	PRICE DOLLARS	QUANTITY	AMOUNT DOLLARS
INCOME				
WHEAT	BU	4.50000	35.00	157.50
TOTAL INCOME				157.50
DIRECT EXPENSES				
OPERATOR LABOR	HOUR	3.35	1.45	5.12
SPECIAL LABOR	HOUR	4.50	.23	1.03
FERT 8-24-24	CWT	10.10	2.00	20.20
SEED	LB	.16	88.00	14.08
FERT UREA-SOLID	CWT	10.23	2.00	20.46
APP FERT - AIR	CWT	3.25	2.00	6.50
2,4-D	LB	4.48	1.00	4.48
APP 2,4-D - AIR	ACRE	5.00	1.00	5.00
SPECIAL EQUIPMENT	ACRE	6.13	1.00	6.13
EQUIPMENT	ACRE	2.05	1.00	2.05
TRACTOR	ACRE	8.68	1.00	8.68
INT ON OP CAP	ACRE	7.52	1.00	7.52
HAUL	BU	.11	35.00	3.85
TOTAL DIRECT EXPENSE				104.07
RETURNS ABOVE DIRECT EXPENSES				53.43
FIXED EXPENSES				
SPECIAL EQUIPMENT	ACRE	10.41	1.00	10.41
EQUIPMENT	ACRE	4.87	1.00	4.87
TRACTOR	ACRE	8.11	1.00	8.11
TOTAL FIXED EXPENSE				23.39
TOTAL SPECIFIED EXPENSES				127.46
RETURNS ABOVE SPECIFIED EXPENSES				30.04

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In conformity with Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, Dr. T. K. Martin, Vice President, 610 Allen Hall, P. O. Drawer J, Mississippi State, Mississippi 39762, office telephone number 325-3221, has been designated as the responsible employee to coordinate efforts to carry out responsibilities and make investigation of complaints relating to nondiscrimination.