

Table 9A. Income and Cash Operating Cost Summary, Pima (ELS) Cotton, 1996

COUNTY: Yuma FARM: Yuma County Farm WATER SOURCE: YCWUA TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,014.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/02/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Lint	Pound	1,014.00	\$0.9400	\$953.16		
CottonSeed	Ton	0.83	114.6000	95.12	\$1,048.28	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					91.58	
Tractor/Self Propelled				34.62		
Hand				26.36		
Irrigation				27.10		
Other/Contract				3.50		
Chemicals & Custom Applications					272.21	
Fertilizers				71.42		
Insecticides				189.43		
Herbicides				11.37		
Farm Machinery and Vehicles					41.69	
Diesel Fuel				15.61		
Gasoline				4.81		
Repairs & Maint.				21.26		
Irrigation Water (excluding labor)					0.00	
Water Assessment (See Note Below) **					**	
Other Purchased Inputs & Services					10.56	
Seed/Transplants				7.56		
Other Services & Rentals				3.00		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					416.04	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					12.96	
Tractor/Self Propelled				5.95		
Other/Contract				7.01		
Chemicals & Custom Applications					53.61	
Insecticides				8.39		
Other Chemicals				45.22		
Farm Machinery and Vehicles					41.62	
Diesel Fuel				7.13		
Repairs & Maint.				34.48		
Custom Harvest/Post Harvest					31.04	
Cotton Ginning					119.29	
Crop Assessments					13.38	
Other Materials					1.59	
TOTAL HARVEST AND POST HARVEST EXPENSE					273.50	
OPERATING OVERHEAD->PICKUP USE					15.61	
OPERATING INTEREST AT 8.0%					9.94	
TOTAL CASH OPERATING EXPENSES					\$715.09	
RETURNS OVER CASH OPERATING EXPENSES					\$333.19	

Notes: The above figures do not include ownership costs, see Table 9B on Next Page for detailed cost allocation.

** A water assessment charge of \$62.00/Acre is included in the ownership costs of Table 9B. ARIZONA COOPERATIVE EXTENSION
 Department of Ag & Resource Economics
 University of Arizona F 2/18

Table 9B. Allocation of Ownership Costs; Pima (ELS) Cotton, 1996

COUNTY: Yuma FARM: Yuma County Farm WATER SOURCE: YCWUA TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
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Item	-- CASH COST BASIS (\$/ACRE) -		- TOTAL COST BASIS (\$/ACRE) -	
	Income & Costs	Net Returns	Income & Costs	Net Returns
TOTAL INCOME at \$ 0.9400/Lb + 2nd Crop	\$1,048.28		\$1,048.28	
TOTAL OPERATING EXPENSES	715.08		715.08	
RETURN OVER CASH OPERATING EXPENSES		\$333.19		\$333.19
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	8.26		8.26	
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	35.75		35.75	
General Farm Maint. (3% of Tot. Oper. Exp.)	21.45		21.45	
Total Cash Overhead Expenses	65.46		65.46	
Total Cash Oper. & Over. Cost	780.55		780.55	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		267.72		267.72
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			54.26	
Interest on Equity, Machinery & Vehicles			21.44	
Total Capital Allocations			75.70	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK ----->		267.72		
RETURNS TO LAND, MANAGEMENT & RISK ----->				192.02
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$780 X 16% X .13076)	16.31		16.31	
Opport. Inter. on Land (100% X 6.0% X \$780)			46.80	
Water Assessment **	62.00		62.00	
Total Land Costs	78.31		125.11	
RETURNS TO MANAGEMENT, CAPITAL & RISK ----->		189.40		
RETURNS TO MANAGEMENT & RISK ----->				66.90
Management Services (8% of Tot. Oper. Exp.)			57.20	
TOTAL OWNERSHIP COST	143.78		323.49	
TOTAL COST	\$858.87		\$1,038.58	
RETURN TO MANAGEMENT, CAPITAL & RISK ----->		\$189.40		
RETURN TO RISK (PROFITS) ----->				\$9.69
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.6114		\$0.6114
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.1417		\$0.3190
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.7532		\$0.9304

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No.	First Month	Operation	Hours * --		Operating Costs (\$/Acre*)				Total	Times	Tot. Cash Expense	Class
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials				
1	Dec	Rip	0.450	0.500	5.34	4.20			9.54	1.0	9.54	L
2	Dec	Disk	0.300	0.333	3.04	2.80			5.84	1.0	5.84	L
3	Jan	Laser Level	0.300	0.333	2.60	2.80			5.40	1.0	5.40	L
4	Jan	Apply Herb. & Incorporate	0.180	0.200	2.04	1.68		4.73	8.45	1.0	8.45	G
5	Jan	List	0.225	0.250	2.17	2.10			4.27	1.0	4.27	L
6	Feb	Preirrigate		0.667		4.67			4.67	1.0	4.67	G
7	Mar	Mulch	0.180	0.200	1.18	1.68			2.86	1.0	2.86	L
8	Mar	Plant	0.225	0.250	2.32	2.10		7.56	11.98	1.0	11.98	L
9	Mar	Remove Cap	0.150	0.167	1.20	1.40			2.60	1.0	2.60	G
10	Apr	Cultivate	0.225	0.250	1.47	2.10			3.57	3.0	10.72	G
11	Apr	Soil Fertility					3.00		3.00	1.0	3.00	G
12	May	Irrigate/Run Fertilizer		0.400		2.80		17.85	20.65	2.0	41.30	G
13	Jun	Irrigate		0.400		2.80			2.80	5.0	14.00	G
14	Jun	Hand Weeding		3.333		22.20			22.20	1.0	22.20	G
15	Jun	Apply Insect./Ground	0.180	0.200	1.59	1.68		46.44	49.71	1.0	49.71	G
16	Jun	Apply Herbicide/Ground	0.180	0.200	1.18	1.68		6.63	9.49	1.0	9.49	G
17	Jul	Apply Insect./Ground	0.180	0.200	1.59	1.68		34.94	38.21	1.0	38.21	G
18	Jul	Apply Insect./Ground	0.180	0.200	1.59	1.68		11.26	14.53	1.0	14.53	G
19	Jul	Hand Weeding		1.250		8.33			8.33	0.5	4.17	G
20	Jul	Apply Insecticide/Air					6.00	7.19	13.19	1.0	13.19	G
21	Aug	Apply Insecticide/Air					6.00	7.62	13.62	1.0	13.62	G
22	Aug	Apply Insecticide/Air					6.00	11.22	17.22	1.0	17.22	G
23	Sep	Apply Insecticide/Air					6.00	26.23	32.23	1.0	32.23	G
24	Aug	Irrigate/Run Fertilizer		0.400		2.80		35.71	38.51	1.0	38.51	G
25	Sep	Apply Insecticide/Air					6.00	14.52	20.52	1.0	20.52	G
26	Oct	Apply Defoliant/Air					8.32	24.21	32.53	1.0	32.53	H
27	Oct	Apply Defoliant/Air					8.32	12.77	21.09	1.0	21.09	H
28	Oct	Dust Control	0.009	0.010	0.17	0.07			0.24	50.0	11.87	G
29	Oct	Prepare Ends	0.037	0.041	0.38	0.34			0.72	1.0	0.72	H

* NOTES: See next page for notes.

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No.	First Month	Operation	Hours * --		Operating Costs (\$/Acre*)					Tot. Cash Expense	Class		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials	Total			Times	
30	Oct	Cotton, First Pick	0.900	1.000	34.09	7.01				41.10	1.0	41.10	H
31	Oct	Cotton, Make Modules	0.450	0.500	5.72	4.20			1.59	11.51	1.0	11.51	H
32	Nov	Cotton, Road 100.0 Cl					28.00			28.00	1.0	28.00	H
33	Nov	Haul, Custom 0.1 Mu							0.00	0.00	1.0	0.00	H
34	Nov	Cotton Ginning 29.8 Cs					119.29			119.29	1.0	119.29	P
35	Nov	Cotton Classing 2.0 Ba					3.04			3.04	1.0	3.04	M
36	Dec	Crop Assessment 2.0 Ba					13.38			13.38	1.0	13.38	M
37	Dec	Cut Stalks	0.150	0.167	1.43	1.40				2.83	1.0	2.83	P
38	Dec	Disk Residue	0.300	0.333	3.04	2.80				5.84	1.0	5.84	L
		Pickup Use 60 Mi/Ac	2.000		15.61							15.61	O
		Operating Interest at 8.00%					9.91					9.91	O
TOTAL CASH OPERATING EXPENSES:					\$98.91	\$104.47	\$223.27	\$288.32				\$714.97	T

* NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The 'Tot. Cash Expense' column and the 'TOTAL CASH OPERATING EXPENSES:' row include all operations, all times over. Classes are defined below. A water assessment charge of \$62.00/Acre included as ownership cost in Table 9B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->	-25%	-10%	Budgeted	+10%	+25%		
Land Preparation (L)	\$45.73								
Growing (G)	370.21								
Harvest (H)	134.94	Yields	\$0.70	\$0.84	\$0.94	\$1.03	\$1.17	Break-even	
Post Harvest (P)	122.12								
Marketing (M)	16.42	-25%	760.5	-110.44	-3.21	68.27	139.76	246.99	0.85
Operating Overhead (O)	25.52	-10%	912.6	-44.23	84.43	170.22	256.00	384.68	0.75
		Budgeted	1,014.0	-0.10	142.87	238.18	333.50	476.47	0.70
		+10%	1,115.4	44.03	201.30	306.15	411.00	568.27	0.66
		+25%	1,267.5	110.24	288.96	408.10	527.25	705.96	0.61
		Break-even Yield		1,014.23	766.07	658.64	577.63	487.66	
Total (T)	\$714.97								

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 AREA: Yuma Valley South YIELD: 1,014.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/02/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
DEC P			0.41		4.19	3.50				7.69
JAN C			1.19		11.00	10.09	4.73			25.82
FEB C	1.0	12.0	0.66			4.67				4.67
MAR C			0.61		4.70	5.19		7.56		17.44
APR C			0.25		1.47	2.10			3.00	6.58
MAY C	1.0	6.0	0.65		1.47	4.91	17.85			24.23
JUN C	2.0	12.0	4.78		4.25	33.27	70.92			108.45
JUL C	2.0	12.0	1.82		3.19	13.13	53.39		6.00	75.71
AUG C	2.0	12.0	0.80			5.61	54.55		12.00	72.16
SEP C	1.0	6.0	0.40			2.80	40.75		12.00	55.55
OCT C			1.07		25.11	7.88	30.59	0.79	12.48	76.86
NOV C			0.97		23.44	7.18	6.38	0.79	152.98	190.77
DEC C			0.50		4.48	4.20			14.91	23.59
Pickup Use 60 Mi/Ac					15.61					15.61
Operating Interest at 8.0%									9.93	9.93
Water Assessment				**						
Total	9.0	60.0	14.14		98.91	104.55	279.16	9.15	223.30	715.06
%					13.83	14.62	39.04	1.27	31.22	100.00

TOTAL RESOURCES REQUIREMENTS(/Acre)		TOTAL ENERGY REQUIREMENTS(/Acre)	
Total N	212.4 lbs	Diesel Fuel	24.4 Gal
Total P	0.0 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	9.1 Gal
Total Labor	14.1 Hrs	All Direct Energy	4.5 M BTU
Total Water	60.0 AI		

EQUIPMENT REQUIREMENTS(/Acre)			
Tractor, 150 PTO HP, MFWD	0.45 Hrs	Ripper, 3 Shank	0.45 Hrs
Offset Disk, 12'	0.64 Hrs	Drag Scraper, 10'	0.30 Hrs
Laser Trailer	0.30 Hrs	Tandem Disk, 12'	0.18 Hrs
Lister, 5 Bottom	0.23 Hrs	Tractor, 70 PTO HP, MFWD	1.80 Hrs
Planter, 4 Row	0.23 Hrs	Cultipacker, 13'	0.15 Hrs
Directed Spray Rig, 8 Row	0.18 Hrs	Truck, 5 Ton w/1000 Gal Tank	0.45 Hrs
Tractor, 80 PTO HP, MFWD	0.45 Hrs	Module Builder	0.45 Hrs
Pickup Truck, 1/2 Ton	2.00 Hrs		
		Tractor, 100 PTO HP, MFWD	1.64 Hrs
		Laser Receiver, Mast System	0.30 Hrs
		Saddle Tk Sprayer, 2 Tk 8 Row	0.18 Hrs
		Rolling Cultivator, 4 Rw	0.86 Hrs
		Row Crop Sprayer, 8 Rw Trail	0.54 Hrs
		Cotton Picker, 2 Row	0.90 Hrs
		Rotary Stalk Cutter, 4 Row	0.15 Hrs

MATERIALS REQUIREMENTS(/Acre)			
Trifluralin	1.20 Pt	Water, District	60.00 AI
32-00-00, URAN 32, Lqd	60.00 Ga	Pyriproxyfen	8.00 Oz
Cyanazine	1.00 Qt	Buprofezin	0.50 Lb
Lambdacyhalothrin	3.20 Oz	Chlorpyrifos	1.00 Pt
Cyfluthrin	2.25 Oz	Amitraz	0.25 Lb
Sulprophos	1.00 Pt	Zetacypermethrin	3.20 Oz
Sodium Chlorate	2.00 Ga	Module Tarps	30.21 CW
		Pima Cotton Sd + Fung	12.00 Lb
		Acephate	1.67 Lb
		Oxamyl	1.00 Pt
		Endosulfan	1.50 Pt
		Bifenthrin	6.00 Oz
		Thidiazuron	0.30 Lb

LABOR REQUIREMENTS(/Acre)			
Tractor	4.82 Hrs	Irrigators	3.87 Hrs
Other	0.50 Hrs	Harvest	1.00 Hrs
		Hand Weeders	3.96 Hrs

* NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$62.00/Acre included as ownership cost in Table 9B.

COUNTY: Yuma FARM: Yuma County Farm WATER SOURCE: YCWUA TILLAGE: Conventional
 CROP: Cotton, Pima ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley South YIELD: 1,014.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/02/96

No.	First Month	Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	Material Use & Cost			Service Cost \$/Unit	Labor Type
				HP	Self-Prop./Implem.		Name	Appl. Rate	\$/Unit		
1	Dec	1.0	Rip	150	Ripper, 3 Shank	2.00					Tractor
2	Dec	1.0	Disk	100	Offset Disk, 12'	3.00					Tractor
3	Jan	1.0	Laser Level	100	Drag Scraper, 10' Laser Receiver, Mast Sy Laser Trailer	3.00					Tractor
4	Jan	1.0	Apply Herb. & Incorporate	100	Tandem Disk, 12' Saddle Tk Sprayer, 2 Tk	5.00	Trifluralin	1.20 Pt	30.06 Ga		Tractor
5	Jan	1.0	List	100	Lister, 5 Bottom	4.00					Tractor
6	Feb	1.0	Preirrigate			1.50	Water, District	12.00 AI	0.00 AF		Irrigator
7	Mar	1.0	Mulch	70	Rolling Cultivator, 4 R	5.00					Tractor
8	Mar	1.0	Plant	70	Planter, 4 Row	4.00	Pima Cotton Sd + F	12.00 Lb	60.00 CW		Tractor
9	Mar	1.0	Remove Cap	100	Cultipacker, 13'	6.00					Tractor
10	Apr	3.0	Cultivate	70	Rolling Cultivator, 4 R	4.00					Tractor
11	Apr	1.0	Soil Fertility		CST Soil Analysis (Surf)					3.00 Ac	
12	May	2.0	Irrigate/Run Fertiliz			2.50	Water, District	6.00 AI	0.00 AF		Irrigator
							32-00-00, URAN 32,	15.00 Ga	205.00 Tn		
13	Jun	5.0	Irrigate			2.50	Water, District	6.00 AI	0.00 AF		Irrigator
14	Jun	1.0	Hand Weeding			0.30					Hand Weed
15	Jun	1.0	Apply Insect./Ground	70	Row Crop Sprayer, 8 Rw	5.00	Pyriproxyfen	8.00 Oz	560.00 Ga		Tractor
							Acephate	1.00 Lb	9.23 Lb		
16	Jun	1.0	Apply Herbicide/Ground	70	Directed Spray Rig, 8	5.00	Cyanazine	1.00 Qt	25.26 Ga		Tractor
17	Jul	1.0	Apply Insect./Ground	70	Row Crop Sprayer, 8 Rw	5.00	Buprofezin	0.50 Lb	50.00 Lb		Tractor
							Oxamyl	1.00 Pt	66.19 Ga		
18	Jul	1.0	Apply Insect./Ground	70	Row Crop Sprayer, 8 Rw	5.00	Lambdacyhalothrin	3.20 Oz	234.04 Ga		Tractor
							Chlorpyrifos	1.00 Pt	39.03 Ga		
19	Jul	0.5	Hand Weeding			0.80					Hand Weed
20	Jul	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Endosulfan	1.50 Pt	36.50 Ga	6.00 Ac	
21	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Cyfluthrin	2.25 Oz	412.77 Ga	6.00 Ac	
22	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Amitraz	0.25 Lb	42.74 Lb	6.00 Ac	
23	Sep	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Bifenthrin	4.00 Oz	511.12 Ga	6.00 Ac	
							Sulprophos	1.00 Pt	72.11 Ga		
24	Aug	1.0	Irrigate/Run Fertiliz			2.50	Water, District	6.00 AI	0.00 AF		Irrigator
							32-00-00, URAN 32,	30.00 Ga	205.00 Tn		
25	Sep	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Zetacypermethrin	3.20 Oz	305.70 Ga	6.00 Ac	
							Acephate	0.67 Lb	9.23 Lb		
26	Oct	1.0	Apply Defoliant/Air		CST Air Spray, 5 Gal Mi		Thidiazuron	0.30 Lb	50.21 Lb	8.32 Ac	
							Bifenthrin	2.00 Oz	511.12 Ga		
27	Oct	1.0	Apply Defoliant/Air		CST Air Spray, 5 Gal Mi		Sodium Chlorate	2.00 Ga	6.08 Ga	8.32 Ac	
28	Oct	50.0	Dust Control		Truck, 5 Ton w/1000 Gal	100.00					Other
29	Oct	1.0	Prepare Ends	100	Offset Disk, 12'	24.40					Tractor
30	Oct	1.0	Cotton, First Pick		Cotton Picker, 2 Row	1.00					Harvest
31	Oct	1.0	Cotton, Make Modules	80	Module Builder	2.00	Module Tarps	30.21 CW	0.05 CW		Tractor
32	Nov	1.0	Cotton, Rood		CST Rood Pima Cotton 2X					0.28 Cl	
33	Nov	1.0	Haul, Custom		CST Haul Cotton Modules					0.00 Mu	

NOTES at the bottom of the next page.

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 AREA: Yuma Valley South YIELD: 1,014.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/02/96

No.	Month	First Times	Operation	Equipment/Custom Oper. HP Self-Prop./Implem.	Job Rate Acres/Hr	----- Name	Material Use & Cost ----- Appl. Rate \$/Unit	Service Cost \$/Unit	Labor Type
34	Nov	1.0	Cotton Ginning	CST Gin Pima Cotton				4.00	Cs
35	Nov	1.0	Cotton Classing	CST Class Cotton, HVI				1.50	Ba
36	Dec	1.0	Crop Assessment	CST Pima (Low Elev)				6.60	Ba
37	Dec	1.0	Cut Stalks	100 Rotary Stalk Cutter, 4	6.00				Tractor
38	Dec	1.0	Disk Residue Pickup Use 60 Mi/Ac	100 Offset Disk, 12' Pickup Truck, 1/2 Ton	3.00 0.50				Tractor

* NOTE: Machine times, labor times, and material rates are for one time over the designated acreage.
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