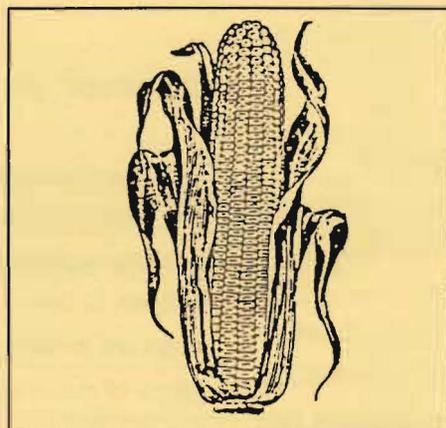


ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 198

CORN

LOAMY SOILS, FLOOD IRRIGATION



AUTHORS

CLYDE A. STUART
TONY E. WINDHAM

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

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Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

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SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS

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Nathan McKinney, Chairman	Ford L. Baldwin
Stanley L. Chapman	Charlie Guy
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Gary Cloud	Gus Lorenz
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UNIVERSITY OF ARKANSAS	ENTERPRISE:	CORN, 1993
COOPERATIVE	FILE NO.:	CN9301
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	LOAMY
	IRRIGATION:	FLOOD

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$28.50	_____
FERTILIZER	\$51.18	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$9.31	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$11.01	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$11.60	_____
REPAIRS	\$23.96	_____
LABOR	\$9.05	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$7.18	_____
REPAIRS	\$2.86	_____
IRRIGATION LABOR	\$5.88	_____
CUSTOM SPREAD	\$6.50	_____
CUSTOM HAUL	\$22.50	_____
CUSTOM DRY OR GINNING	\$25.50	_____
MISCELLANEOUS	\$1.25	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$7.63	_____
TOTAL SPECIFIED OPERATING COSTS	\$223.92	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHEL

	91.00	105.00	140.00	175.00	189.00
	\$2.27	\$2.02	\$1.60	\$1.35	\$1.28

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$40.71	_____
INTEREST	\$20.43	_____
TAXES & INSURANCE	\$5.71	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$66.85	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$290.77

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHEL

	91.00	105.00	140.00	175.00	189.00
	\$3.01	\$2.65	\$2.08	\$1.73	\$1.63

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1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
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ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
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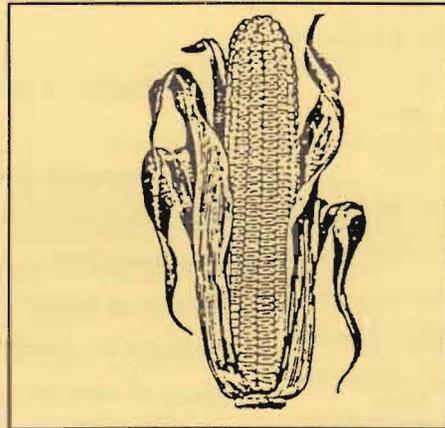
TB198-1180-11-92

ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 199

CORN

LOAMY SOILS, FURROW IRRIGATION



AUTHORS

CLYDE A. STUART
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UNIVERSITY OF ARKANSAS	ENTERPRISE: CORN, 1993
COOPERATIVE	FILE NO.: CN9302
EXTENSION	LOCATION: ARKANSAS
SERVICE	SOILS TYPE: LOAMY
	IRRIGATION: FURROW

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$28.50	_____
FERTILIZER	\$51.18	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$9.31	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$11.01	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$10.77	_____
REPAIRS	\$23.00	_____
LABOR	\$8.33	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$9.36	_____
REPAIRS	\$2.48	_____
IRRIGATION LABOR	\$7.94	_____
CUSTOM SPREAD	\$6.50	_____
CUSTOM HAUL	\$24.15	_____
CUSTOM DRY OR GINNING	\$27.37	_____
MISCELLANEOUS	\$5.93	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$7.94	_____
TOTAL SPECIFIED OPERATING COSTS	\$233.77	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

	YIELD IN BUSHELS				
	97.50	112.50	150.00	187.50	202.50
	\$2.21	\$1.96	\$1.56	\$1.32	\$1.24

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$38.52	_____
INTEREST	\$18.86	_____
TAXES & INSURANCE	\$5.27	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$62.64	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS	\$296.41	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

	YIELD IN BUSHELS				
	97.50	112.50	150.00	187.50	202.50
	\$2.85	\$2.52	\$1.98	\$1.65	\$1.55

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TB199-1010-11-92

ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 191

COTTON

LOAMY SOILS, SOLID PLANTED,
SOUTH OF I-40, EASTERN ARKANSAS



AUTHORS

BILLY E. HERRINGTON, JR.
CLYDE A. STUART
TONY E. WINDHAM

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Note: This year's cotton enterprise budgets do not list ginning costs as a specified operating cost. In addition, all cotton pickers have been changed from 2-row to 4-row. These changes resulted in a lower Total Specified Operating Cost than in recent years.

SEQUENCE OF OPERATIONS

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ACKNOWLEDGEMENTS EXTENSION COTTON COMMITTEE

Claude M. Bonner, Chairman	Charlie Guy
Gary Cloud	Gary Huitink
Billy E. Herrington	Donald R. Johhson
Terry Kirkpatrick	J. Scott McConnell
Clifford S. Snyder	Ples Spradley
Phil L. Tacker	Earl D. Vories
Marvin L. Wall	Robert G. Wells
Tony E. Windham	Cliff Coker

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UNIVERSITY OF ARKANSAS	ENTERPRISE: COTTON, SOLID PLANTED, 1993
COOPERATIVE	FILE NO.: COT9301
EXTENSION	LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
SERVICE	SOILS TYPE: LOAMY
	IRRIGATION: NONE

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.80	_____
FERTILIZER	\$38.54	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$22.59	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$56.25	_____
DEFOLIANT	\$6.69	_____
AERIAL APPLICATION	\$36.50	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$16.49	_____
REPAIRS	\$45.77	_____
LABOR	\$17.46	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$6.75	_____
CUSTOM HAUL	\$0.00	_____
GINNING (Cost assumed to be offset by seed value)	\$0.00	_____
MISCELLANEOUS	\$4.50	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$10.37	_____
TOTAL SPECIFIED OPERATING COSTS	\$269.72	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN POUNDS
(Breakeven prices reflect a cottonseed credit against ginning charges.)

	422.50	487.50	650.00	812.50	877.50
	\$0.64	\$0.55	\$0.41	\$0.33	\$0.31

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$48.58	_____
INTEREST	\$21.22	_____
TAXES & INSURANCE	\$5.93	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$75.72	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS \$345.43

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN POUNDS
(Breakeven prices reflect a cottonseed credit against ginning charges.)

	422.50	487.50	650.00	812.50	877.50
	\$0.82	\$0.71	\$0.53	\$0.43	\$0.39

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SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9301
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: NONE

MACHINERY COST

OPERATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRECIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
							1	3	CHISEL PLOW	21.0	175.0	7.127
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	4	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.18	\$3.19
5	4	BED CONDITIONER	26.7	175.0	11.638	1.00	\$1.19	\$0.71	\$1.17	\$0.74	\$0.21	\$4.02
6	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.18	\$3.19
7	5	TRIPLE K	26.7	175.0	11.638	1.00	\$1.35	\$0.71	\$1.37	\$0.86	\$0.24	\$4.53
	5	SPRAYER, SADDLE MTD BC	26.7	0.0	11.638	1.00	\$0.13	\$0.00	\$0.32	\$0.14	\$0.04	\$0.63
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
8	5	PLANTER, 8 ROW @ 38"	25.3	175.0	9.257	1.00	\$2.10	\$0.89	\$2.23	\$0.96	\$0.27	\$6.45
	5	SPRAYER, SADDLE MTD BC	25.3	0.0	9.257	1.00	\$0.16	\$0.00	\$0.40	\$0.17	\$0.05	\$0.79
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
9	5	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
10	5	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	5	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
13	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
14	6	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
15	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
16	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
17	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18	7	INSECT SCOUTING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	7	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9301
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: NONE

MATERIAL AND/OR MISCELLANEOUS

OPER- ATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMU- LATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPER- ATING COST (\$/ACRE) (J)	OWNER- SHIP COST (\$/ACRE) (K)	LABOR COST (\$/ACRE) (L)	TOTAL SPECIFIED COST (\$/ACRE) (M)
1								0.00%	\$0.00		\$0.83	\$6.54
2								0.00%	\$0.00		\$0.51	\$5.20
3	CSTM AP FERT GRND (DRY)		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	NITROGEN (ACTUAL N)	NH4	POUND	\$0.270	40.000			100.00%	\$10.80		\$0.00	\$10.80
	PHOSPHATE (MATERIAL)	0-46-0	POUND	\$0.092	50.000			100.00%	\$4.60		\$0.00	\$4.60
	POTASH (MATERIAL)	0-0-60	POUND	\$0.075	80.000			100.00%	\$6.00		\$0.00	\$6.00
4								0.00%	\$0.00		\$0.44	\$3.83
5								0.00%	\$0.00		\$0.51	\$4.52
6								0.00%	\$0.00		\$0.44	\$3.83
7								0.00%	\$0.00		\$0.83	\$5.16
	PROWL	4EC	PINT	\$3.690	1.250			100.00%	\$4.61		\$0.00	\$5.24
								0.00%	\$0.00		\$0.00	\$0.16
8	COTTON SEED		POUND	\$0.650	12.000			100.00%	\$7.80		\$1.22	\$15.47
	COTORAN	4L	PINT	\$4.730	2.000	38	18	47.37%	\$4.48		\$0.00	\$5.27
								0.00%	\$0.00		\$0.00	\$0.16
9								0.00%	\$0.00		\$0.91	\$6.40
10	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	BIDRIN	8EC	PINT	\$10.470	0.200			100.00%	\$2.09		\$0.00	\$2.09
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
11	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	BIDRIN	8EC	PINT	\$10.470	0.200			100.00%	\$2.09		\$0.00	\$2.09
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
12								0.00%	\$0.00		\$1.14	\$6.63
	COTORAN	4L	PINT	\$4.730	1.600	38	16	42.11%	\$3.19		\$0.00	\$3.98
	DSMA	3.6#	PINT	\$0.890	5.111	38	16	42.11%	\$1.92		\$0.00	\$1.92
								0.00%	\$0.00		\$0.00	\$0.14
13								0.00%	\$0.00		\$1.14	\$6.63
	CAPAROL	4L	PINT	\$3.790	1.000	38	16	42.11%	\$1.60		\$0.00	\$2.39
	MSMA	6.0#	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$2.47
								0.00%	\$0.00		\$0.00	\$0.14
14	CSTM AP FERT GRND (LIQUID)		ACRE	\$3.500	1.000			100.00%	\$3.50		\$0.00	\$3.50
	NITROGEN (ACTUAL N-32%)		POUND	\$0.211	40.000			100.00%	\$8.44		\$0.00	\$8.44
15								0.00%	\$0.00		\$1.14	\$6.63
	BLADEX	4L	PINT	\$2.950	1.500	38	16	42.11%	\$1.86		\$0.00	\$2.66
	MSMA	6.0#	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$2.47
								0.00%	\$0.00		\$0.00	\$0.14
16	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
17	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
18	COTTON INSECT SCOUTING		ACRE	\$4.500	1.000			100.00%	\$4.50		\$0.00	\$4.50
19	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

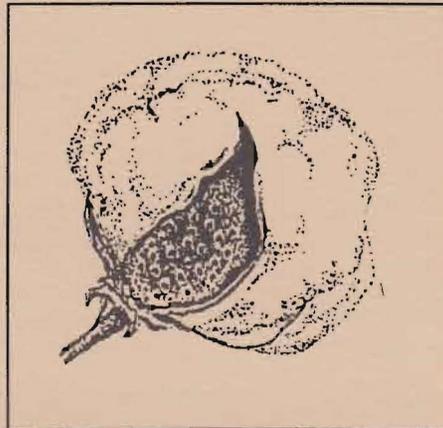
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 192

COTTON

LOAMY SOILS, SOLID PLANTED, FURROW
IRRIGATION, SOUTH OF I-40, EASTERN ARKANSAS



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UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

Note: This year's cotton enterprise budgets do not list ginning costs as a specified operating cost. In addition, all cotton pickers have been changed from 2-row to 4-row. These changes resulted in a lower Total Specified Operating Cost than in recent years.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION COTTON COMMITTEE

Claude M. Bonner, Chairman	Charlie Guy
Gary Cloud	Gary Huitink
Billy E. Herrington	Donald R. Johnson
Terry Kirkpatrick	J. Scott McConnell
Clifford S. Snyder	Ples Spradley
Phil L. Tacker	Earl D. Vories
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Tony E. Windham	Cliff Coker

THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE	ENTERPRISE: COTTON, SOLID PLANTED, 1993 FILE NO.: COT9302 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40 SOILS TYPE: LOAMY IRRIGATION: FURROW, FLEXIBLE IRRIGATION TUBING
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University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.80	_____
FERTILIZER	\$50.95	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$27.31	_____
FUNGICIDE	\$10.15	_____
INSECTICIDE	\$72.72	_____
DEFOLIANT	\$14.94	_____
AERIAL APPLICATION	\$43.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$18.28	_____
REPAIRS	\$47.96	_____
LABOR	\$18.75	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$8.14	_____
REPAIRS	\$2.09	_____
IRRIGATION LABOR	\$7.72	_____
CUSTOM SPREAD	\$6.75	_____
CUSTOM HAUL	\$0.00	_____
GINNING (Cost assumed to be offset by seed value)	\$0.00	_____
MISCELLANEOUS	\$10.43	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$13.88	_____
TOTAL SPECIFIED OPERATING COSTS	\$360.87	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

	YIELD IN POUNDS				
	<i>(Breakeven prices reflect a cottonseed credit against ginning charges.)</i>				
	633.75	731.25	975.00	1218.75	1316.25
	\$0.57	\$0.49	\$0.37	\$0.30	\$0.27

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$57.21	_____
INTEREST	\$27.35	_____
TAXES & INSURANCE	\$7.64	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$92.20	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$453.07

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

	YIELD IN POUNDS				
	<i>(Breakeven prices reflect a cottonseed credit against ginning charges.)</i>				
	633.75	731.25	975.00	1218.75	1316.25
	\$0.71	\$0.62	\$0.46	\$0.37	\$0.34

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9302
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEXIBLE IRRIGATION TUBING

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	MACHINERY COST					
							OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRE- CIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
1	3	SUBSOIL	15.0	200.0	4.364	1.00	\$2.73	\$2.15	\$3.02	\$1.98	\$0.57	\$10.45
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	4	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
5	4	BED CONDITIONER	26.7	175.0	11.638	1.00	\$1.19	\$0.71	\$1.17	\$0.74	\$0.21	\$4.02
6	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
7	5	TRIPLE K	26.7	175.0	11.638	1.00	\$1.35	\$0.71	\$1.37	\$0.86	\$0.24	\$4.53
	5	SPRAYER, SADDLE MTD BC	26.7	0.0	11.638	1.00	\$0.13	\$0.00	\$0.32	\$0.14	\$0.04	\$0.63
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
8	5	SPLIT BOX PLANTER, 8 x 38"	25.3	175.0	8.981	1.00	\$2.28	\$0.91	\$2.45	\$1.03	\$0.29	\$6.97
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	SPRAYER, SADDLE MTD BC	25.3	0.0	8.981	1.00	\$0.17	\$0.00	\$0.41	\$0.18	\$0.05	\$0.81
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
9	5	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
10	6	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
12	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
13	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
14	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
15	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
17	6	LAYBY RIG	25.3	140.0	9.978	1.00	\$0.87	\$0.66	\$0.93	\$0.55	\$0.16	\$3.16
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.12	\$0.13	\$0.10	\$0.07	\$0.02	\$0.01	\$0.33
18	7	FLEX. IRRIGATION TUBING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	7	INSECT SCOUTING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
20	7	FURROW IRRIGATION (3")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9302
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEXIBLE IRRIGATION TUBING

MATERIAL AND/OR MISCELLANEOUS

OPER- ATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMU- LATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPER- ATING COST (J) (\$/ACRE)	OWNER- SHIP COST (K) (\$/ACRE)	LABOR COST (L) (\$/ACRE)	TOTAL SPECIFIED COST (M) (\$/ACRE)
1								0.00%	\$0.00		\$1.35	\$11.80
2								0.00%	\$0.00		\$0.51	\$5.20
3	CSTM AP FERT GRND (DRY)		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	NITROGEN (ACTUAL N)	NH4	POUND	\$0.270	50.000			100.00%	\$13.50		\$0.00	\$13.50
	PHOSPHATE (MATERIAL)	0-46-0	POUND	\$0.092	75.000			100.00%	\$6.90		\$0.00	\$6.90
	POTASH (MATERIAL)	0-0-60	POUND	\$0.075	90.000			100.00%	\$6.75		\$0.00	\$6.75
4								0.00%	\$0.00		\$0.44	\$3.63
5								0.00%	\$0.00		\$0.51	\$4.52
6								0.00%	\$0.00		\$0.44	\$3.63
7								0.00%	\$0.00		\$0.63	\$5.18
	PROWL	4EC	PINT	\$3.690	1.250			100.00%	\$4.61		\$0.00	\$5.24
								0.00%	\$0.00		\$0.00	\$0.16
8	COTTON SEED		POUND	\$0.650	12.000			100.00%	\$7.80		\$1.25	\$16.03
	TEMIK	15G	POUND	\$3.250	3.000			100.00%	\$9.75		\$0.00	\$9.75
	TERRACHLOR SX	GRAN	POUND	\$1.450	7.000			100.00%	\$10.15		\$0.00	\$10.15
	COTORAN	4L	PINT	\$4.730	2.000	38	18	47.37%	\$4.48		\$0.00	\$5.29
								0.00%	\$0.00		\$0.00	\$0.16
9								0.00%	\$0.00		\$0.91	\$6.40
10	CSTM AP FERT GRND (LIQUID)		ACRE	\$3.500	1.000			100.00%	\$3.50		\$0.00	\$3.50
	NITROGEN (ACTUAL N)	32%	POUND	\$0.211	50.000			100.00%	\$10.55		\$0.00	\$10.55
11	COTORAN	4L	PINT	\$4.730	1.600	38	16	42.11%	\$3.19		\$1.14	\$9.81
	DSMA	3.6#	PINT	\$0.890	5.111	38	16	42.11%	\$1.92		\$0.00	\$2.71
								0.00%	\$0.00		\$0.00	\$0.14
12	CAPAROL	4L	PINT	\$3.790	1.000	38	16	42.11%	\$1.60		\$1.14	\$8.22
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$3.27
								0.00%	\$0.00		\$0.00	\$0.14
13	BLADEX	4L	PINT	\$2.950	1.500	38	16	42.11%	\$1.88		\$1.14	\$8.49
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$3.27
								0.00%	\$0.00		\$0.00	\$0.14
14	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	BIDRIN	8EC	PINT	\$10.470	0.200			100.00%	\$2.09		\$0.00	\$2.09
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
15	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
16	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
17	BLADEX	4L	PINT	\$2.950	1.600			100.00%	\$4.72		\$0.74	\$8.62
								0.00%	\$0.00		\$0.00	\$0.33
18	FLEX. IRRIGATION TUBING		ACRE	\$5.930	1.000			100.00%	\$5.93		\$0.00	\$5.93
19	COTTON INSECT SCOUTING		ACRE	\$4.500	1.000			100.00%	\$4.50		\$0.00	\$4.50
20	FURROW IRRIGATION (3")		AC IN	\$1.709	3.000			100.00%	\$5.13	\$3.30	\$0.00	\$8.43

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9302
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEXIBLE IRRIGATION TUBING

MACHINERY COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HF) (F)	TIMES OVER (NO.) (G)	MACHINERY COST					
							OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRE- CIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
21	7	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
22	7	FURROW IRRIGATION (3")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
23	7	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
24	7	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
25	8	FURROW IRRIGATION (3")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
26	8	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27	8	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
28	8	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
29	8	F. IRR. (EVERY OTHER ROW)	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
30	8	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
31	8	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
32	9	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
33	9	APPLY DEFOLIANT	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
34	9	APPLY DEFOLIANT	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
35	9	4 ROW PICKER, FIRST PICK	12.7	207.0	2.995	1.00	\$18.92	\$3.91	\$21.39	\$7.20	\$2.06	\$53.48
	9	COTTON TRAILER	20.0	170.0	8.485	0.30	\$0.41	\$0.26	\$0.22	\$0.08	\$0.02	\$0.99
	9	COTTON TRAILER	20.0	170.0	8.485	0.30	\$0.41	\$0.26	\$0.22	\$0.08	\$0.02	\$0.99
36	10	4 ROW PICKER, 50% SCRAP	12.7	207.0	4.607	0.50	\$6.15	\$1.27	\$6.95	\$2.34	\$0.67	\$17.38
	10	COTTON TRAILER	20.0	170.0	8.485	0.15	\$0.20	\$0.13	\$0.11	\$0.04	\$0.01	\$0.49
	10	COTTON TRAILER	20.0	170.0	8.485	0.15	\$0.20	\$0.13	\$0.11	\$0.04	\$0.01	\$0.49
37	11	STALK CUTTER	15.0	140.0	7.727	1.00	\$1.94	\$0.85	\$1.51	\$0.87	\$0.25	\$5.42
		SPECIFIED INTEREST										
TOTAL SPECIFIED COSTS							\$47.96	\$18.28	\$51.28	\$22.37	\$6.39	\$146.28

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9302
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEXIBLE IRRIGATION TUBING

MATERIAL AND/OR MISCELLANEOUS

OPER- ATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMU- LATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPER- ATING COST (J) (\$/ACRE)	OWNER- SHIP COST (K) (\$/ACRE)	LABOR COST (L) (\$/ACRE)	TOTAL SPECIFIED COST (M) (\$/ACRE)
21	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
22	FURROW IRRIGATION (3")		AC IN	\$1.709	3.000			100.00%	\$5.13	\$3.30	\$0.00	\$8.43
23	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
24	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
25	FURROW IRRIGATION (3")		AC IN	\$1.709	3.000			100.00%	\$5.13	\$3.30	\$0.00	\$8.43
26	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
27	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
28	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
29	F. IRR. (EVERY OTHER ROW)		AC IN	\$1.709	1.500			100.00%	\$2.56	\$1.65	\$0.00	\$4.21
30	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
31	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	LARVIN	3.2#	PINT	\$6.120	0.626			100.00%	\$3.83		\$0.00	\$3.83
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
32	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
33	CSTM AP AIR DEFOLIANT		ACRE	\$4.250	1.000			100.00%	\$4.25		\$0.00	\$4.25
	PREP	6#/GAL	PINT	\$7.580	0.500			100.00%	\$3.79		\$0.00	\$3.79
	DEF/FOLEX	6EC	PINT	\$4.460	1.000			100.00%	\$4.46		\$0.00	\$4.46
34	CSTM AP AIR DEFOLIANT		ACRE	\$4.250	1.000			100.00%	\$4.25		\$0.00	\$4.25
	DEF/FOLEX	6EC	PINT	\$4.460	1.500			100.00%	\$6.69		\$0.00	\$6.69
35								0.00%	\$0.00		\$5.89	\$59.37
								0.00%	\$0.00		\$0.00	\$0.99
								0.00%	\$0.00		\$0.00	\$0.99
36								0.00%	\$0.00		\$1.91	\$19.29
								0.00%	\$0.00		\$0.00	\$0.49
								0.00%	\$0.00		\$0.00	\$0.49
37								0.00%	\$0.00		\$0.76	\$6.18
											\$14.49	
									\$262.00	\$11.55	\$18.75	\$453.07

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 193

COTTON

LOAMY SOILS, SOLID PLANTED, CENTER
PIVOT IRRIGATION, NON-TOWABLE, 130 ACRES,
SOUTH OF I-40, EASTERN ARKANSAS



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UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

Note: This year's cotton enterprise budgets do not list ginning costs as a specified operating cost. In addition, all cotton pickers have been changed from 2-row to 4-row. These changes resulted in a lower Total Specified Operating Cost than in recent years.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION COTTON COMMITTEE

Claude M. Bonner, Chairman	Charlie Guy
Gary Cloud	Gary Huitink
Billy E. Herrington	Donald R. Johnson
Terry Kirkpatrick	J. Scott McConnell
Clifford S. Snyder	Ples Spradley
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Marvin L. Wall	Robert G. Wells
Tony E. Windham	Cliff Coker

THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE: COTTON, SOLID PLANTED, 1993
COOPERATIVE	FILE NO.: COT9303
EXTENSION	LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
SERVICE	SOILS TYPE: LOAMY
	IRRIGATION: CENTER PIVOT, 130 ACRES

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.80	_____
FERTILIZER	\$50.95	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$27.31	_____
FUNGICIDE	\$10.15	_____
INSECTICIDE	\$72.72	_____
DEFOLIANT	\$14.94	_____
AERIAL APPLICATION	\$43.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$18.28	_____
REPAIRS	\$47.96	_____
LABOR	\$18.75	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$8.60	_____
REPAIRS	\$5.81	_____
IRRIGATION LABOR	\$1.41	_____
CUSTOM SPREAD	\$6.75	_____
CUSTOM HAUL	\$0.00	_____
GINNING (Cost assumed to be offset by seed value)	\$0.00	_____
MISCELLANEOUS	\$4.50	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$13.56	_____
TOTAL SPECIFIED OPERATING COSTS	\$352.49	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN POUNDS
(Breakeven prices reflect a cottonseed credit against ginning charges.)

	633.75	731.25	975.00	1218.75	1316.25
	\$0.56	\$0.48	\$0.36	\$0.29	\$0.27

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$77.76	_____
INTEREST	\$41.26	_____
TAXES & INSURANCE	\$11.52	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$130.54	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS	\$483.03	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN POUNDS
(Breakeven prices reflect a cottonseed credit against ginning charges.)

	633.75	731.25	975.00	1218.75	1316.25
	\$0.76	\$0.66	\$0.50	\$0.40	\$0.37

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9303
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: CENTER PIVOT, 130 ACRES

MACHINERY COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	MACHINERY COST					
							OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRE- CIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
1	3	SUBSOIL	15.0	200.0	4.364	1.00	\$2.73	\$2.15	\$3.02	\$1.98	\$0.57	\$10.45
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	4	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
5	4	BED CONDITIONER	26.7	175.0	11.638	1.00	\$1.19	\$0.71	\$1.17	\$0.74	\$0.21	\$4.02
6	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.81	\$0.92	\$0.57	\$0.16	\$3.19
7	5	TRIPLE K	28.7	175.0	11.638	1.00	\$1.35	\$0.71	\$1.37	\$0.86	\$0.24	\$4.53
	5	SPRAYER, SADDLE MTD BC	28.7	0.0	11.638	1.00	\$0.13	\$0.00	\$0.32	\$0.14	\$0.04	\$0.83
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
8	5	SPLIT BOX PLANTER, 8 x 38"	25.3	175.0	8.981	1.00	\$2.28	\$0.91	\$2.45	\$1.03	\$0.29	\$6.97
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	SPRAYER, SADDLE MTD BC	25.3	0.0	8.981	1.00	\$0.17	\$0.00	\$0.41	\$0.18	\$0.05	\$0.81
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
9	5	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
10	6	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
12	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
13	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
14	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
15	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
17	6	LAYBY RIG	25.3	140.0	9.978	1.00	\$0.87	\$0.66	\$0.93	\$0.55	\$0.16	\$3.16
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.12	\$0.13	\$0.10	\$0.07	\$0.02	\$0.01	\$0.33
18	7	INSECT SCOUTING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	7	CENTER PIVOT IRR. (1.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
20	7	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9303
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: CENTER PIVOT, 130 ACRES

MATERIAL AND/OR MISCELLANEOUS

OPER- ATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMU- LATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPER- ATING COST (J) (\$/ACRE)	OWNER- SHIP COST (K) (\$/ACRE)	LABOR COST (L) (\$/ACRE)	TOTAL SPECIFIED COST (M) (\$/ACRE)
1								0.00%	\$0.00		\$1.35	\$11.80
2								0.00%	\$0.00		\$0.51	\$5.20
3	CSTM AP FERT GRND (DRY)		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	NITROGEN (ACTUAL N)	NH4	POUND	\$0.270	50.000			100.00%	\$13.50		\$0.00	\$13.50
	PHOSPHATE (MATERIAL)	0-46-0	POUND	\$0.092	75.000			100.00%	\$6.90		\$0.00	\$6.90
	POTASH (MATERIAL)	0-0-60	POUND	\$0.075	90.000			100.00%	\$6.75		\$0.00	\$6.75
4								0.00%	\$0.00		\$0.44	\$3.63
5								0.00%	\$0.00		\$0.51	\$4.52
6								0.00%	\$0.00		\$0.44	\$3.63
7								0.00%	\$0.00		\$0.63	\$5.16
	PROWL	4EC	PINT	\$3.690	1.250			100.00%	\$4.61		\$0.00	\$5.24
								0.00%	\$0.00		\$0.00	\$0.16
8	COTTON SEED		POUND	\$0.650	12.000			100.00%	\$7.80		\$1.25	\$16.03
	TEMIK	15G	POUND	\$3.250	3.000			100.00%	\$9.75		\$0.00	\$9.75
	TERRACHLOR SX	GRAN	POUND	\$1.450	7.000			100.00%	\$10.15		\$0.00	\$10.15
	COTORAN	4L	PINT	\$4.730	2.000	38	18	47.37%	\$4.48		\$0.00	\$5.29
								0.00%	\$0.00		\$0.00	\$0.16
9								0.00%	\$0.00		\$0.91	\$6.40
10	CSTM AP FERT GRND (LIQUID)		ACRE	\$3.500	1.000			100.00%	\$3.50		\$0.00	\$3.50
	NITROGEN (ACTUAL N)		POUND	\$0.211	50.000			100.00%	\$10.55		\$0.00	\$10.55
11	COTORAN	4L	PINT	\$4.730	1.600	38	16	42.11%	\$3.19		\$1.14	\$9.81
	DSMA	3.6#	PINT	\$0.890	5.111	38	16	42.11%	\$1.92		\$0.00	\$2.71
								0.00%	\$0.00		\$0.00	\$0.14
12	CAPAROL	4L	PINT	\$3.790	1.000	38	16	42.11%	\$1.60		\$1.14	\$8.22
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$3.26
								0.00%	\$0.00		\$0.00	\$0.14
13	BLADEX	4L	PINT	\$2.950	1.500	38	16	42.11%	\$1.86		\$1.14	\$8.49
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$3.26
								0.00%	\$0.00		\$0.00	\$0.14
14	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	BIDRIN	8EC	PINT	\$10.470	0.200			100.00%	\$2.09		\$0.00	\$2.09
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
15	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
16	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
17	BLADEX	4L	PINT	\$2.950	1.600			100.00%	\$4.72		\$0.74	\$8.62
								0.00%	\$0.00		\$0.00	\$0.33
18	COTTON INSECT SCOUTING		ACRE	\$4.500	1.000			100.00%	\$4.50		\$0.00	\$4.50
19	CENTER PIVOT IRR. (1.25")		AC IN	\$2.751	1.250			100.00%	\$3.44	\$10.78	\$0.00	\$14.22
20	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9303
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: CENTER PIVOT, 130 ACRES

MACHINERY COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	OPERATING COST		OWNERSHIP COST				
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRE- CIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)	
							7			0.0	0.0	0.000	1.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
21	7	CENTER PIVOT IRR. (1.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
22	7	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
23	7	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
24	8	CENTER PIVOT IRR. (1.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
25	8	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
26	8	CENTER PIVOT IRR. (1.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
28	8	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
29	8	CENTER PIVOT IRR. (.75")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
30	8	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
31	8	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
32	9	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
33	9	APPLY DEFOLIANT	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
34	9	APPLY DEFOLIANT	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
35	9	4 ROW PICKER, FIRST PICK	12.7	207.0	2.995	1.00	\$18.92	\$3.91	\$21.39	\$7.20	\$2.08	\$53.48	
	9	COTTON TRAILER	20.0	170.0	8.485	0.30	\$0.41	\$0.26	\$0.22	\$0.08	\$0.02	\$0.99	
	9	COTTON TRAILER	20.0	170.0	8.485	0.30	\$0.41	\$0.26	\$0.22	\$0.08	\$0.02	\$0.99	
36	10	4 ROW PICKER, 50% SCRAP	12.7	207.0	4.607	0.50	\$6.15	\$1.27	\$6.95	\$2.34	\$0.67	\$17.38	
	10	COTTON TRAILER	20.0	170.0	8.485	0.15	\$0.20	\$0.13	\$0.11	\$0.04	\$0.01	\$0.49	
	10	COTTON TRAILER	20.0	170.0	8.485	0.15	\$0.20	\$0.13	\$0.11	\$0.04	\$0.01	\$0.49	
37	11	STALK CUTTER	15.0	140.0	7.727	1.00	\$1.94	\$0.85	\$1.51	\$0.87	\$0.25	\$5.42	
SPECIFIED INTEREST													
TOTAL SPECIFIED COSTS								\$47.96	\$18.28	\$51.28	\$22.37	\$6.39	\$146.28

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9303
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: CENTER PIVOT, 130 ACRES

MATERIAL AND/OR MISCELLANEOUS

OPER- ATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMU- LATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPER- ATING COST (J) (\$/ACRE)	OWNER- SHIP COST (K) (\$/ACRE)	LABOR COST (L) (\$/ACRE)	TOTAL SPECIFIED COST (M) (\$/ACRE)
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
21	CENTER PIVOT IRR. (1.25")		AC IN	\$2.751	1.250			100.00%	\$3.44	\$10.78	\$0.00	\$14.22
22	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
23	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
24	CENTER PIVOT IRR. (1.25")		AC IN	\$2.751	1.250			100.00%	\$3.44	\$10.78	\$0.00	\$14.22
25	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
26	CENTER PIVOT IRR. (1.25")		AC IN	\$2.751	1.250			100.00%	\$3.44	\$10.78	\$0.00	\$14.22
27	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
28	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
29	CENTER PIVOT IRR. (.75")		AC IN	\$2.751	0.750			100.00%	\$2.06	\$6.47	\$0.00	\$8.53
30	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
31	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	LARVIN	3.2#	PINT	\$6.120	0.626			100.00%	\$3.83		\$0.00	\$3.83
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
32	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
33	CSTM AP AIR DEFOLIANT		ACRE	\$4.250	1.000			100.00%	\$4.25		\$0.00	\$4.25
	PREP	6#/GAL	PINT	\$7.580	0.500			100.00%	\$3.79		\$0.00	\$3.79
	DEF/FOLEX	6EC	PINT	\$4.460	1.000			100.00%	\$4.46		\$0.00	\$4.46
34	CSTM AP AIR DEFOLIANT		ACRE	\$4.250	1.000			100.00%	\$4.25		\$0.00	\$4.25
	DEF/FOLEX	6EC	PINT	\$4.460	1.500			100.00%	\$6.69		\$0.00	\$6.69
35								0.00%	\$0.00		\$5.89	\$59.37
								0.00%	\$0.00		\$0.00	\$0.99
								0.00%	\$0.00		\$0.00	\$0.99
36								0.00%	\$0.00		\$1.91	\$19.29
								0.00%	\$0.00		\$0.00	\$0.49
								0.00%	\$0.00		\$0.00	\$0.49
37								0.00%	\$0.00		\$0.76	\$6.18
												\$14.48
									\$253.94	\$49.58	\$18.75	\$483.03

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 194

COTTON

LOAMY SOILS, SOLID PLANTED,
NORTH OF I-40, EASTERN ARKANSAS



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ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

Note: This year's cotton enterprise budgets do not list ginning costs as a specified operating cost. In addition, all cotton pickers have been changed from 2-row to 4-row. These changes resulted in a lower Total Specified Operating Cost than in recent years.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION COTTON COMMITTEE

Claude M. Bonner, Chairman	Charlie Guy
Gary Cloud	Gary Huitink
Billy E. Herrington	Donald R. Johhson
Terry Kirkpatrick	J. Scott McConnell
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THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE	ENTERPRISE: COTTON, SOLID PLANTED, 1993 FILE NO.: COT9304 LOCATION: EASTERN ARKANSAS, NORTH OF I-40 SOILS TYPE: LOAMY IRRIGATION: NONE
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University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.80	_____
FERTILIZER	\$39.59	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$21.70	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$33.92	_____
DEFOLIANT	\$6.69	_____
AERIAL APPLICATION	\$30.75	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$16.49	_____
REPAIRS	\$45.77	_____
LABOR	\$17.46	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$6.75	_____
CUSTOM HAUL	\$0.00	_____
GINNING (Cost assumed to be offset by seed value)	\$0.00	_____
MISCELLANEOUS	\$4.50	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$9.26	_____
TOTAL SPECIFIED OPERATING COSTS	\$240.67	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN POUNDS

(Breakeven prices reflect a cottonseed credit against ginning charges.)

422.50	487.50	650.00	812.50	877.50
\$0.57	\$0.49	\$0.37	\$0.30	\$0.27

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$48.58	_____
INTEREST	\$21.22	_____
TAXES & INSURANCE	\$5.93	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$75.72	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$316.39

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN POUNDS

(Breakeven prices reflect a cottonseed credit against ginning charges.)

422.50	487.50	650.00	812.50	877.50
\$0.75	\$0.65	\$0.49	\$0.39	\$0.36

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9304
 LOCATION: EASTERN ARKANSAS, NORTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: NONE

MACHINERY COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	MACHINERY COST					TOTAL MACHINE COST (M) (\$/ACRE)
							OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRE- CIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	
1	3	CHISEL PLOW	21.0	175.0	7.127	1.00	\$1.73	\$1.15	\$1.56	\$1.00	\$0.28	\$5.72
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	4	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
5	4	BED CONDITIONER	26.7	175.0	11.638	1.00	\$1.19	\$0.71	\$1.17	\$0.74	\$0.21	\$4.02
6	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
7	5	TRIPLE K	26.7	175.0	11.638	1.00	\$1.35	\$0.71	\$1.37	\$0.86	\$0.24	\$4.53
	5	SPRAYER, SADDLE MTD BC	26.7	0.0	11.638	1.00	\$0.13	\$0.00	\$0.32	\$0.14	\$0.04	\$0.63
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
8	5	PLANTER, 8 ROW @ 38"	25.3	175.0	9.257	1.00	\$2.10	\$0.89	\$2.23	\$0.96	\$0.27	\$8.45
	5	SPRAYER, SADDLE MTD BC	25.3	0.0	9.257	1.00	\$0.16	\$0.00	\$0.40	\$0.17	\$0.05	\$0.79
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
9	5	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
10	5	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
12	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
13	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
14	6	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
15	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
17	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18	7	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	7	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9304
 LOCATION: EASTERN ARKANSAS, NORTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: NONE

MATERIAL AND/OR MISCELLANEOUS

OPER- ATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMU- LATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPER- ATING COST (J) (\$/ACRE)	OWNER- SHIP COST (K) (\$/ACRE)	LABOR COST (L) (\$/ACRE)	TOTAL SPECIFIED COST (M) (\$/ACRE)
1								0.00%	\$0.00		\$0.83	\$6.54
2								0.00%	\$0.00		\$0.51	\$5.20
3	CSTM AP FERT GRND (DRY)		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	NITROGEN (ACTUAL N)	NH4	POUND	\$0.270	40.000			100.00%	\$10.80		\$0.00	\$10.80
	PHOSPHATE (MATERIAL)	0-46-0	POUND	\$0.092	50.000			100.00%	\$4.60		\$0.00	\$4.60
	POTASH (MATERIAL)	0-0-60	POUND	\$0.075	80.000			100.00%	\$6.00		\$0.00	\$6.00
4								0.00%	\$0.00		\$0.44	\$3.63
5								0.00%	\$0.00		\$0.51	\$4.52
6								0.00%	\$0.00		\$0.44	\$3.63
7								0.00%	\$0.00		\$0.63	\$5.16
	PROWL	4EC	PINT	\$3.690	1.250			100.00%	\$4.81		\$0.00	\$5.24
								0.00%	\$0.00		\$0.00	\$0.16
8	COTTON SEED		POUND	\$0.650	12.000			100.00%	\$7.80		\$1.22	\$15.47
	COTORAN	4L	PINT	\$4.730	1.600	38	18	47.37%	\$3.58		\$0.00	\$4.37
								0.00%	\$0.00		\$0.00	\$0.16
9								0.00%	\$0.00		\$0.91	\$6.40
10	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	BIDRIN	8EC	PINT	\$10.470	0.200			100.00%	\$2.09		\$0.00	\$2.09
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
11	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	BIDRIN	8EC	PINT	\$10.470	0.200			100.00%	\$2.09		\$0.00	\$2.09
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
12								0.00%	\$0.00		\$1.14	\$6.63
	COTORAN	4L	PINT	\$4.730	1.600	38	16	42.11%	\$3.19		\$0.00	\$3.98
	DSMA	3.6#	PINT	\$0.890	5.111	38	16	42.11%	\$1.92		\$0.00	\$1.92
								0.00%	\$0.00		\$0.00	\$0.14
13								0.00%	\$0.00		\$1.14	\$6.63
	CAPAROL	4L	PINT	\$3.790	1.000	38	16	42.11%	\$1.60		\$0.00	\$2.39
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$2.47
								0.00%	\$0.00		\$0.00	\$0.14
14	CSTM AP FERT GRND (LIQUID)		ACRE	\$3.500	1.000			100.00%	\$3.50		\$0.00	\$3.50
	NITROGEN (ACTUAL N)	32%	POUND	\$0.211	35.000			100.00%	\$7.39		\$0.00	\$7.39
15	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
16								0.00%	\$0.00		\$1.14	\$6.63
	BLADEX	4L	PINT	\$2.950	1.500	38	16	42.11%	\$1.86		\$0.00	\$2.66
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$2.47
								0.00%	\$0.00		\$0.00	\$0.14
17	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	DIMETHOATE	2.67EC	PINT	\$2.080	0.800			100.00%	\$1.25		\$0.00	\$1.25
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
18	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	DIMETHOATE	2.67EC	PINT	\$2.080	0.800			100.00%	\$1.25		\$0.00	\$1.25
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
19	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Dr. Milo J. Shult, Director of Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, age, or handicap, and is an Equal Opportunity Employer.

ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 195

COTTON

*LOAMY SOILS, SOLID PLANTED, FURROW
IRRIGATION, NORTH OF I-40, EASTERN ARKANSAS*



AUTHORS

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UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

Note: This year's cotton enterprise budgets do not list ginning costs as a specified operating cost. In addition, all cotton pickers have been changed from 2-row to 4-row. These changes resulted in a lower Total Specified Operating Cost than in recent years.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION COTTON COMMITTEE

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Gary Cloud	Gary Huitink
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THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE: COTTON, SOLID PLANTED, 1993
COOPERATIVE	FILE NO.: COT9305
EXTENSION	LOCATION: EASTERN ARKANSAS, NORTH OF I-40
SERVICE	SOILS TYPE: LOAMY
	IRRIGATION: FURROW, FLEXIBLE IRRIGATION TUBING

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.80	_____
FERTILIZER	\$42.25	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$26.42	_____
FUNGICIDE	\$10.15	_____
INSECTICIDE	\$46.39	_____
DEFOLIANT	\$27.87	_____
AERIAL APPLICATION	\$33.25	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$16.75	_____
REPAIRS	\$41.40	_____
LABOR	\$16.84	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$8.14	_____
REPAIRS	\$2.09	_____
IRRIGATION LABOR	\$7.72	_____
CUSTOM SPREAD	\$6.75	_____
CUSTOM HAUL	\$0.00	_____
GINNING (Cost assumed to be offset by seed value)	\$0.00	_____
MISCELLANEOUS	\$10.43	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$12.17	_____
TOTAL SPECIFIED OPERATING COSTS	\$316.40	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN POUNDS
(Breakeven prices reflect a cottonseed credit against ginning charges.)

	633.75	731.25	975.00	1218.75	1316.25
	\$0.50	\$0.43	\$0.32	\$0.26	\$0.24

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$50.04	_____
INTEREST	\$24.88	_____
TAXES & INSURANCE	\$6.95	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$81.87	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$398.27

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN POUNDS

(Breakeven prices reflect a cottonseed credit against ginning charges.)

	633.75	731.25	975.00	1218.75	1316.25
	\$0.63	\$0.54	\$0.41	\$0.33	\$0.30

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9305
 LOCATION: EASTERN ARKANSAS, NORTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEXIBLE IRRIGATION TUBING

MACHINERY COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	MACHINERY COST					
							OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRE- CIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
1	3	SUBSOIL	15.0	200.0	4.384	1.00	\$2.73	\$2.15	\$3.02	\$1.98	\$0.57	\$10.45
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	4	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
5	4	BED CONDITIONER	26.7	175.0	11.638	1.00	\$1.19	\$0.71	\$1.17	\$0.74	\$0.21	\$4.02
6	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
7	5	TRIPLE K	26.7	175.0	11.638	1.00	\$1.35	\$0.71	\$1.37	\$0.86	\$0.24	\$4.53
	5	SPRAYER, SADDLE MTD BC	26.7	0.0	11.638	1.00	\$0.13	\$0.00	\$0.32	\$0.14	\$0.04	\$0.63
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
8	5	SPLIT BOX PLANTER, 8 x 38"	25.3	175.0	8.981	1.00	\$2.28	\$0.91	\$2.45	\$1.03	\$0.29	\$6.97
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	SPRAYER, SADDLE MTD BC	25.3	0.0	8.981	1.00	\$0.17	\$0.00	\$0.41	\$0.18	\$0.05	\$0.81
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.08	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
9	5	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
10	6	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
12	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
13	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
14	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
15	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	6	LAYBY RIG	25.3	140.0	9.978	1.00	\$0.87	\$0.66	\$0.93	\$0.55	\$0.18	\$3.18
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.12	\$0.13	\$0.10	\$0.07	\$0.02	\$0.01	\$0.33
17	6	FLEX. IRRIGATION TUBING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18	7	INSECT SCOUTING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	7	FURROW IRRIGATION (3")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
20	7	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9305
 LOCATION: EASTERN ARKANSAS, NORTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEXIBLE IRRIGATION TUBING

MATERIAL AND/OR MISCELLANEOUS

OPER- ATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMU- LATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPER- ATING COST (J) (\$/ACRE)	OWNER- SHIP COST (K) (\$/ACRE)	LABOR COST (L) (\$/ACRE)	TOTAL SPECIFIED COST (M) (\$/ACRE)
1								0.00%	\$0.00		\$1.35	\$11.80
2								0.00%	\$0.00		\$0.51	\$5.20
3	CSTM AP FERT GRND (DRY)		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	NITROGEN (ACTUAL N)	NH4	POUND	\$0.270	45.000			100.00%	\$12.15		\$0.00	\$12.15
	PHOSPHATE (MATERIAL)	0-46-0	POUND	\$0.092	50.000			100.00%	\$4.60		\$0.00	\$4.60
	POTASH (MATERIAL)	0-0-60	POUND	\$0.075	80.000			100.00%	\$6.00		\$0.00	\$6.00
4								0.00%	\$0.00		\$0.44	\$3.63
5								0.00%	\$0.00		\$0.51	\$4.52
6								0.00%	\$0.00		\$0.44	\$3.63
7								0.00%	\$0.00		\$0.83	\$5.16
	PROWL	4EC	PINT	\$3.690	1.250			100.00%	\$4.81		\$0.00	\$5.24
								0.00%	\$0.00		\$0.00	\$0.16
8	COTTON SEED		POUND	\$0.650	12.000			100.00%	\$7.80		\$1.25	\$16.03
	TEMIK	15G	POUND	\$3.250	3.000			100.00%	\$9.75		\$0.00	\$9.75
	TERRACHLOR SX	GRAN	POUND	\$1.450	7.000			100.00%	\$10.15		\$0.00	\$10.15
	COTORAN	4L	PINT	\$4.730	1.600	38	18	47.37%	\$3.58		\$0.00	\$4.40
								0.00%	\$0.00		\$0.00	\$0.16
9								0.00%	\$0.00		\$0.91	\$6.40
10	CSTM AP FERT GRND (LIQUID)		ACRE	\$3.500	1.000			100.00%	\$3.50		\$0.00	\$3.50
	NITROGEN (ACTUAL N)	32%	POUND	\$0.211	45.000			100.00%	\$9.50		\$0.00	\$9.50
11								0.00%	\$0.00		\$1.14	\$6.63
	COTORAN	4L	PINT	\$4.730	1.600	38	16	42.11%	\$3.19		\$0.00	\$3.98
	DSMA	3.6#	PINT	\$0.890	5.111	38	16	42.11%	\$1.92		\$0.00	\$1.92
								0.00%	\$0.00		\$0.00	\$0.14
12								0.00%	\$0.00		\$1.14	\$6.63
	CAPAROL	4L	PINT	\$3.790	1.000	38	16	42.11%	\$1.60		\$0.00	\$2.39
	MSMA	6.0 #	PINT	\$2.200	2.668	38	16	42.11%	\$2.47		\$0.00	\$2.47
								0.00%	\$0.00		\$0.00	\$0.14
13	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
14								0.00%	\$0.00		\$1.14	\$6.63
	BLADEX	4L	PINT	\$2.950	1.500	38	16	42.11%	\$1.86		\$0.00	\$2.66
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$2.47
								0.00%	\$0.00		\$0.00	\$0.14
15	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	DIMETHOATE	2.67EC	PINT	\$2.080	0.600			100.00%	\$1.25		\$0.00	\$1.25
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
16	BLADEX	4L	PINT	\$2.950	1.600			100.00%	\$4.72		\$0.74	\$8.62
								0.00%	\$0.00		\$0.00	\$0.33
17	FLEX. IRRIGATION TUBING		ACRE	\$5.930	1.000			100.00%	\$5.93		\$0.00	\$5.93
18	COTTON INSECT SCOUTING		ACRE	\$4.500	1.000			100.00%	\$4.50		\$0.00	\$4.50
19	FURROW IRRIGATION (3")		AC IN	\$1.709	3.000			100.00%	\$5.13	\$3.30	\$0.00	\$8.43
20	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Dr. Milo J. Shult, Director of Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, age, or handicap, and is an Equal Opportunity Employer.

ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 196

COTTON

LOAMY SOILS, SOLID PLANTED, CENTER
PIVOT IRRIGATION, NON-TOWABLE, 130 ACRES,
NORTH OF I-40, EASTERN ARKANSAS



AUTHORS

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EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

Note: This year's cotton enterprise budgets do not list ginning costs as a specified operating cost. In addition, all cotton pickers have been changed from 2-row to 4-row. These changes resulted in a lower Total Specified Operating Cost than in recent years.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION COTTON COMMITTEE

Claude M. Bonner, Chairman	Charlie Guy
Gary Cloud	Gary Huitink
Billy E. Herrington	Donald R. Johhson
Terry Kirkpatrick	J. Scott McConnell
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THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE: COTTON, SOLID PLANTED, 1993
COOPERATIVE	FILE NO.: COT9306
EXTENSION	LOCATION: EASTERN ARKANSAS, NORTH OF I-40
SERVICE	SOILS TYPE: LOAMY
	IRRIGATION: CENTER PIVOT, 130 ACRES

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.80	_____
FERTILIZER	\$42.25	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$26.42	_____
FUNGICIDE	\$10.15	_____
INSECTICIDE	\$46.39	_____
DEFOLIANT	\$27.87	_____
AERIAL APPLICATION	\$33.25	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$16.75	_____
REPAIRS	\$41.40	_____
LABOR	\$16.84	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$8.60	_____
REPAIRS	\$5.81	_____
IRRIGATION LABOR	\$1.41	_____
CUSTOM SPREAD	\$6.75	_____
CUSTOM HAUL	\$0.00	_____
GINNING (Cost assumed to be offset by seed value)	\$0.00	_____
MISCELLANEOUS	\$4.50	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$11.85	_____
TOTAL SPECIFIED OPERATING COSTS	\$308.02	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN POUNDS
(Breakeven prices reflect a cottonseed credit against ginning charges.)

633.75	731.25	975.00	1218.75	1316.25
\$0.49	\$0.42	\$0.32	\$0.25	\$0.23

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$70.59	_____
INTEREST	\$38.78	_____
TAXES & INSURANCE	\$10.83	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$120.21	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS \$428.23

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN POUNDS
(Breakeven prices reflect a cottonseed credit against ginning charges.)

633.75	731.25	975.00	1218.75	1316.25
\$0.68	\$0.59	\$0.44	\$0.35	\$0.33

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9306
 LOCATION: EASTERN ARKANSAS, NORTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: CENTER PIVOT, 130 ACRES

MACHINERY COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H)	FUEL, OIL & LUB (I)	DEPRE- CIATION (J)	INTEREST (K)	TAXES & INSURANCE (L)	TOTAL MACHINE COST (M)
							(\$/ACRE)	(\$/ACRE)	(\$/ACRE)	(\$/ACRE)	(\$/ACRE)	(\$/ACRE)
1	3	SUBSOIL	15.0	200.0	4.364	1.00	\$2.73	\$2.15	\$3.02	\$1.98	\$0.57	\$10.45
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	4	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
5	4	BED CONDITIONER	26.7	175.0	11.638	1.00	\$1.19	\$0.71	\$1.17	\$0.74	\$0.21	\$4.02
6	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.16	\$3.19
7	5	TRIPLE K	26.7	175.0	11.638	1.00	\$1.35	\$0.71	\$1.37	\$0.86	\$0.24	\$4.53
	5	SPRAYER, SADDLE MTD BC	26.7	0.0	11.638	1.00	\$0.13	\$0.00	\$0.32	\$0.14	\$0.04	\$0.63
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
8	5	SPLIT BOX PLANTER, 8 x 38"	25.3	175.0	8.981	1.00	\$2.28	\$0.91	\$2.45	\$1.03	\$0.29	\$6.97
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	SPRAYER, SADDLE MTD BC	25.3	0.0	8.981	1.00	\$0.17	\$0.00	\$0.41	\$0.18	\$0.05	\$0.81
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.08	\$0.06	\$0.05	\$0.03	\$0.01	\$0.00	\$0.16
9	5	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.28	\$5.49
10	6	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.28	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
12	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.28	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
13	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
14	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.28	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.05	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.14
15	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	6	LAYBY RIG	25.3	140.0	9.978	1.00	\$0.87	\$0.66	\$0.93	\$0.55	\$0.16	\$3.16
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.12	\$0.13	\$0.10	\$0.07	\$0.02	\$0.01	\$0.33
17	7	INSECT SCOUTING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18	7	C. P. IRRIGATION (1.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	7	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, SOLID PLANTED, 1993
 FILE NO.: COT9306
 LOCATION: EASTERN ARKANSAS, NORTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: CENTER PIVOT, 130 ACRES

MATERIAL AND/OR MISCELLANEOUS

OPERATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMULATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPERATING COST (\$/ACRE) (J)	OWNER-SHIP COST (\$/ACRE) (K)	LABOR COST (\$/ACRE) (L)	TOTAL SPECIFIED COST (\$/ACRE) (M)
1								0.00%	\$0.00		\$1.35	\$11.80
2								0.00%	\$0.00		\$0.51	\$5.20
3	CSTM AP FERT GRND (DRY)		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	NITROGEN (ACTUAL N)	HN4	POUND	\$0.270	45.000			100.00%	\$12.15		\$0.00	\$12.15
	PHOSPHATE (MATERIAL)	0-46-0	POUND	\$0.092	50.000			100.00%	\$4.60		\$0.00	\$4.60
	POTASH (MATERIAL)	0-0-60	POUND	\$0.075	80.000			100.00%	\$6.00		\$0.00	\$6.00
4								0.00%	\$0.00		\$0.44	\$3.63
5								0.00%	\$0.00		\$0.51	\$4.52
6								0.00%	\$0.00		\$0.44	\$3.63
7	PROWL	4EC	PINT	\$3.690	1.250			100.00%	\$4.61		\$0.00	\$5.24
								0.00%	\$0.00		\$0.00	\$0.16
8	COTTON SEED		POUND	\$0.650	12.000			100.00%	\$7.80		\$1.25	\$16.03
	TEMIK	15G	POUND	\$3.250	3.000			100.00%	\$9.75		\$0.00	\$9.75
	TERRACHLOR SX	GRAN	POUND	\$1.450	7.000			100.00%	\$10.15		\$0.00	\$10.15
	COTORAN	4L	PINT	\$4.730	1.600	38	18	47.37%	\$3.58		\$0.00	\$4.40
								0.00%	\$0.00		\$0.00	\$0.16
9								0.00%	\$0.00		\$0.91	\$6.40
10	CSTM AP FERT GRND (LIQUID)		ACRE	\$3.500	1.000			100.00%	\$3.50		\$0.00	\$3.50
	NITROGEN (ACTUAL N)	32%	POUND	\$0.211	45.000			100.00%	\$9.50		\$0.00	\$9.50
11								0.00%	\$0.00		\$1.14	\$6.63
	COTORAN	4L	PINT	\$4.730	1.600	38	16	42.11%	\$3.19		\$0.00	\$3.98
	DSMA	3.6#	PINT	\$0.890	5.111	38	16	42.11%	\$1.92		\$0.00	\$1.92
								0.00%	\$0.00		\$0.00	\$0.14
12	CAPAROL	4L	PINT	\$3.790	1.000	38	16	42.11%	\$1.60		\$0.00	\$2.39
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$2.47
								0.00%	\$0.00		\$0.00	\$0.14
13	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
14								0.00%	\$0.00		\$1.14	\$6.63
	BLADEX	4L	PINT	\$2.950	1.500	38	16	42.11%	\$1.88		\$0.00	\$2.66
	MSMA	6.0 #	PINT	\$2.200	2.666	38	16	42.11%	\$2.47		\$0.00	\$2.47
								0.00%	\$0.00		\$0.00	\$0.14
15	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	DIMETHOATE	2.67EC	PINT	\$2.080	0.600			100.00%	\$1.25		\$0.00	\$1.25
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
16	BLADEX	4L	PINT	\$2.950	1.600			100.00%	\$4.72		\$0.74	\$8.62
								0.00%	\$0.00		\$0.00	\$0.33
17	COTTON INSECT SCOUTING		ACRE	\$4.500	1.000			100.00%	\$4.50		\$0.00	\$4.50
18	C. P. IRRIGATION (1.25")		AC IN	\$2.751	1.250			100.00%	\$3.44	\$10.78	\$0.00	\$14.22
19	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Dr. Milo J. Shult, Director of Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, age, or handicap, and is an Equal Opportunity Employer.

ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 197

COTTON

LOAMY SOILS, NARROW 2x1 SKIP ROW, FURROW
IRRIGATION, SOUTH OF I-40, EASTERN ARKANSAS



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UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

Note: This year's cotton enterprise budgets do not list ginning costs as a specified operating cost. In addition, all cotton pickers have been changed from 2-row to 4-row. These changes resulted in a lower Total Specified Operating Cost than in recent years.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION COTTON COMMITTEE

Claude M. Bonner, Chairman	Charlie Guy
Gary Cloud	Gary Huitink
Billy E. Herrington	Donald R. Johhson
Terry Kirkpatrick	J. Scott McConnell
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THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE	ENTERPRISE: COTTON, NARROW 2*1 SKIP (75%), 1993 FILE NO.: SCOT9307, 95% RELATIVE YIELD LOCATION: EASTERN ARKANSAS, SOUTH OF I-40 SOILS TYPE: LOAMY IRRIGATION: FURROW, FLEX. IRRIGATION TUBING
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University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$5.85	_____
FERTILIZER	\$48.31	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$22.82	_____
FUNGICIDE	\$7.61	_____
INSECTICIDE	\$70.28	_____
DEFOLIANT	\$14.94	_____
AERIAL APPLICATION	\$43.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$17.47	_____
REPAIRS	\$44.15	_____
LABOR	\$17.58	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$6.97	_____
REPAIRS	\$2.09	_____
IRRIGATION LABOR	\$6.62	_____
CUSTOM SPREAD	\$6.75	_____
CUSTOM HAUL	\$0.00	_____
GINNING (Cost assumed to be offset by seed value)	\$0.00	_____
MISCELLANEOUS	\$10.43	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$13.00	_____
TOTAL SPECIFIED OPERATING COSTS	\$337.88	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

	YIELD IN POUNDS PER LAND ACRE				
	<i>(Breakeven prices reflect a cottonseed credit against ginning charges.)</i>				
	601.25	693.75	925.00	1156.25	1248.75
	\$0.56	\$0.49	\$0.37	\$0.29	\$0.27

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$52.93	_____
INTEREST	\$25.88	_____
TAXES & INSURANCE	\$7.23	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$86.04	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$423.92

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

	YIELD IN POUNDS PER LAND ACRE				
	<i>(Breakeven prices reflect a cottonseed credit against ginning charges.)</i>				
	601.25	693.75	925.00	1156.25	1248.75
	\$0.71	\$0.61	\$0.46	\$0.37	\$0.34

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, NARROW 2*1 SKIP (75%), 1993
 FILE NO.: SCOT9307, 95% RELATIVE YIELD
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEX. IRRIGATION TUBING

MACHINERY COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRE- CIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
							1	3	SUBSOIL	15.0	200.0	4.364
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	4	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
4	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.18	\$3.19
5	4	BED CONDITIONER	26.7	175.0	11.633	1.00	\$1.19	\$0.71	\$1.17	\$0.74	\$0.21	\$4.02
6	4	DISK BEDDER, 8 ROW @ 38"	25.3	175.0	13.509	1.00	\$0.94	\$0.61	\$0.92	\$0.57	\$0.18	\$3.19
7	5	TRIPLE K	26.7	175.0	11.633	1.00	\$1.35	\$0.71	\$1.37	\$0.86	\$0.24	\$4.53
	5	SPRAYER, SADDLE MTD BC	26.7	0.0	11.633	1.00	\$0.13	\$0.00	\$0.32	\$0.14	\$0.04	\$0.63
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.12	\$0.13	\$0.10	\$0.07	\$0.02	\$0.01	\$0.33
8	5	SPLIT BOX PLANTER, 8 X 38"	25.3	175.0	8.981	1.00	\$2.28	\$0.91	\$2.45	\$1.03	\$0.29	\$6.97
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	SPRAYER, SADDLE MTD BC	25.3	0.0	8.981	1.00	\$0.17	\$0.00	\$0.41	\$0.18	\$0.05	\$0.81
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.04	\$0.05	\$0.04	\$0.03	\$0.01	\$0.00	\$0.12
9	5	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.28	\$5.49
10	6	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
11	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.28	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.04	\$0.04	\$0.03	\$0.02	\$0.01	\$0.00	\$0.10
12	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.04	\$0.04	\$0.03	\$0.02	\$0.01	\$0.00	\$0.10
13	6	ROW CULTIVATOR, 8 x 38"	25.3	140.0	6.448	1.00	\$1.72	\$1.02	\$1.57	\$0.91	\$0.26	\$5.49
	6	DIRECTED SPRAYER	25.3	0.0	6.448	1.00	\$0.17	\$0.00	\$0.40	\$0.18	\$0.05	\$0.80
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.04	\$0.04	\$0.03	\$0.02	\$0.01	\$0.00	\$0.10
14	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
15	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	6	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	6		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
17	6	LAYBY RIG	25.3	140.0	9.978	1.00	\$0.87	\$0.66	\$0.93	\$0.55	\$0.18	\$3.18
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.12	\$0.13	\$0.10	\$0.07	\$0.02	\$0.01	\$0.33
18	6	FLEX. IRRIGATION TUBING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	7	INSECT SCOUTING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
20	7	FURROW IRRIGATION (2.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, NARROW 2*1 SKIP (75%), 1993
 FILE NO.: SCOT9307, 95% RELATIVE YIELD
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEX. IRRIGATION TUBING

MATERIAL AND/OR MISCELLANEOUS

OPERATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMULATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPERATING COST (\$/ACRE) (J)	OWNER-SHIP COST (\$/ACRE) (K)	LABOR COST (\$/ACRE) (L)	TOTAL SPECIFIED COST (\$/ACRE) (M)
1								0.00%	\$0.00		\$1.35	\$11.80
2								0.00%	\$0.00		\$0.51	\$5.20
3	CSTM AP FERT GRND (DRY)		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	NITROGEN (ACTUAL N)	NH4	POUND	\$0.270	50.000			100.00%	\$13.50		\$0.00	\$13.50
	PHOSPHATE (MATERIAL)	0-48-0	POUND	\$0.092	75.000			100.00%	\$8.90		\$0.00	\$8.90
	POTASH (MATERIAL)	0-0-60	POUND	\$0.075	90.000			100.00%	\$6.75		\$0.00	\$6.75
4								0.00%	\$0.00		\$0.44	\$3.63
5								0.00%	\$0.00		\$0.51	\$4.52
6								0.00%	\$0.00		\$0.44	\$3.63
7	PROWL	4EC	PINT	\$3.690	1.250			100.00%	\$4.61		\$0.00	\$5.16
								0.00%	\$0.00		\$0.00	\$0.33
8	COTTON SEED(ADJ FOR SKIP)		POUND	\$0.650	9.000			100.00%	\$5.85		\$1.25	\$14.08
	TEMIK (AFS)	15G	POUND	\$3.250	2.250			100.00%	\$7.31		\$0.00	\$7.31
	TERRACHLOR SX (AFS)	GRAN	POUND	\$1.450	5.250			100.00%	\$7.81		\$0.00	\$7.81
	COTORAN (AFS)	4L	PINT	\$4.730	1.500	38	18	47.37%	\$3.36		\$0.00	\$4.17
								0.00%	\$0.00		\$0.00	\$0.12
9								0.00%	\$0.00		\$0.91	\$6.40
10	CSTM AP FERT GRND (LIQUID)		ACRE	\$3.500	1.000			100.00%	\$3.50		\$0.00	\$3.50
	N (ACTUAL), (AFS)	32%	POUND	\$0.211	37.500			100.00%	\$7.91		\$0.00	\$7.91
11	COTORAN (AFS)	4L	PINT	\$4.730	1.200	38	16	42.11%	\$2.39		\$1.14	\$9.02
	DSMA (AFS)	3.6 #	PINT	\$0.890	3.833	38	16	42.11%	\$1.44		\$0.00	\$2.23
								0.00%	\$0.00		\$0.00	\$0.10
12	CAPAROL (ADJ FOR SKIP)	4L	PINT	\$3.790	0.750	38	16	42.11%	\$1.20		\$1.14	\$7.82
	MSMA (AFS)	6.0 #	PINT	\$2.200	2.000	38	16	42.11%	\$1.85		\$0.00	\$2.65
								0.00%	\$0.00		\$0.00	\$0.10
13	BLADEX (AFS)	4L	PINT	\$2.950	1.125	38	16	42.11%	\$1.40		\$1.14	\$8.02
	MSMA (ADJ FOR SKIP)	6.0 #	PINT	\$2.200	2.000	38	16	42.11%	\$1.85		\$0.00	\$2.65
								0.00%	\$0.00		\$0.00	\$0.10
14	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	BIDRIN	8EC	PINT	\$10.470	0.200			100.00%	\$2.09		\$0.00	\$2.09
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
15	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
16	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
	SOLUBOR	20%	POUND	\$0.750	1.000			100.00%	\$0.75		\$0.00	\$0.75
17	BLADEX	4L	PINT	\$2.950	1.800			100.00%	\$4.72		\$0.74	\$8.62
								0.00%	\$0.00		\$0.00	\$0.33
18	FLEX. IRRIGATION TUBING		ACRE	\$5.930	1.000			100.00%	\$5.93		\$0.00	\$5.93
19	COTTON INSECT SCOUTING		ACRE	\$4.500	1.000			100.00%	\$4.50		\$0.00	\$4.50
20	FURROW IRRIGATION (2.25")		AC IN	\$1.742	2.250			100.00%	\$3.92	\$2.89	\$0.00	\$6.81

SEQUENCE OF OPERATIONS

ENTERPRISE: COTTON, NARROW 2*1 SKIP (75%), 1993
 FILE NO.: SCOT9307, 95% RELATIVE YIELD
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEX. IRRIGATION TUBING

MACHINERY COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	MACHINERY COST					
							OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRE- CIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
21	7	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
22	7	FURROW IRRIGATION (2.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
23	7	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
24	7	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
25	8	FURROW IRRIGATION (2.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
26	8	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27	8	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
28	8	APPLY INSECTICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
29	8	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8	FURROW IRRIGATION (2.25")	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
30	8	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
31	9	APPLY INSECT. & FOLIAR N.	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
32	9	APPLY DEFOLIANT	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
33	9	APPLY DEFOLIANT	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	9		0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
34	9	4 ROW PICKER, FIRST PICK	12.7	207.0	2.995	0.85	\$16.08	\$3.33	\$18.18	\$8.12	\$1.75	\$45.45
	9	COTTON TRAILER	20.0	170.0	8.485	0.29	\$0.39	\$0.24	\$0.21	\$0.08	\$0.02	\$0.94
	9	COTTON TRAILER	20.0	170.0	8.485	0.29	\$0.39	\$0.24	\$0.21	\$0.08	\$0.02	\$0.94
35	10	4 ROW PICKER, 50% SCRAP	12.7	207.0	4.607	0.43	\$5.23	\$1.08	\$5.91	\$1.99	\$0.57	\$14.77
	10	COTTON TRAILER	20.0	170.0	8.485	0.14	\$0.19	\$0.12	\$0.10	\$0.04	\$0.01	\$0.47
	10	COTTON TRAILER	20.0	170.0	8.485	0.14	\$0.19	\$0.12	\$0.10	\$0.04	\$0.01	\$0.47
36	12	STALK CUTTER	15.0	140.0	7.727	1.00	\$1.94	\$0.85	\$1.51	\$0.87	\$0.25	\$5.42
		SPECIFIED INTEREST										
TOTAL SPECIFIED COSTS							\$44.15	\$17.47	\$47.00	\$20.93	\$5.98	\$135.54

SEQUENCE OF OPERATIONS (CONTINUED)

ENTERPRISE: COTTON, NARROW 2*1 SKIP (75%), 1993
 FILE NO.: SCOT9307, 95% RELATIVE YIELD
 LOCATION: EASTERN ARKANSAS, SOUTH OF I-40
 SOILS TYPE: LOAMY
 IRRIGATION: FURROW, FLEX. IRRIGATION TUBING

MATERIAL AND/OR MISCELLANEOUS

OPER- ATION NO. (A)	CHEMICAL TRADE NAME OR ITEM (B)	FORMU- LATION (UNIT) (C)	UNIT RATE (MEASURE) (D)	PRICE PER UNIT (E)	PRODUCT RATE (ACRE) (F)	ROW WIDTH (INCHES) (G)	BAND WIDTH (INCHES) (H)	PERCENT COVERED (I)	OPER- ATING COST (J) (\$/ACRE)	OWNER- SHIP COST (K) (\$/ACRE)	LABOR COST (L) (\$/ACRE)	TOTAL SPECIFIED COST (M) (\$/ACRE)
21	CSTM AP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	1.100			100.00%	\$0.28		\$0.00	\$0.28
22	FURROW IRRIGATION (2.25")		AC IN	\$1.742	2.250			100.00%	\$3.92	\$2.89	\$0.00	\$6.81
23	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
24	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
25	FURROW IRRIGATION (2.25")		AC IN	\$1.742	2.250			100.00%	\$3.92	\$2.89	\$0.00	\$6.81
26	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
27	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
28	CSTM APP AIR 3 GAL		ACRE	\$2.500	1.000			100.00%	\$2.50		\$0.00	\$2.50
	GUTHION	2L	PINT	\$3.360	1.000			100.00%	\$3.36		\$0.00	\$3.36
29	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
	FURROW IRRIGATION (2.25")		AC IN	\$1.742	2.250			100.00%	\$3.92	\$2.89	\$0.00	\$6.81
30	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	LARVIN	3.2#	PINT	\$6.120	0.626			100.00%	\$3.83		\$0.00	\$3.83
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
31	CSTM AP AIR 5 GAL		ACRE	\$3.250	1.000			100.00%	\$3.25		\$0.00	\$3.25
	PYRETHROID		MED RAT	\$6.900	1.000			100.00%	\$6.90		\$0.00	\$6.90
	LARVIN	3.2#	PINT	\$6.120	0.313			100.00%	\$1.92		\$0.00	\$1.92
	NITROGEN (ACTUAL N-23%)		POUND	\$0.250	6.600			100.00%	\$1.65		\$0.00	\$1.65
32	CSTM AP AIR DEFOLIANT		ACRE	\$4.250	1.000			100.00%	\$4.25		\$0.00	\$4.25
	PREP	6#/GAL	PINT	\$7.580	0.500			100.00%	\$3.79		\$0.00	\$3.79
	DEF/FOLEX	6EC	PINT	\$4.460	1.000			100.00%	\$4.46		\$0.00	\$4.46
33	CSTM AP AIR DEFOLIANT		ACRE	\$4.250	1.000			100.00%	\$4.25		\$0.00	\$4.25
	DEF/FOLEX	6EC	PINT	\$4.460	1.500			100.00%	\$6.69		\$0.00	\$6.69
34								0.00%	\$0.00		\$5.01	\$50.46
								0.00%	\$0.00		\$0.00	\$0.94
								0.00%	\$0.00		\$0.00	\$0.94
35								0.00%	\$0.00		\$1.83	\$18.40
								0.00%	\$0.00		\$0.00	\$0.47
								0.00%	\$0.00		\$0.00	\$0.47
36								0.00%	\$0.00		\$0.76	\$6.18
												\$13.57
									\$245.68	\$11.55	\$17.58	\$423.92

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
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ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
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ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 188

RICE

SILT LOAM SOILS, EASTERN ARKANSAS



AUTHORS

CLYDE A. STUART
TONY E. WINDHAM

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural industry. They are used:

- by farmers for planning,
- by extension personnel in providing educational programs to farmers,
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- to inform non-farmers of the costs incurred by farmers in the production of food and fiber crops.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production

Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

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ACKNOWLEDGEMENTS EXTENSION RICE COMMITTEE

Ronnie S. Helms, Chairman	Ford L. Baldwin
Gary Cloud	Charlie Guy
Gary Huitink	Donald R. Johnson
James J. Kimbrough	John Langston
Roy N. Sharp	Nathan Slaton
Phil L. Tacker	Tony E. Windham

THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE:	RICE, 1993
COOPERATIVE	FILE NO.:	RC9301
EXTENSION	LOCATION:	EASTERN ARKANSAS
SERVICE	SOILS TYPE:	SILT LOAM
	IRRIGATION:	FLOOD

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$12.32	_____
FERTILIZER	\$34.94	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$40.26	_____
FUNGICIDE	\$15.40	_____
INSECTICIDE	\$4.41	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$29.11	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$12.51	_____
REPAIRS	\$24.85	_____
LABOR	\$10.89	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$22.97	_____
REPAIRS	\$2.86	_____
IRRIGATION LABOR	\$9.41	_____
CUSTOM SPREAD	\$3.25	_____
CUSTOM HAUL	\$19.33	_____
CUSTOM DRY OR GINNING	\$32.22	_____
MISCELLANEOUS	\$4.80	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$9.89	_____
TOTAL SPECIFIED OPERATING COSTS	\$289.42	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST
YIELD IN BUSHELLS

	78.00	90.00	120.00	150.00	162.00
	\$3.48	\$3.07	\$2.41	\$2.02	\$1.90

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$45.30	_____
INTEREST	\$22.11	_____
TAXES & INSURANCE	\$6.18	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$73.58	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS \$363.00

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST
YIELD IN BUSHELLS

	78.00	90.00	120.00	150.00	162.00
	\$4.42	\$3.89	\$3.02	\$2.51	\$2.35

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: RICE, 1993
 FILE NO.: RC9301
 LOCATION: EASTERN ARKANSAS
 SOILS TYPE: SILT LOAM
 IRRIGATION: FLOOD

MACHINERY COST

OPERATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	MACHINERY COST					
							OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRECIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
1	11	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	3	LAND FLOAT 16' X 56'	16.0	175.0	7.273	2.00	\$3.04	\$2.26	\$2.67	\$1.87	\$0.53	\$10.36
4	4	CUSTOM APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4	FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5	4	FIELD CULTIVATOR	25.5	175.0	9.891	1.00	\$1.41	\$0.83	\$1.47	\$0.89	\$0.25	\$4.86
6	4	BED CONDITIONER	20.0	155.0	8.727	1.00	\$1.30	\$0.83	\$1.29	\$0.81	\$0.23	\$4.47
7	4	GRAIN DRILL	20.0	140.0	8.145	1.00	\$1.83	\$0.81	\$2.47	\$1.26	\$0.36	\$6.73
8	4	ROLLER	27.0	140.0	18.691	1.00	\$0.52	\$0.39	\$0.82	\$0.63	\$0.18	\$2.54
9	4	LASER SURVEY	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
10	4	DITCHER	3.0	140.0	0.436	0.01	\$0.18	\$0.15	\$0.38	\$0.20	\$0.06	\$0.97
11	4	LEVEE DISK	9.0	155.0	4.800	0.30	\$0.52	\$0.45	\$0.60	\$0.35	\$0.10	\$2.03
12	4	LEVEE DISK/W BOX SEEDER	9.0	155.0	4.800	0.10	\$0.20	\$0.15	\$0.24	\$0.14	\$0.04	\$0.78
13	5	INSTALL LEVEE GATES-BLADE	8.0	105.0	1.745	0.05	\$0.18	\$0.16	\$0.18	\$0.12	\$0.03	\$0.67
	5	LEVEE GATES (PLASTIC)	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
14	5	BUTT LEVEES-REAR BACKHOE	18.0	105.0	7.636	0.05	\$0.04	\$0.04	\$0.12	\$0.08	\$0.02	\$0.27
15	5	APPLY HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	5	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
17	5	APP. INSEC. (TREAT 20% AC)	0.0	0.0	0.000	0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	INSECTICIDE	0.0	0.0	0.000	0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18	5	APPLY HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	5	HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	5	IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
20	6	IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
21	7	APPLY HERBICIDE - LEVEES	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7	HERBICIDE	0.0	0.0	0.000	0.10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
22	7	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7	FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
23	7	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7	FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
24	7	APP. FUNG. (TREAT 50% AC)	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	7	FUNGICIDE	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
25	7	IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
26	8	APP. FUNG. (TREAT 50% AC)	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8	FUNGICIDE	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	8	INSECTICIDE	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27	8	IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
28	9	COMBINE, 4WD, RICE	20.0	215.0	3.055	0.90	\$9.57	\$3.27	\$18.61	\$5.43	\$1.65	\$38.43
	9	COMBINE, 4WD, DOWN RICE	20.0	215.0	1.697	0.10	\$1.91	\$0.65	\$3.72	\$1.09	\$0.31	\$7.69
29	9	GRAIN BUGGY, 350 BU.	8.3	175.0	4.024	0.39	\$1.17	\$0.79	\$1.10	\$0.72	\$0.21	\$4.00
30	9	CUSTOM HAULING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
31	9	CUSTOM DRYING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
32	10	LEVEE DISK	9.0	155.0	4.800	0.20	\$0.35	\$0.30	\$0.40	\$0.24	\$0.07	\$1.35
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		SPECIFIED INTEREST										
TOTAL SPECIFIED COSTS							\$24.85	\$12.51	\$37.13	\$15.55	\$4.44	\$94.49

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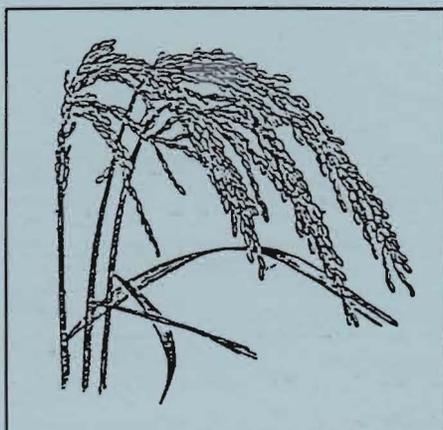
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 189

RICE

CLAY SOILS, EASTERN ARKANSAS



AUTHORS

CLYDE A. STUART
TONY E. WINDHAM

EXTENSION ECONOMISTS - MANAGEMENT
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Roy N. Sharp	Nathan Slaton
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THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE:	RICE, 1993
COOPERATIVE	FILE NO.:	RC9302
EXTENSION	LOCATION:	EASTERN ARKANSAS
SERVICE	SOILS TYPE:	CLAY
	IRRIGATION:	FLOOD

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$14.81	_____
FERTILIZER	\$27.44	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$47.80	_____
FUNGICIDE	\$15.40	_____
INSECTICIDE	\$4.41	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$29.11	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$12.51	_____
REPAIRS	\$24.85	_____
LABOR	\$10.89	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$21.73	_____
REPAIRS	\$2.15	_____
IRRIGATION LABOR	\$10.58	_____
CUSTOM SPREAD	\$0.00	_____
CUSTOM HAUL	\$19.33	_____
CUSTOM DRY OR GINNING	\$32.22	_____
MISCELLANEOUS	\$4.80	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$9.83	_____
TOTAL SPECIFIED OPERATING COSTS	\$287.87	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHELS

	78.00	90.00	120.00	150.00	162.00
	\$3.46	\$3.05	\$2.40	\$2.01	\$1.89

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$43.22	_____
INTEREST	\$20.48	_____
TAXES & INSURANCE	\$5.72	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$69.42	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$357.29

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHELS

	78.00	90.00	120.00	150.00	162.00
	\$4.35	\$3.82	\$2.98	\$2.47	\$2.32

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: RICE, 1993
 FILE NO.: RC9302
 LOCATION: EASTERN ARKANSAS
 SOILS TYPE: CLAY
 IRRIGATION: FLOOD

OPERATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	MACHINERY COST					
							OPERATING COST		OWNERSHIP COST			
							REPAIRS & MAINTENANCE (H) (\$/ACRE)	FUEL, OIL & LUB (I) (\$/ACRE)	DEPRECIATION (J) (\$/ACRE)	INTEREST (K) (\$/ACRE)	TAXES & INSURANCE (L) (\$/ACRE)	TOTAL MACHINE COST (M) (\$/ACRE)
1	11	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
2	3	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69
3	3	LAND FLOAT 16' X 56'	18.0	175.0	7.273	2.00	\$3.04	\$2.26	\$2.67	\$1.87	\$0.53	\$10.36
4	4	FIELD CULTIVATOR	25.5	175.0	9.891	1.00	\$1.41	\$0.83	\$1.47	\$0.89	\$0.25	\$4.86
5	4	BED CONDITIONER	20.0	155.0	8.727	1.00	\$1.30	\$0.83	\$1.29	\$0.81	\$0.23	\$4.47
6	4	GRAIN DRILL	20.0	140.0	8.145	1.00	\$1.83	\$0.81	\$2.47	\$1.26	\$0.36	\$6.73
7	4	ROLLER	27.0	140.0	16.691	1.00	\$0.52	\$0.39	\$0.82	\$0.63	\$0.18	\$2.54
8	4	LASER SURVEY	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
9	4	DITCHER	3.0	140.0	0.436	0.01	\$0.18	\$0.15	\$0.38	\$0.20	\$0.06	\$0.97
10	4	LEVEE DISK	9.0	155.0	4.800	0.30	\$0.52	\$0.45	\$0.60	\$0.35	\$0.10	\$2.03
11	4	LEVEE DISK/W BOX SEEDER	9.0	155.0	4.800	0.10	\$0.20	\$0.15	\$0.24	\$0.14	\$0.04	\$0.76
12	5	INSTALL LEVEE GATES-BLADE	8.0	105.0	1.745	0.05	\$0.18	\$0.18	\$0.18	\$0.12	\$0.03	\$0.67
		5 LEVEE GATES (PLASTIC)	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
13	5	BUTT LEVEES-REAR BACKHOE	18.0	105.0	7.636	0.05	\$0.04	\$0.04	\$0.12	\$0.06	\$0.02	\$0.27
14	5	APPLY HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		5 HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
15	5	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		5 FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
16	5	APP. INSEC. (TREAT 20% AC)	0.0	0.0	0.000	0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		5 INSECTICIDE	0.0	0.0	0.000	0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
17	5	APPLY HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		5 HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
18	5	IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
19	6	IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
20	7	APPLY HERBICIDE - LEVEES	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		7 HERBICIDE	0.0	0.0	0.000	0.10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
21	7	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		7 FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
22	7	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		7 FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
23	7	APP. FUNG. (TREAT 50% AC)	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		7 FUNGICIDE	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
24	7	IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
25	8	APP. FUNG. (TREAT 50% AC)	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		8 FUNGICIDE	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
		8 INSECTICIDE	0.0	0.0	0.000	0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
26	8	IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
27	9	COMBINE, 4WD, RICE	20.0	215.0	3.055	0.90	\$9.57	\$3.27	\$18.61	\$5.43	\$1.55	\$38.43
		9 COMBINE, 4WD, DOWN RICE	20.0	215.0	1.697	0.10	\$1.91	\$0.65	\$3.72	\$1.09	\$0.31	\$7.69
28	9	GRAIN BUGGY, 350 BU.	8.3	175.0	4.024	0.39	\$1.17	\$0.79	\$1.10	\$0.72	\$0.21	\$4.00
29	9	CUSTOM HAULING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
30	9	CUSTOM DRYING	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
31	10	LEVEE DISK	9.0	155.0	4.800	0.20	\$0.35	\$0.30	\$0.40	\$0.24	\$0.07	\$1.35
0			0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0			0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0			0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0			0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0			0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SPECIFIED INTEREST												
TOTAL SPECIFIED COSTS							\$24.85	\$12.51	\$37.13	\$15.55	\$4.44	\$94.49

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Dr. Milo J. Shult, Director of Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, age, or handicap, and is an Equal Opportunity Employer.

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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 190

RICE

GRAND PRAIRIE SOILS,
GRAND PRAIRE REGION, ARKANSAS



AUTHORS

CLYDE A. STUART
TONY E. WINDHAM

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production

Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION RICE COMMITTEE

Ronnie S. Helms, Chairman	Ford L. Baldwin
Gary Cloud	Charlie Guy
Gary Huitink	Donald R. Johnson
James J. Kimbrough	John Langston
Roy N. Sharp	Nathan Slaton
Phil L. Tacker	Tony E. Windham

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UNIVERSITY OF ARKANSAS	ENTERPRISE: RICE, 1993
COOPERATIVE	FILE NO.: RC9303
EXTENSION	LOCATION: GRAND PRAIRIE REGION
SERVICE	SOILS TYPE: GRAND PRAIRIE SOILS
	IRRIGATION: FLOOD

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$12.32	_____
FERTILIZER	\$27.44	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$40.26	_____
FUNGICIDE	\$15.40	_____
INSECTICIDE	\$4.41	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$29.11	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$12.56	_____
REPAIRS	\$24.92	_____
LABOR	\$10.96	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$34.96	_____
REPAIRS	\$6.51	_____
IRRIGATION LABOR	\$7.35	_____
CUSTOM SPREAD	\$0.00	_____
CUSTOM HAUL	\$20.46	_____
CUSTOM DRY OR GINNING	\$34.10	_____
MISCELLANEOUS	\$4.80	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$10.06	_____
TOTAL SPECIFIED OPERATING COSTS	\$295.62	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST
YIELD IN BUSHELS

	82.55	95.25	127.00	158.75	171.45
	\$3.35	\$2.96	\$2.33	\$1.95	\$1.84

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$57.28	_____
INTEREST	\$30.73	_____
TAXES & INSURANCE	\$8.59	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$96.60	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS	\$392.22	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST
YIELD IN BUSHELS

	82.55	95.25	127.00	158.75	171.45
	\$4.52	\$3.97	\$3.09	\$2.56	\$2.40

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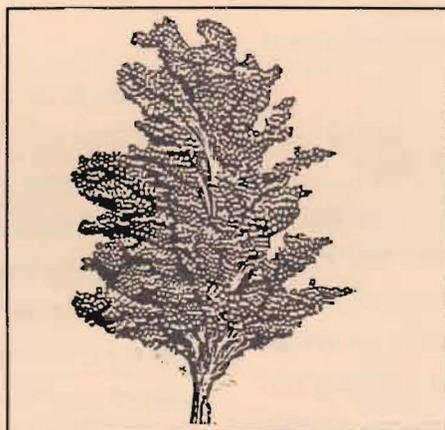
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 200

GRAIN SORGHUM

LOAMY SOILS



AUTHORS

CLYDE A. STUART
TONY E. WINDHAM

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

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UNIVERSITY OF ARKANSAS	ENTERPRISE:	GRAIN SORGHUM, 1993
COOPERATIVE	FILE NO.:	GR9301
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	LOAMY
	IRRIGATION:	NONE

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.00	_____
FERTILIZER	\$30.78	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$8.10	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$7.96	_____
REPAIRS	\$16.71	_____
LABOR	\$6.91	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$6.50	_____
CUSTOM HAUL	\$11.50	_____
CUSTOM DRY OR GINNING	\$11.58	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$3.82	_____
TOTAL SPECIFIED OPERATING COSTS	\$110.86	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST
YIELD IN CWT.

	26.00	30.00	40.00	50.00	54.00
	\$3.95	\$3.50	\$2.77	\$2.33	\$2.21

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$22.94	_____
INTEREST	\$9.67	_____
TAXES & INSURANCE	\$2.70	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$35.32	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

	26.00	30.00	40.00	50.00	54.00
	\$5.31	\$4.68	\$3.65	\$3.04	\$2.86

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ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
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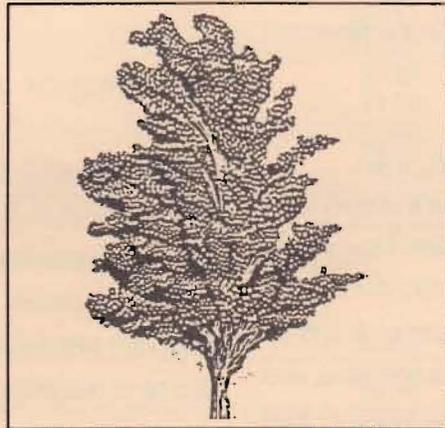
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 201

GRAIN SORGHUM

LOAMY SOILS, FLOOD IRRIGATION



AUTHORS

CLYDE A. STUART
TONY E. WINDHAM

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
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UNIVERSITY OF ARKANSAS	ENTERPRISE:	GRAIN SORGHUM, 1993
COOPERATIVE	FILE NO.:	GR9302
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	LOAMY
	IRRIGATION:	FLOOD

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.00	_____
FERTILIZER	\$34.96	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$8.10	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$8.61	_____
REPAIRS	\$17.41	_____
LABOR	\$7.51	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$4.23	_____
REPAIRS	\$2.15	_____
IRRIGATION LABOR	\$4.12	_____
CUSTOM SPREAD	\$6.50	_____
CUSTOM HAUL	\$17.24	_____
CUSTOM DRY OR GINNING	\$17.37	_____
MISCELLANEOUS	\$1.25	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$4.76	_____

TOTAL SPECIFIED OPERATING COSTS	\$141.22	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST					
YIELD IN CWT.					
	39.00	45.00	60.00	75.00	81.00
	\$3.30	\$2.94	\$2.35	\$2.00	\$1.90

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$29.89	_____
INTEREST	\$14.78	_____
TAXES & INSURANCE	\$4.13	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____

TOTAL SPECIFIED OWNERSHIP COSTS	\$48.80	_____
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TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS	\$190.02	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST					
YIELD IN CWT.					
	39.00	45.00	60.00	75.00	81.00
	\$4.56	\$4.03	\$3.17	\$2.65	\$2.50

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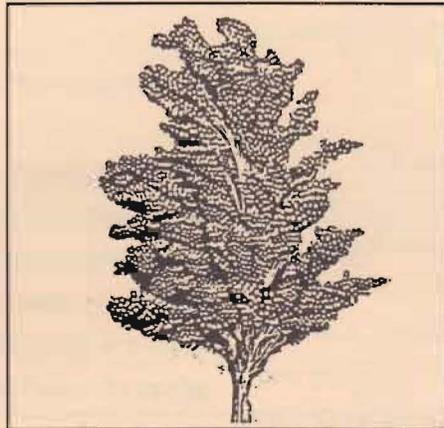
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 202

GRAIN SORGHUM

CLAY SOILS



AUTHORS

CLYDE A. STUART
TONY E. WINDHAM

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UNIVERSITY OF ARKANSAS	ENTERPRISE:	GRAIN SORGHUM, 1993
COOPERATIVE	FILE NO.:	GR9303
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	CLAY
	IRRIGATION:	NONE

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.00	_____
FERTILIZER	\$22.32	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$9.11	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$8.80	_____
REPAIRS	\$18.12	_____
LABOR	\$7.51	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$6.50	_____
CUSTOM HAUL	\$11.50	_____
CUSTOM DRY OR GINNING	\$11.58	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$3.63	_____
TOTAL SPECIFIED OPERATING COSTS	\$106.06	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

	YIELD IN CWT.				
	26.00	30.00	40.00	50.00	54.00
	\$3.76	\$3.34	\$2.65	\$2.24	\$2.12

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$24.42	_____
INTEREST	\$10.58	_____
TAXES & INSURANCE	\$2.96	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$37.95	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS	\$144.02	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

	YIELD IN CWT.				
	26.00	30.00	40.00	50.00	54.00
	\$5.22	\$4.60	\$3.60	\$3.00	\$2.82

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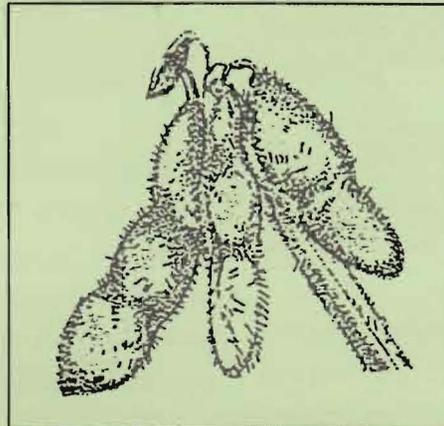
TB202-1540-11-92

ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 179

SOYBEANS

EARLY SEASON, LOAMY SOILS



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

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THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, EARLY SEASON, 1993
COOPERATIVE	FILE NO.:	SOY9301
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	LOAMY
	IRRIGATION:	NONE

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$8.25	_____
FERTILIZER	\$15.00	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$27.21	_____
FUNGICIDE	\$1.82	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$9.52	_____
REPAIRS	\$19.27	_____
LABOR	\$8.13	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$3.25	_____
CUSTOM HAUL	\$3.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$3.85	_____
TOTAL SPECIFIED OPERATING COSTS	\$100.03	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHELS

16.25	18.75	25.00	31.25	33.75
\$6.07	\$5.28	\$4.00	\$3.23	\$3.00

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$25.67	_____
INTEREST	\$11.29	_____
TAXES & INSURANCE	\$3.15	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$40.11	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$140.15

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHELS

16.25	18.75	25.00	31.25	33.75
\$8.54	\$7.42	\$5.61	\$4.52	\$4.19

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		<i>FURROW ^</i>	<i>FLOOD ^^</i>	<i>CENTER PIVOT</i>
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS	(\$/ACRE)			
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS	(\$/ACRE)			
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64

^ Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.

^^ Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
FUNGICIDE (BENLATE)	.75 POUNDS	\$11.25	\$4.25	\$15.5
INSECTICIDE (ASANA XL)	5 OUNCES	\$5.00	\$4.25	\$9.25
LIME (PRORATED COST OVER 5 YEARS)	2 TONS			\$8.00

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Dr. Milo J. Shult, Director of Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, age, or handicap, and is an Equal Opportunity Employer.

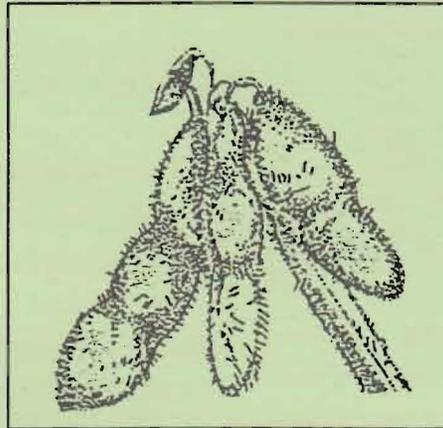
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 180

SOYBEANS

MIXED SOILS



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production

Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION SOYBEAN COMMITTEE

Nathan McKinney, Chairman	Ford L. Baldwin
Charlie Guy	Gary Huitink
Donald R. Johnson	Richard A. Klerk
Gus M. Lorenz	Roy N. Sharp
Clifford S. Snyder	Phil L. Tacker
Tony E. Windham	

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UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, 1993
COOPERATIVE	FILE NO.:	SOY9302
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	MIXED
	IRRIGATION:	NONE

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$6.75	_____
FERTILIZER	\$7.50	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$27.21	_____
FUNGICIDE	\$1.49	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$10.05	_____
REPAIRS	\$19.78	_____
LABOR	\$8.50	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$3.25	_____
CUSTOM HAUL	\$3.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$3.53	_____
TOTAL SPECIFIED OPERATING COSTS	\$91.80	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHELS

	16.25	18.75	25.00	31.25	33.75
	\$5.57	\$4.84	\$3.67	\$2.97	\$2.76

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$25.75	_____
INTEREST	\$11.46	_____
TAXES & INSURANCE	\$3.20	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$40.42	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS \$132.22

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHELS

	16.25	18.75	25.00	31.25	33.75
	\$8.05	\$7.00	\$5.29	\$4.26	\$3.96

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		<i>FURROW ^</i>	<i>FLOOD ^^</i>	<i>CENTER PIVOT</i>
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS	(\$/ACRE)			
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS	(\$/ACRE)			
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64

^ Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.

^^ Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
FUNGICIDE (BENLATE)	.75 POUNDS	\$11.25	\$4.25	\$15.5
INSECTICIDE (ASANA XL)	5 OUNCES	\$5.00	\$4.25	\$9.25
LIME (PRORATED COST OVER 5 YEARS)	2 TONS			\$8.00

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

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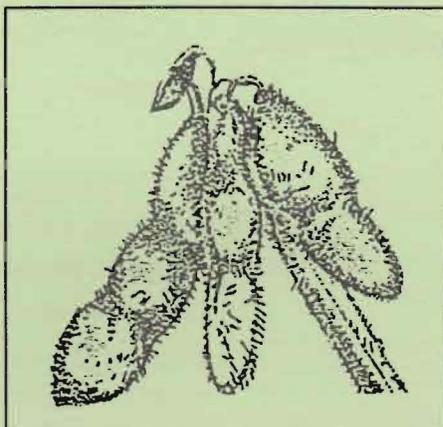
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 181

SOYBEANS

STALE SEEDBED, MIXED SOILS



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
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ESTIMATING PRODUCTION COSTS IN ARKANSAS

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Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

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UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, STALE SEEDBED, 1993
COOPERATIVE	FILE NO.:	SOY9303
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	MIXED
	IRRIGATION:	NONE

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.50	_____
FERTILIZER	\$0.00	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$30.31	_____
FUNGICIDE	\$1.65	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$4.25	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$6.08	_____
REPAIRS	\$14.59	_____
LABOR	\$4.56	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$3.50	_____
CUSTOM HAUL	\$3.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$3.05	_____
TOTAL SPECIFIED OPERATING COSTS	\$79.23	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHELLS

	16.25	18.75	25.00	31.25	33.75
	\$4.79	\$4.17	\$3.17	\$2.57	\$2.39

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$21.14	_____
INTEREST	\$8.17	_____
TAXES & INSURANCE	\$2.28	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$31.59	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$110.82

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHELLS

	16.25	18.75	25.00	31.25	33.75
	\$6.74	\$5.86	\$4.43	\$3.58	\$3.32

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		FURROW ^	FLOOD ^^	CENTER PIVOT
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS	(\$/ACRE)			
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS	(\$/ACRE)			
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64

^ Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.

^^ Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
FUNGICIDE (BENLATE)	.75 POUNDS	\$11.25	\$4.25	\$15.5
INSECTICIDE (ASANA XL)	5 OUNCES	\$5.00	\$4.25	\$9.25
LIME (PRORATED COST OVER 5 YEARS)	2 TONS			\$8.00

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO
RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with
the U.S. Department of Agriculture, Dr. Milo J. Shult, Director of Extension Service, University
of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless
of race, color, national origin, sex, age, or handicap, and is an Equal Opportunity Employer.

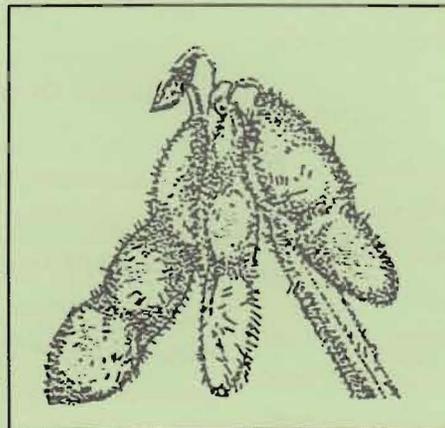
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 182

SOYBEANS

MIXED SOILS, FURROW IRRIGATION



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production

Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION SOYBEAN COMMITTEE

Nathan McKinney, Chairman
Charlie Guy
Donald R. Johnson
Gus M. Lorenz
Clifford S. Snyder
Tony E. Windham

Ford L. Baldwin
Gary Huitink
Richard A. Klerk
Roy N. Sharp
Phil L. Tacker

THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, 1993
COOPERATIVE	FILE NO.:	SOY9304
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	MIXED
	IRRIGATION:	FURROW

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$11.25	_____
FERTILIZER	\$11.25	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$27.21	_____
FUNGICIDE	\$1.49	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$11.34	_____
REPAIRS	\$21.82	_____
LABOR	\$9.66	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$6.97	_____
REPAIRS	\$2.09	_____
IRRIGATION LABOR	\$6.62	_____
CUSTOM SPREAD	\$3.25	_____
CUSTOM HAUL	\$6.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$5.93	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$5.02	_____
TOTAL SPECIFIED OPERATING COSTS	\$130.64	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHELS

	29.25	33.75	45.00	56.25	60.75
	\$4.38	\$3.82	\$2.90	\$2.35	\$2.19

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$33.54	_____
INTEREST	\$17.05	_____
TAXES & INSURANCE	\$4.76	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$55.36	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$186.00

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHELS

	29.25	33.75	45.00	56.25	60.75
	\$6.27	\$5.46	\$4.13	\$3.34	\$3.10

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		<i>FURROW ^</i>	<i>FLOOD ^^</i>	<i>CENTER PIVOT</i>
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS (\$/ACRE)				
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS (\$/ACRE)				
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64

^ Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.

^^ Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
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1993 PRODUCTION COST ESTIMATES

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ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
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ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
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ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
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ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
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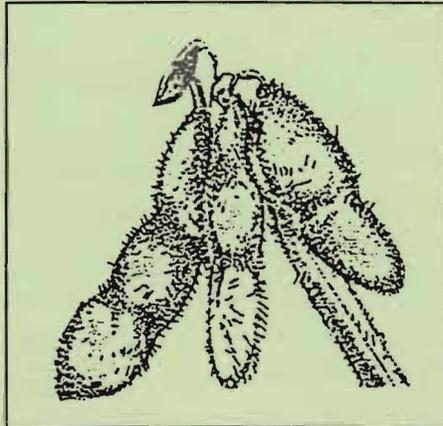
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 183

SOYBEANS

IN RICE ROTATION,
LOAMY SOILS, FLOOD IRRIGATION



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
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ESTIMATING PRODUCTION COSTS IN ARKANSAS

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Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

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UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, IN RICE ROTATION, 1993
COOPERATIVE	FILE NO.:	SOY9305
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	LOAMY
	IRRIGATION:	FLOOD

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$11.25	_____
FERTILIZER	\$20.45	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$36.94	_____
FUNGICIDE	\$1.49	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$13.93	_____
REPAIRS	\$25.50	_____
LABOR	\$12.06	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$7.18	_____
REPAIRS	\$2.86	_____
IRRIGATION LABOR	\$5.88	_____
CUSTOM SPREAD	\$3.25	_____
CUSTOM HAUL	\$6.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$1.25	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$5.95	_____
TOTAL SPECIFIED OPERATING COSTS	\$154.72	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

	YIELD IN BUSHELS				
	29.25	33.75	45.00	56.25	60.75
	\$5.21	\$4.53	\$3.44	\$2.78	\$2.59

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$40.16	_____
INTEREST	\$21.51	_____
TAXES & INSURANCE	\$6.01	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$67.68	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS	\$222.40	_____
--	-----------------	-------

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

	YIELD IN BUSHELS				
	29.25	33.75	45.00	56.25	60.75
	\$7.52	\$6.54	\$4.94	\$3.98	\$3.70

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SEQUENCE OF OPERATIONS

ENTERPRISE: SOYBEANS, IN RICE ROTATION, 1993
 FILE NO.: SOY9305
 LOCATION: ARKANSAS
 SOILS TYPE: LOAMY
 IRRIGATION: FLOOD

MACHINERY COST

OPERATING COST OWNERSHIP COST

OPER- ATION NO. (A)	DATE (MONTH) (B)	OPERATION (C)	WIDTH (FEET) (D)	HORSE POWER (PTO) (E)	PERFORMANCE RATE (AC/HR) (F)	TIMES OVER (NO.) (G)	OPERATING COST		OWNERSHIP COST				
							REPAIRS & MAINTENANCE (H)	FUEL, OIL & LUB (I)	DEPRE- CIATION (J)	INTEREST (K)	TAXES & INSURANCE (L)	TOTAL MACHINE COST (M)	
							(\$/ACRE)	(\$/ACRE)	(\$/ACRE)	(\$/ACRE)	(\$/ACRE)	(\$/ACRE)	
1	11	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69	
2	4	DISK, MC 9.0" SPACING	26.4	175.0	11.524	1.00	\$1.32	\$0.71	\$1.53	\$0.87	\$0.25	\$4.69	
3	4	FIELD CULTIVATOR	25.5	175.0	9.891	1.00	\$1.41	\$0.83	\$1.47	\$0.89	\$0.25	\$4.86	
4	4	LAND FLOAT	16.0	175.0	7.273	1.00	\$1.52	\$1.13	\$1.33	\$0.93	\$0.27	\$5.18	
5	5	APPLY FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	5	FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	5	FERTILIZER	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
6	5	FIELD CULTIVATOR	25.5	175.0	9.891	1.00	\$1.41	\$0.83	\$1.47	\$0.89	\$0.25	\$4.86	
7	5	TRIPLE - K	26.7	175.0	11.838	1.00	\$1.35	\$0.71	\$1.37	\$0.86	\$0.24	\$4.53	
	5	SPRAYER, BROADCAST	26.7	0.0	11.838	1.00	\$0.13	\$0.00	\$0.32	\$0.14	\$0.04	\$0.63	
	5	HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	5	PICKUP, WATER TANK	20.0	170.0	8.485	0.12	\$0.13	\$0.10	\$0.07	\$0.02	\$0.01	\$0.33	
8	5	PLANTER 8 ROW @ 30"	20.0	140.0	7.309	1.00	\$2.27	\$0.90	\$2.47	\$1.01	\$0.29	\$6.93	
	5	SEED TREATMENT	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
9	5	DITCHER, REAR MTD POWER	3.0	140.0	0.436	0.01	\$0.18	\$0.15	\$0.38	\$0.20	\$0.08	\$0.97	
10	6	ROW CULTIVATOR	20.0	140.0	5.091	1.00	\$2.04	\$1.29	\$1.85	\$1.10	\$0.31	\$6.60	
11	6	SPRAYER, BANDED	20.0	140.0	7.879	1.00	\$1.13	\$0.83	\$1.26	\$0.74	\$0.21	\$4.17	
	6	HERBICIDE	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	6	CROP OIL	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	6	PICKUP, WATER TANK	20.0	170.0	8.485	0.06	\$0.07	\$0.05	\$0.04	\$0.01	\$0.00	\$0.16	
12	6	LEVEE SURVEY	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
13	6	ROW CULTIVATOR	20.0	140.0	5.091	1.00	\$2.04	\$1.29	\$1.85	\$1.10	\$0.31	\$6.60	
14	7	ROW CULTIVATOR	20.0	140.0	5.091	1.00	\$2.04	\$1.29	\$1.85	\$1.10	\$0.31	\$6.60	
15	7	LEVEE DISK-BUILD	9.0	155.0	4.800	0.15	\$0.26	\$0.23	\$0.30	\$0.18	\$0.05	\$1.01	
16	7	BLADE- 8', BUTT LEVEES	8.0	85.0	1.745	0.05	\$0.10	\$0.12	\$0.18	\$0.11	\$0.03	\$0.53	
17	7	FLOOD IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
18	8	LEVEE DISK-BUILD	9.0	155.0	4.800	0.10	\$0.17	\$0.15	\$0.20	\$0.12	\$0.03	\$0.88	
19	8	FLOOD IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
20	8	LEVEE DISK-BUILD	9.0	155.0	4.800	0.10	\$0.17	\$0.15	\$0.20	\$0.12	\$0.03	\$0.68	
21	8	FLOOD IRRIGATION	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
22	9	LEVEE DISK-KNOCK	9.0	155.0	4.800	0.10	\$0.17	\$0.15	\$0.20	\$0.12	\$0.03	\$0.68	
23	9	BLADE- SMOOTH LEVEES	8.0	85.0	1.745	0.05	\$0.10	\$0.12	\$0.18	\$0.11	\$0.03	\$0.53	
24	10	COMBINE, 4WD, SOYBEANS	20.0	215.0	5.091	1.00	\$6.15	\$2.18	\$11.96	\$3.49	\$1.00	\$24.78	
25	10	CUSTOM HAUL	0.0	0.0	0.000	1.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	0		0.0	0.0	0.000	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
SPECIFIED INTEREST													
TOTAL SPECIFIED COSTS							\$25.50	\$13.93	\$32.00	\$14.96	\$4.28	\$90.66	

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		<i>FURROW</i> ^	<i>FLOOD</i> ^^	<i>CENTER PIVOT</i>
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS (\$/ACRE)				
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS (\$/ACRE)				
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64

^ Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.

^^ Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
FUNGICIDE (BENLATE)	.75 POUNDS	\$11.25	\$4.25	\$15.5
INSECTICIDE (ASANA XL)	5 OUNCES	\$5.00	\$4.25	\$9.25
LIME (PRORATED COST OVER 5 YEARS)	2 TONS			\$8.00

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Dr. Milo J. Shult, Director of Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, age, or handicap, and is an Equal Opportunity Employer.

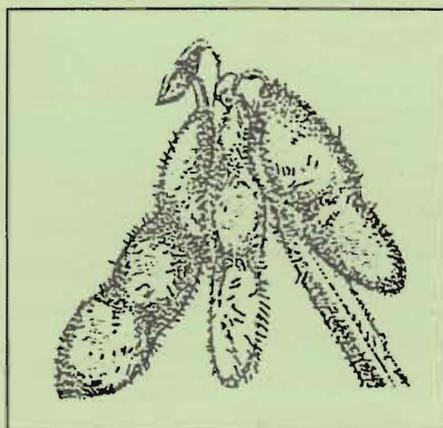
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 184

SOYBEANS

*FOLLOWING WHEAT,
LOAMY SOILS, FLOOD IRRIGATION*



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production

Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION SOYBEAN COMMITTEE

Nathan McKinney, Chairman
Charlie Guy
Donald R. Johnson
Gus M. Lorenz
Clifford S. Snyder
Tony E. Windham

Ford L. Baldwin
Gary Huitink
Richard A. Klerk
Roy N. Sharp
Phil L. Tacker

THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, FOLLOWING WHEAT, 1993
COOPERATIVE	FILE NO.:	SOY9306
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	LOAMY
	IRRIGATION:	FLOOD

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$11.25	_____
FERTILIZER	\$10.23	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$12.57	_____
FUNGICIDE	\$1.49	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$9.70	_____
REPAIRS	\$18.91	_____
LABOR	\$8.48	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$7.18	_____
REPAIRS	\$2.86	_____
IRRIGATION LABOR	\$5.88	_____
CUSTOM SPREAD	\$1.63	_____
CUSTOM HAUL	\$6.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$1.25	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$3.93	_____

TOTAL SPECIFIED OPERATING COSTS	\$102.08	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

	YIELD IN BUSHELS				
	29.25	33.75	45.00	56.25	60.75
	\$3.41	\$2.97	\$2.27	\$1.85	\$1.72

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$33.48	_____
INTEREST	\$17.35	_____
TAXES & INSURANCE	\$4.85	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____

TOTAL SPECIFIED OWNERSHIP COSTS	\$55.68	_____
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TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS	\$157.77	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

	YIELD IN BUSHELS				
	29.25	33.75	45.00	56.25	60.75
	\$5.31	\$4.62	\$3.51	\$2.84	\$2.64

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		<i>FURROW ^</i>	<i>FLOOD ^^</i>	<i>CENTER PIVOT</i>
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS (\$/ACRE)				
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS (\$/ACRE)				
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64
^ Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.				
^^ Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.				

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
FUNGICIDE (BENLATE)	.75 POUNDS	\$11.25	\$4.25	\$15.5
INSECTICIDE (ASANA XL)	5 OUNCES	\$5.00	\$4.25	\$9.25
LIME (PRORATED COST OVER 5 YEARS)	2 TONS			\$8.00

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
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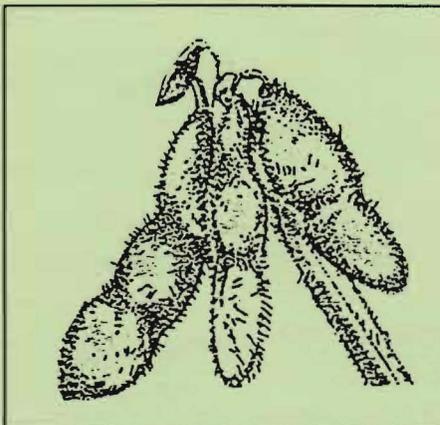
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 185

SOYBEANS

NO-TILL, FOLLOWING WHEAT,
LOAMY SOILS, FLOOD IRRIGATION



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

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Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION SOYBEAN COMMITTEE

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UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, NO-TILL, FOLLOWING WHEAT, 1993
COOPERATIVE	FILE NO.:	SOY9307
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	LOAMY
	IRRIGATION:	FLOOD

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$15.00	_____
FERTILIZER	\$10.23	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$39.45	_____
FUNGICIDE	\$1.98	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$5.17	_____
REPAIRS	\$11.28	_____
LABOR	\$4.72	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$5.74	_____
REPAIRS	\$2.86	_____
IRRIGATION LABOR	\$4.70	_____
CUSTOM SPREAD	\$4.88	_____
CUSTOM HAUL	\$6.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$1.25	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$4.56	_____
TOTAL SPECIFIED OPERATING COSTS	\$118.57	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHELLS

	29.25	33.75	45.00	56.25	60.75
	\$3.97	\$3.46	\$2.63	\$2.14	\$1.99

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$27.04	_____
INTEREST	\$13.51	_____
TAXES & INSURANCE	\$3.77	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$44.32	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$162.89

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHELLS

	29.25	33.75	45.00	56.25	60.75
	\$5.48	\$4.77	\$3.62	\$2.93	\$2.72

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		<i>FURROW</i> ^	<i>FLOOD</i> ^^	<i>CENTER PIVOT</i>
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS	(\$/ACRE)			
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS	(\$/ACRE)			
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64

^ Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.

^^ Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
FUNGICIDE (BENLATE)	.75 POUNDS	\$11.25	\$4.25	\$15.5
INSECTICIDE (ASANA XL)	5 OUNCES	\$5.00	\$4.25	\$9.25
LIME (PRORATED COST OVER 5 YEARS)	2 TONS			\$8.00

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

INFORMATION PRESENTED IN THIS DOCUMENT IS PREPARED SOLELY AS A GENERAL GUIDE AND IS NOT INTENDED TO RECOGNIZE OR PREDICT THE COSTS AND RETURNS FROM ANY ONE PARTICULAR FARM OR RANCH OPERATION

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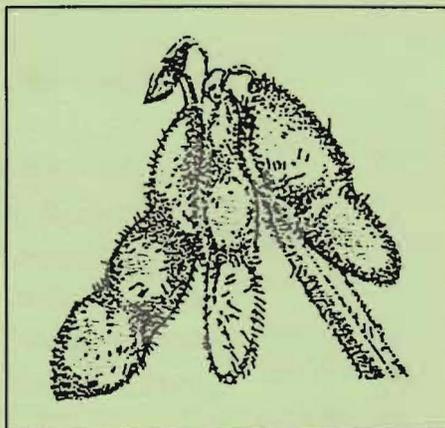
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 186

SOYBEANS

NARROW ROW, CLAY SOILS



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production

Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS EXTENSION SOYBEAN COMMITTEE

Nathan McKinney, Chairman
Charlie Guy
Donald R. Johnson
Gus M. Lorenz
Clifford S. Snyder
Tony E. Windham

Ford L. Baldwin
Gary Huitink
Richard A. Klerk
Roy N. Sharp
Phil L. Tacker

THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, NARROW ROW, 1993
COOPERATIVE	FILE NO.:	SOY9308
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	CLAY
	IRRIGATION:	NONE

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$7.50	_____
FERTILIZER	\$0.00	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$29.09	_____
FUNGICIDE	\$1.65	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$8.19	_____
REPAIRS	\$18.19	_____
LABOR	\$6.89	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$0.00	_____
CUSTOM HAUL	\$3.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$3.01	_____
TOTAL SPECIFIED OPERATING COSTS	\$78.27	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST
YIELD IN BUSHELS

	16.25	18.75	25.00	31.25	33.75
	\$4.73	\$4.12	\$3.13	\$2.54	\$2.36

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$25.09	_____
INTEREST	\$10.48	_____
TAXES & INSURANCE	\$2.93	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$38.50	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS \$116.77

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST
YIELD IN BUSHELS

	16.25	18.75	25.00	31.25	33.75
	\$7.10	\$6.18	\$4.67	\$3.77	\$3.50

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		<i>FURROW ^</i>	<i>FLOOD ^^</i>	<i>CENTER PIVOT</i>
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS (\$/ACRE)				
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS (\$/ACRE)				
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64

[^] Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.

^{^^} Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
FUNGICIDE (BENLATE)	.75 POUNDS	\$11.25	\$4.25	\$15.5
INSECTICIDE (ASANA XL)	5 OUNCES	\$5.00	\$4.25	\$9.25

1993 PRODUCTION COST ESTIMATES

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ETB 180	Soybeans, Mixed Soils, Arkansas
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ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
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ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
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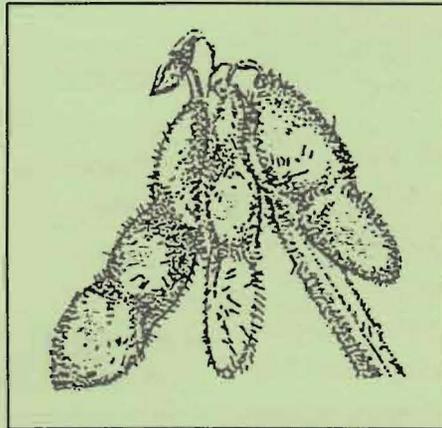
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 187

SOYBEANS

NARROW ROW, MIXED SOILS, CENTER
PIVOT IRRIGATION, TOWABLE, 260 ACRES



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT
ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
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ESTIMATING PRODUCTION COSTS IN ARKANSAS

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The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

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Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

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UNIVERSITY OF ARKANSAS	ENTERPRISE:	SOYBEANS, NARROW ROW, 1993
COOPERATIVE	FILE NO.:	SOY9309
EXTENSION	LOCATION:	ARKANSAS
SERVICE	SOILS TYPE:	MIXED
	IRRIGATION:	CENTER PIVOT, TOWABLE, 260 ACRES

University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$12.50	_____
FERTILIZER	\$0.00	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$27.21	_____
FUNGICIDE	\$1.65	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$0.00	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$8.14	_____
REPAIRS	\$18.13	_____
LABOR	\$6.84	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$9.87	_____
REPAIRS	\$6.01	_____
IRRIGATION LABOR	\$3.23	_____
CUSTOM SPREAD	\$0.00	_____
CUSTOM HAUL	\$6.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$4.01	_____
TOTAL SPECIFIED OPERATING COSTS	\$104.34	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHELS

	29.25	33.75	45.00	56.25	60.75
	\$3.48	\$3.04	\$2.32	\$1.89	\$1.76

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$41.15	_____
INTEREST	\$21.86	_____
TAXES & INSURANCE	\$6.11	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$69.11	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$173.45

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHELS

	29.25	33.75	45.00	56.25	60.75
	\$5.85	\$5.09	\$3.85	\$3.11	\$2.90

NOT INCLUDED IN THIS REPORT ARE CHARGES FOR LAND, RISK, OVERHEAD LABOR, OTHER OVERHEAD, CROP INSURANCE, REAL ESTATE TAXES, AND MGT.

SUMMARY OF SPECIFIED OPERATING AND OWNERSHIP COSTS FOR THREE IRRIGATION SYSTEMS USED IN SOYBEAN PRODUCTION COST ESTIMATES, ARKANSAS, 1993.

		<i>FURROW</i> ^	<i>FLOOD</i> ^^	<i>CENTER PIVOT</i>
TOTAL WATER USE PER ACRE	(ACRE INCHES)	9.00	10.00	6.60
TOTAL ACRES WATERED	(ACRES)	160.00	125.00	260.00
NUMBER OF IRRIGATIONS		3.00	3.00	6.00
SPECIFIED OPERATING COSTS	(\$/ACRE)			
FUEL, OIL, LUB		\$6.98	\$8.10	\$9.87
REPAIRS		\$2.09	\$3.84	\$6.01
LABOR		\$6.62	\$6.77	\$3.23
LEVEE SURVEYING		\$0.00	\$1.25	\$0.00
FLEXIBLE IRRIGATION TUBING		\$5.93	\$0.00	\$0.00
INTEREST		\$0.86	\$0.80	\$0.77
TOTAL SPECIFIED OPERATING COSTS		\$22.47	\$20.76	\$19.88
SPECIFIED OWNERSHIP COSTS	(\$/ACRE)			
DEPRECIATION		\$5.93	\$9.39	\$16.13
INTEREST		\$4.47	\$6.98	\$11.44
TAXES & INSURANCE		\$1.25	\$1.95	\$3.19
OVERHEAD LABOR		\$0.00	\$0.00	\$0.00
OTHER OVERHEAD		\$0.00	\$0.00	\$0.00
LAND & PROPERTY TAXES		\$0.00	\$0.00	\$0.00
MANAGEMENT		\$0.00	\$0.00	\$0.00
TOTAL SPECIFIED OWNERSHIP COSTS		\$11.65	\$18.32	\$30.76
TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS		\$34.12	\$39.08	\$50.64

^ Furrow irrigation costs assume the use of flexible irrigation tubing. No costs have been included for land leveling or other land preparation.

^^ Flood irrigation costs include levee surveying, levee disking, butting levees, and smoothing levees.

NOTES

Recommendations for certain soybean production systems may require the use of the items listed below. The estimated costs are intended to be used as a guide and should be transferred to the Your Cost Column on page 3.

	RATE/ACRE	PRODUCT COST/ACRE	APPLICATION COST/ACRE	TOTAL COST/ACRE
FUNGICIDE (BENLATE)	.75 POUNDS	\$11.25	\$4.25	\$15.5
INSECTICIDE (ASANA XL)	5 OUNCES	\$5.00	\$4.25	\$9.25
LIME (PRORATED COST OVER 5 YEARS)	2 TONS			\$8.00

1993 PRODUCTION COST ESTIMATES

<u>Publication Number</u>	<u>Title</u>
ETB 177	Wheat, Loamy Soils, Arkansas
ETB 178	Wheat, Clay Soils, Arkansas
ETB 179	Soybeans, Early Season, Loamy Soils, Arkansas
ETB 180	Soybeans, Mixed Soils, Arkansas
ETB 181	Soybeans, Stale Seedbed, Mixed Soils, Arkansas
ETB 182	Soybeans, Mixed Soils, Furrow Irrigation, Arkansas
ETB 183	Soybeans, In Rice Rotation, Loamy Soils, Flood Irrigation, Arkansas
ETB 184	Soybeans, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 185	Soybeans, No-Till, Following Wheat, Loamy Soils, Flood Irrigation, Arkansas
ETB 186	Soybeans, Narrow Row, Clay Soils, Arkansas
ETB 187	Soybeans, Narrow Row, Mixed Soils, Center Pivot Irrigation, Towable, 260 Acres, Arkansas
ETB 188	Rice, Silt Loam Soils, Eastern Arkansas
ETB 189	Rice, Clay Soils, Eastern Arkansas
ETB 190	Rice, Grand Prairie Soils, Grand Prairie Region, Arkansas
ETB 191	Cotton, Loamy Soils, Solid Planted, South of I-40, Eastern Arkansas
ETB 192	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 193	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, South of I-40, Eastern Arkansas
ETB 194	Cotton, Loamy Soils, Solid Planted, North of I-40, Eastern Arkansas
ETB 195	Cotton, Loamy Soils, Solid Planted, Furrow Irrigation, North of I-40, Eastern Arkansas
ETB 196	Cotton, Loamy Soils, Solid Planted, Center Pivot Irrigation, 130 Acres, North of I-40, Eastern Arkansas
ETB 197	Cotton, Loamy Soils, Narrow 2x1 Skip Row, Furrow Irrigation, South of I-40, Eastern Arkansas
ETB 198	Corn, Loamy Soils, Flood Irrigation, Arkansas
ETB 199	Corn, Loamy Soils, Furrow Irrigation, Arkansas
ETB 200	Grain Sorghum, Loamy Soils, Arkansas
ETB 201	Grain Sorghum, Loamy Soils, Flood Irrigation, Arkansas
ETB 202	Grain Sorghum, Clay Soils, Arkansas

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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 177

WHEAT

LOAMY SOILS



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT

ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE,
United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

INTRODUCTION

The primary purpose of this publication is to provide a systematic procedure for estimating the costs of producing the specified enterprise. Most users of this information should think of these budgets as a first approximation and then make appropriate adjustments using the "YOUR COST" column provided on each budget to add, delete, or change costs to reflect their specific situations.

Enterprise budgets represent a type of information that can be used by a wide variety of individuals in making decisions in the agricultural 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.

This publication has three major parts: A written discussion, page 2; a summary of specified operating and ownership costs, page 3; and a sequential listing of field operations, pages 4 and 5.

SPECIFIED OPERATING AND OWNERSHIP COSTS

Specified operating and ownership costs for this particular enterprise, location, soil type, and irrigation method are located on page 3. The specified operating costs are derived from the sequential listing of operations presented on pages 4 and 5.

Input price data are updated annually by obtaining prices from farm input suppliers throughout a crop's production area. Quantities of inputs are based on recommendations of Extension Agronomy Specialists and/or data obtained from the Research Verification Programs. Selected input costs for the 1993 Production

Cost Estimates include: diesel, \$0.70/gal; labor, \$4.90/hr; operating interest, 8 %; ownership interest, 8.75%.

Breakeven prices for total specified operating costs are given for a base yield and at deviations of 25 and 35 percent.

Total specified ownership costs and breakeven prices for total specified costs are also given on page 3. The depreciation and interest cost components represent an average cost allocated over the entire useful life of the machinery. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year.

SEQUENCE OF OPERATIONS

A sequential listing of each operation performed for this enterprise is given on pages 4 and 5. These operations provide the foundation on which the economic analysis is based. Machinery operating and ownership costs are presented on page 4 followed by quantities and prices of materials used on page 5.

ACKNOWLEDGEMENTS

EXTENSION WHEAT & FEED GRAIN COMMITTEE

Nathan McKinney, Chairman	Ford L. Baldwin
Stanley L. Chapman	Charlie Guy
Gary Huitink	Donald R. Johnson
Gary Cloud	Billy Herrington
Roy N. Sharp	Phil L. Tacker
Tony E. Windham	

THE MENTION OF ANY COMMERCIAL PRODUCT IN THIS ANALYSIS DOES NOT IMPLY ITS ENDORSEMENT BY THE UNITED STATES DEPARTMENT OF AGRICULTURE OR THE UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE OVER OTHER PRODUCTS NOT NAMED, NOR DOES THE OMISSION IMPLY THAT THEY ARE NOT SATISFACTORY.

UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE	ENTERPRISE: WHEAT, FOLLOWING SOYBEANS OR FALLOW FILE NO.: WHT9301, 1992-93 LOCATION: ARKANSAS SOILS TYPE: SILT LOAM IRRIGATION: NONE
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University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$11.25	_____
FERTILIZER	\$27.75	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$0.00	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$4.25	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$5.84	_____
REPAIRS	\$13.24	_____
LABOR	\$5.36	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$0.00	_____
CUSTOM HAUL	\$6.75	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$2.98	_____
TOTAL SPECIFIED OPERATING COSTS	\$77.42	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

YIELD IN BUSHEL

29.25	33.75	45.00	56.25	60.75
\$2.56	\$2.24	\$1.72	\$1.41	\$1.31

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$18.95	_____
INTEREST	\$8.15	_____
TAXES & INSURANCE	\$2.28	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$29.38	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS

\$106.80

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

YIELD IN BUSHEL

29.25	33.75	45.00	56.25	60.75
\$3.57	\$3.11	\$2.37	\$1.93	\$1.80

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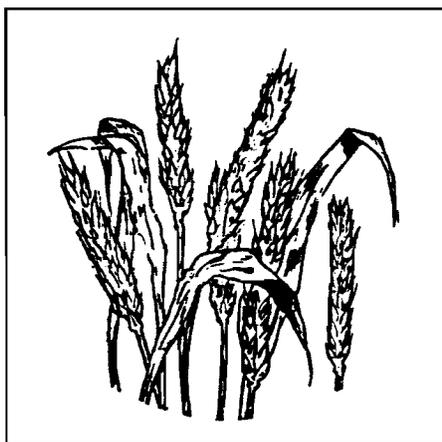
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ESTIMATING 1993 PRODUCTION
COSTS IN ARKANSAS

EXTENSION TECHNICAL BULLETIN NO. 178

WHEAT

CLAY SOILS



AUTHORS

TONY E. WINDHAM
CLYDE A. STUART

EXTENSION ECONOMISTS - MANAGEMENT

ECONOMIC AND COMMUNITY DEVELOPMENT SECTION

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United States Department of Agriculture, and County Governments Cooperating

ESTIMATING PRODUCTION COSTS IN ARKANSAS

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UNIVERSITY OF ARKANSAS COOPERATIVE EXTENSION SERVICE	ENTERPRISE: WHEAT, FOLLOWING SOYBEANS OR FALLOW FILE NO.: WHT9302, 1992-93 LOCATION: ARKANSAS SOILS TYPE: CLAY IRRIGATION: NONE
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University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

SPECIFIED OPERATING COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
SEED	\$12.50	_____
FERTILIZER	\$21.28	_____
LIME + APPLICATION	\$0.00	_____
HERBICIDE	\$0.00	_____
FUNGICIDE	\$0.00	_____
INSECTICIDE	\$0.00	_____
DEFOLIANT	\$0.00	_____
AERIAL APPLICATION	\$4.25	_____
MACHINERY:		
FUEL, OIL, LUBRICANTS	\$5.37	_____
REPAIRS	\$12.14	_____
LABOR	\$4.76	_____
IRRIGATION:		
FUEL, OIL, LUBRICANTS	\$0.00	_____
REPAIRS	\$0.00	_____
IRRIGATION LABOR	\$0.00	_____
CUSTOM SPREAD	\$0.00	_____
CUSTOM HAUL	\$6.00	_____
CUSTOM DRY OR GINNING	\$0.00	_____
MISCELLANEOUS	\$0.00	_____
CROP INSURANCE PREMIUM	\$0.00	_____
OTHER	\$0.00	_____
INTEREST ON OP. CAP.	\$2.65	_____
TOTAL SPECIFIED OPERATING COSTS	\$68.95	_____

PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OPERATING COST

	YIELD IN BUSHELS				
	26.00	30.00	40.00	50.00	54.00
	\$2.57	\$2.25	\$1.72	\$1.41	\$1.32

SPECIFIED OWNERSHIP COSTS

RESOURCE OR INPUT	PER ACRE COST	YOUR COST
DEPRECIATION	\$18.01	_____
INTEREST	\$7.58	_____
TAXES & INSURANCE	\$2.12	_____
OVERHEAD LABOR	\$0.00	_____
OTHER OVERHEAD	\$0.00	_____
LAND & PROPERTY TAX	\$0.00	_____
MANAGEMENT	\$0.00	_____
TOTAL SPECIFIED OWNERSHIP COSTS	\$27.71	_____

TOTAL SPECIFIED OPERATING AND OWNERSHIP COSTS	\$96.65	_____
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PER UNIT BREAKEVEN PRICE, TOTAL SPECIFIED OWNERSHIP & OPERATING COST

	YIELD IN BUSHELS				
	26.00	30.00	40.00	50.00	54.00
	\$3.63	\$3.17	\$2.42	\$1.96	\$1.83

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