

Table 4A. Income and Cash Operating Summary; Romaine Lettuce, 2001

COUNTY: Yuma FARM: Yuma Vegetables WATER SOURCE: Yuma County Water TILLAGE: Double Crop
 CROP: Lettuce, Romaine ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley North YIELD: 712.0 Ct / Acre PREVIOUS CROP: Mixed Greens DATE: 8/13/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Lettuce	Crtn	712.00	\$7.63	\$5,432.56	\$5,432.56	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					189.22	_____
Tractor/Self Propelled				74.66		_____
Irrigation				114.56		_____
Chemicals and Custom Applications					377.67	_____
Fertilizer				98.67		_____
Insecticide				222.58		_____
Herbicide				56.42		_____
Farm Machinery and Vehicles					96.54	_____
Diesel Fuel				40.35		_____
Repairs and Maintenance				56.19		_____
Irrigation Water (excluding labor)					0.00	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				636.00	711.00	_____
Other Services and Rentals				75.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1374.43	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Custom Harvest/Post Harvest					3150.00	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					3150.00	_____
OPERATING OVERHEAD -> PICKUP USE					13.17	_____
OPERATING INTEREST AT 10.0%					13.98	_____
TOTAL CASH OPERATING EXPENSES					\$4,551.57	_____
RETURNS OVER CASH OPERATING EXPENSES					\$880.99	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

** A water assessment charge of \$31.00 per Acre is included as an ownership cost in Table B.

Table 4B. Allocations of Ownership Costs; Romaine Lettuce, 2001

COUNTY: Yuma FARM: Yuma Vegetables WATER SOURCE: Yuma County Water TILLAGE: Double Crop
 CROP: Lettuce, Romaine ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley North YIELD: 712.0 Ct / Acre PREVIOUS CROP: Mixed Greens DATE: 8/13/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$7.63 / Ct	\$5,432.56		\$5,432.56	
TOTAL OPERATING EXPENSES	\$4,551.57		\$4,551.57	
RETURN OVER CASH OPERATING EXPENSES		\$880.99		\$880.99
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	9.99		9.99	
General and Office Overhead (5.0%of Total Operating Exp.)	227.58		227.58	
General Farm Maintenance (3.0% of Total Operating Exp.)	136.55		136.55	
Total Cash Overhead Expenses	374.11		374.11	
Total Cash Operating and Overhead Cost	4,925.69		4,925.69	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$506.87		\$506.87
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			57.25	
Interest on Equity, Machinery and Vehicles			25.44	
Total Capital Allocations			82.69	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$506.87		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$424.18
Land Cost / Rent or Lease	550.00		550.00	
Land Cost / Ownership (100% Equity)				
Water Assessment **	31.00		31.00	
Total Land Costs	581.00		581.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$74.13)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$156.82)
Management Services (8% of Total Operation Expenses)			364.13	
TOTAL OWNERSHIP COST	955.11		1,401.93	
TOTAL COST	\$5,506.69		\$5,953.51	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$74.13)		
RETURNS TO RISK (PROFITS) ----->				(\$520.95)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$6.39		\$6.39
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$1.34		\$1.97
BREAK-EVEN PRICE TO COVER TOTAL COST		\$7.73		\$8.36

Table 4C. Variable Operating Costs; Romaine Lettuce, 2001

COUNTY: Yuma FARM: Yuma Vegetables WATER SOURCE: Yuma County Water TILLAGE: Double Crop
 CROP: Lettuce, Romaine ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley North YIELD: 712.0 Ct / Acre PREVIOUS CROP: Mixed Greens DATE: 8/13/01

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No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Aug	Rip	0.900	1.000	14.46	8.77			23.24	1.0	23.24	L
2	Aug	Disk	0.600	0.667	11.39	5.85			17.24	2.0	34.49	L
3	Sep	Laser Level	0.450	0.500	6.59	4.39			10.98	1.0	10.98	L
4	Sep	Make Borders	0.180	0.200	1.05	1.75			2.81	1.0	2.81	G
5	Sep	Preirrigate		0.800		6.14			6.14	1.0	6.14	G
6	Sep	Knock Borders	0.180	0.200	1.05	1.75			2.81	1.0	2.81	G
7	Sep	Apply Fert/Ground	0.450	0.500	4.52	4.39		58.43	67.34	1.0	67.34	G
8	Sep	List	0.300	0.333	3.37	2.92			6.30	1.0	6.30	L
9	Sep	Shape Beds	0.180	0.200	2.14	1.75		77.97	81.86	1.0	81.86	L
10	Sep	Apply Insect./Ground					9.13	41.72	50.85	1.0	50.85	G
11	Sep	Plant	0.360	0.400	5.04	3.51		636.00	644.55	1.0	644.55	L
12	Sep	Set Sprinklers	0.158	0.351	0.91	2.88			3.80	1.0	3.80	G
13	Sep	Apply Herbicide/Ground	0.180	0.200	1.28	1.75		56.42	59.45	1.0	59.45	G
14	Sep	Irrigate/Sec Sys		0.091		0.70			0.70	5.0	3.49	G
15	Sep	Remove Sprinklers	0.158	0.351	0.91	2.88			3.80	1.0	3.80	G
16	Sep	Make Ditches	0.023	0.025	0.33	0.22			0.55	1.0	0.55	G
17	Sep	Irrigate		1.333		10.23			10.23	10.0	102.25	G
18	Sep	Cultivate	0.900	1.000	6.34	8.77			15.11	1.0	15.11	G
19	Sep	Thinning					75.00		75.00	1.0	75.00	G
20	Oct	Apply Insect./Ground	0.180	0.200	1.15	1.75		80.79	83.69	1.0	83.69	G
21	Oct	Apply Fert/Side Dress	0.900	1.000	10.65	8.77		40.24	59.67	1.0	59.67	G
22	Oct	Apply Insect./Ground	0.180	0.200	1.28	1.75		6.48	9.52	2.0	19.04	G
23	Nov	Harvest, Load & Haul 700					3150.00		3150.00	1.0	3150.00	H
24	Nov	Disk Residue 700 Ct	0.600	0.667	11.39	5.85			17.24	1.0	17.24	L
		Pickup Use 50 Mi/Acre	1.667		13.17						13.17	
		Operating Interest at 10.0					13.98				13.98	
TOTAL CASH OPERATING EXPENSES (includes all times over):											4551.57	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 \$31.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	818.64
Growing (G)	555.78
Harvest (H)	3,150.00
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	27.15
Total (T)	\$4,551.57

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->	Yields					Break-even Price
	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields	\$5.72	\$6.87	\$7.63	\$8.39	\$9.54	
- 25%	534.0	-694.28	-83.12	324.32	731.77	1,342.93
- 10%	640.8	-555.62	177.78	666.71	1,155.64	1,889.03
Budgeted	712.0	-463.18	351.71	894.96	1,438.22	2,253.10
+ 10%	783.2	-370.73	525.64	1,123.22	1,720.80	2,617.17
Break-even Yield	1,068.74	568.03	432.83	349.62	271.37	

Table 4D. Resource and Cash Flow Requirements; Romaine Lettuce, 2001

COUNTY: Yuma FARM: Yuma Vegetables WATER SOURCE: Yuma County Water TILLAGE: Double Crop
 CROP: Lettuce, Romaine ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley North YIELD: 712.0 Ct / Acre PREVIOUS CROP: Mixed Greens DATE: 8/13/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
AUG C			2.33		37.25	20.47				57.72
SEP C	9.0	23.5	9.51		33.54	77.29	234.54	636.00	84.13	1065.50
OCT C	4.0	16.0	6.93		14.35	54.94	134.00			203.29
NOV C	3.0	12.0	4.67		11.39	36.52			3150.00	3197.91
Pickup Use 50 Mi/Acre					13.17					13.17
Operating Interest at 10.0									13.98	13.98
Water Assessment				**						
Total	16.0	51.5	23.45		109.70	189.22	368.54	636.00	3248.11	4551.57
%					2.41	4.16	8.10	13.97	71.36	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 209.8
 Total P 207.0
 Total Labor 23.4
 Total Water 51.5

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 45.6 Gal
 Unleaded Gas 5.0 Gal
 All Direct Energy 7.0 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	0.18 Hr	Border Disk, 6' Disk	0.36 Hr	Cultivator, Sweep, 4 Rw	1.80 Hr
Drag Scraper, 10'	0.45 Hr	Fert. Side Dress Unit,	1.35 Hr	Laser, Complete System	0.45 Hr
Lister, 5 Bottom	0.30 Hr	Manual Spray Rig, 150 g	0.18 Hr	Motor Grader, 12'	0.02 Hr
Offset Disk, 18'	1.80 Hr	Pickup Truck, 1/2 Ton	1.67 Hr	Planter, Stanhay, 4 Row	0.36 Hr
Saddle Tk Sprayer, 2 Tk 8	0.72 Hr	Sprinkler Trailer	0.32 Hr	Tractor, 60 PTO HP	3.65 Hr
Tractor, 80 PTO HP	0.36 Hr	Tractor, 100 PTO HP	0.48 Hr	Tractor, 175 PTO HP,	1.80 Hr
Tractor, 235 Eng HP, Art.	1.35 Hr	V-Ripper, 7 Shnk	0.90 Hr		

MATERIALS REQUIREMENT (per Acre)

18-46-00, Dry	450.00 Lb	46-00-00, Urea 46	280.00 Lb	Bensulide	10.00 Pt
Imidacloprid	16.00 Oz	Methomyl	4.00 Pt	Permethrin	2.00 Pt
Romaine Lettuce Seed	800.00 Th	Spinosad	16.00 Oz	Water, District	51.50 Al

LABOR REQUIREMENT (per Acre)

Irrigators	14.94 Hr	Tractor	8.51 Hr
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*NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$31.00 per Acre is included as an ownership cost in Table B.

Table 4E. Schedule of Operations; Romaine Lettuce, 2001

COUNTY: Yuma FARM: Yuma Vegetables WATER SOURCE: Yuma County Water TILLAGE: Double Crop
 CROP: Lettuce, Romaine ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley North YIELD: 712.0 Ct / Acre PREVIOUS CROP: Mixed Greens DATE: 8/13/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Aug	1.0	Rip	175	V-Ripper, 7 Shnk	1.00						Tractor
Aug	2.0	Disk	175	Offset Disk, 18'	1.50						Tractor
Sep	1.0	Laser Level	175	Drag Scraper, 10'	2.00						Tractor
Sep	1.0	Make Borders	60	Border Disk, 6' Disk	5.00						Tractor
Sep	1.0	Preirrigate			1.25	Water, District	6.00	Al	0.00	AF	Irrigators
Sep	1.0	Knock Borders	60	Border Disk, 6' Disk	5.00						Tractor
Sep	1.0	Apply Fert/Ground	60	Fert. Side Dress Unit, 4Row	2.00	18-46-00, Dry	450.00	Lb	245.00	Tn	Tractor
Sep	1.0	List	100	Lister, 5 Bottom	3.00						Tractor
Sep	1.0	Shape Beds	100	Bed Shaper, 4 Rw	5.00	Imidacloprid	16.00	Oz	588.40	Ga	Tractor
Sep	1.0	Apply Insect./Ground		Saddle Tk Sprayer, 2 Tk 8 Row CST Grnd Spray Insecticide		Methomyl	2.00	Pt	48.94	Ga	9.13 Ac
Sep	1.0	Plant	80	Planter, Stanhay, 4 Row	2.50	Romaine Lettuce Seed	800.00	Th	0.75	Th	Tractor
Sep	1.0	Set Sprinklers	60	Sprinkler Trailer	5.70						Tractor
Sep	1.0	Apply Herbicide/Ground	60	Saddle Tk Sprayer, 2 Tk 8	5.00	Bensulide	10.00	Pt	42.58	Ga	Tractor
Sep	5.0	Irrigate/Sec Sys			11.00	Water, District	1.10	Al	0.00	AF	Irrigators
Sep	1.0	Remove Sprinklers	60	Sprinkler Trailer	5.70						Tractor
Sep	1.0	Make Ditches		Motor Grader, 12'	40.00						Irrigators
Sep	10.0	Irrigate			0.75	Water, District	4.00	Al	0.00	AF	Irrigators
Sep	1.0	Cultivate	60	Cultivator, Sweep, 4 Rw	1.00						Tractor
Sep	1.0	Thinning		CST Thinning							75.00 Ac
Oct	1.0	Apply Insect./Ground	60	Manual Spray Rig, 150 g on	5.00	Spinosad	16.00	Oz	609.67	Ga	Tractor
Oct	1.0	Apply Fert/Side Dress	60	Cultivator, Sweep, 4 Rw Fert. Side Dress Unit, 4Row	1.00	46-00-00, Urea 46	280.00	Lb	271.17	Tn	Tractor
Oct	2.0	Apply Insect./Ground	60	Saddle Tk Sprayer, 2 Tk 8	5.00	Methomyl	1.00	Pt	48.94	Ga	Tractor
Nov	1.0	Harvest, Load & Haul		CST Harv/pack/haul Leaf							4.50 Ct
Nov	1.0	Disk Residue	175	Offset Disk, 18'	1.50						Tractor
		Pickup use 50 Mi/Ac		Pickup Truck, 1/2 Ton	0.60						

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

Table 4F Operations Calendar; Romaine Lettuce, 2001

COUNTY: Yuma FARM: Western Arizona Vegetables WATER SOURCE: YCWUA TILLAGE: Double Crop
 CROP: Lettuce, Romaine ACRES: 1 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Yuma Valley North YIELD: 700 Ct/Acre PREVIOUS CROP: Mixed Greens DATE: 03/25/2001

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip								1 C				
2	Disk								2 C				
3	Laser Level									1 C			
4	Make Borders									1 C			
5	Preirrigate									1 C			
6	Knock Borders									1 C			
7	Apply Fert/Ground									1 C			
8	List									1 C			
9	Shape Beds									1 C			
10	Apply Insecticide/Ground									1 C			
11	Plant									1 C			
12	Set Sprinklers									1 C			
13	Apply Herbicide/Ground									1 C			
14	Irrigate/Sec Sys									5 C			
15	Remove Sprinklers									1 C			
16	Make Ditches									1 C			
17	Irrigate									3 C	4 C	3 C	
18	Cultivate									1 C			
19	Thinning									1 C			
20	Apply Insect/Ground										1 C		
21	Apply Fert/Side Dress										2 C		
22	Apply Insect/Ground												
23	Harvest, Load & Haul												1 C
24	Disk Residue												1 C

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