

Table 16A. Income and Cash Operating Summary; Red Potatoes, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Potatoes	Hundred Lbs	291.00	\$9.98	\$2,904.18	\$2,904.18	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					130.09	_____
Tractor/Self Propelled				60.54		_____
Irrigation				43.26		_____
Other/ Contract				26.29		_____
Chemicals and Custom Applications					150.35	_____
Fertilizer				101.55		_____
Insecticide				11.38		_____
Herbicide				4.96		_____
Other Chemicals				32.47		_____
Farm Machinery and Vehicles					73.23	_____
Diesel Fuel				24.60		_____
Gasoline				3.54		_____
Repairs and Maintenance				45.09		_____
Irrigation Water (excluding labor)					171.68	_____
Pump Energy - Electric				147.06		_____
Repairs and Maintenance				24.62		_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				699.60	699.60	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1224.96	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					49.77	_____
Tractor/Self Propelled				26.76		_____
Other/Contract				23.01		_____
Farm Machinery and Vehicles					46.23	_____
Diesel Fuel				10.54		_____
Repairs and Maintenance				35.69		_____
TOTAL HARVEST AND POST HARVEST EXPENSE					96.00	_____
OPERATING OVERHEAD -> PICKUP USE					15.32	_____
OPERATING INTEREST AT 10.0%					29.02	_____
TOTAL CASH OPERATING EXPENSES					\$1,365.30	_____
RETURNS OVER CASH OPERATING EXPENSES					\$1,538.88	_____

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

Table 16B. Allocations of Ownership Costs; Red Potatoes, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

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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 \$9.98 / CW	\$2,904.18		\$2,904.18	
TOTAL OPERATING EXPENSES	\$1,365.30		\$1,365.30	
RETURN OVER CASH OPERATING EXPENSES		\$1,538.88		\$1,538.88
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	13.98		13.98	
Wells and Irrigation System	8.30		8.30	
General and Office Overhead (5.0%of Total Operating Exp.)	68.26		68.26	
General Farm Maintenance (3.0% of Total Operating Exp.)	40.96		40.96	
Total Cash Overhead Expenses	131.50		131.50	
Total Cash Operating and Overhead Cost	1,496.80		1,496.80	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$1,407.38		\$1,407.38
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			84.17	
Wells and Irrigation System			31.83	
Interest on Equity, Machinery and Vehicles			36.10	
Wells and Irrigation System			15.73	
Total Capital Allocations			167.83	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$1,407.38		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$1,239.56
Land Cost / Rent or Lease	100.00		100.00	
Total Land Costs	100.00		100.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,307.38		
RETURNS TO MANAGEMENT AND RISK ----->				\$1,139.56
Management Services (8% of Total Operation Expenses)			109.22	
TOTAL OWNERSHIP COST	231.50		508.55	
TOTAL COST	\$1,596.80		\$1,873.85	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,307.38		
RETURNS TO RISK (PROFITS) ----->				\$1,030.33
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)		\$4.69		\$4.69
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.80		\$1.75
BREAK-EVEN PRICE TO COVER TOTAL COST		\$5.49		\$6.44

Table16D. Resource and Cash Flow Requirements; Red Potatoes, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
NOV P	1.0	4.0	1.80		29.07	15.39				44.46
DEC P			8.92		31.11	47.49	65.33	699.60		839.95
JAN C	1.0	7.0	1.49		27.84	12.35	29.76			69.95
FEB C	3.0	21.0	1.97		62.71	15.14	24.80			102.65
MAR C	2.0	14.0	1.72		44.86	13.60				58.46
APR C	2.0	14.0	8.94		99.60	73.69	25.70		4.75	199.86
MAY C			0.25		3.44	2.19				5.63
Pickup Use 60 Mi/Acre					15.32					15.32
Operating Interest at 10.0									29.02	29.02
Total	9.0	60.0	25.09		313.95	172.09	145.59	699.90	33.77	1365.30
%					22.99	12.60	10.66	51.26	2.47	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 150.0
 Total P 184.0
 Total Labor 25.1
 Total Water 60.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 40.7 Gal
 Unleaded Gas 8.7 Gal
 Electric / Pumping 3887.4 KWH
 All Direct Energy 20.0 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Roller, 4 Rw	0.13 Hr	Blade Scraper, 10'	0.05 Hr	Flat Trailer	0.90 Hr
Hiller, 4 Row	1.08 Hr	Lister, 5 Bottom	0.22 Hr	Moldboard Plow, 4-16 2	0.45 Hr
Offset Disk, 13.5'	0.14 Hr	Offset Disk, 16.5'	0.90 Hr	Offset Disk, 8'	0.05 Hr
Pickup Truck, 1/2 Ton	2.90 Hr	Planter, Potato 3 Comp. 4	0.75 Hr	Potato Harvester, 4 Row	0.90 Hr
Power Mulcher, 4 Rw	0.30 Hr	Rolling Cultivator, 4 Rw	0.30 Hr	Root Cutter-Puller, 4 Row	0.75 Hr
Rowbuck, 10'	0.14 Hr	Saddle Tk Sprayer, 2 Tk 8	0.30 Hr	Tractor, 50 PTO HP,	0.05 Hr
Tractor, 60 PTO HP,	2.41 Hr	Tractor, 100 PTO HP,	3.24 Hr	Tractor, 150 PTO HP,	2.36 Hr
V-Ripper, 5 Shnk	0.11 Hr	Vegetable Trailer Flat Bed	1.80 Hr		

MATERIALS REQUIREMENT (per Acre)

18-46-00, Dry	400.00 Lb	20-0-0-45, Nitro-Sul	40.00 Ga	Carbaryl	2.00 Pt
Metalaxyl	0.50 Pt	Paraquat	0.50 Ga	Potato Seed	30.00 C
Trifluralin	1.50 Pt	Water, Pump	60.00 Al		

LABOR REQUIREMENT (per Acre)

Cutter	4.00 Hr	Irrigators	5.64 Hr	Other	5.50 Hr
Tractor	9.95 Hr				

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

Table 16E. Schedule of Operations; Red Potatoes, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

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	\$ / Unit		
Nov	0.5	Rip	150	V-Ripper, 5 Shnk	4.00						Tractor
Nov	1.0	Plow	150	Moldboard Plow, 4-16 2	2.00						Tractor
Nov	3.0	Disk	150	Offset Disk, 16.5'	4.00						Tractor
Nov	1.0	List	100	Lister, 5 Bottom	4.00						Tractor
Nov	3.0	Buck Rows	60	Rowbuck, 10'	20.00						Tractor
Nov	1.0	Preirrigate			2.65	Water, Pump	4.00	Al	35.84	AF	Irrigators
Dec	1.0	Mulch	60	Power Mulcher, 4 Rw	3.00						Tractor
Dec	1.0	Prep/Haul Seed Potato		Pickup Truck, 1/2 Ton	1.00						Tractor
Dec	1.0	Plant		100 Planter, Potato 3 Comp. 4	1.20	Potato Seed	30.00	C	22.00	CW	Tractor
						18-46-00, Dry	400.00	Lb	245.00	Tn	Other
						Metalaxyl	0.50	Pt	202.05	Ga	
Jan	1.0	Apply Herbicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8	3.00	Trifluralin	1.50	Pt	24.95	Ga	Tractor
				Rolling Cultivator, 4 Rw							
Jan	3.0	Hilling	100	Hiller, 4 Row	2.50						Tractor
Jan	2.0	Disk Ends	100	Offset Disk, 13.5'	20.00						Tractor
Jan	2.0	Irrigate/Run Fertilizer			1.52	Water, Pump	7.00	Al	35.84	AF	Irrigators
						20-0-0-45, Nitro-Sul	20.00	Ga	240.00	Tn	
Feb	6.0	Irrigate			1.52	Water, Pump	7.00	Al	35.84	AF	Irrigators
Apr	1.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Carbaryl	2.00	Pt	25.00	Ga	4.75 Ac
						Paraquat	0.50	Ga	36.00	Ga	
Apr	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00						Tractor
Apr	1.0	Cut Vines	100	Root Cutter-Puller, 4 Row	1.20						Tractor
Apr	1.0	Disk Ends	50	Offset Disk, 8'	20.00						Tractor
Apr	1.0	Knock Ditches	60	Blade Scraper, 10'	20.00						Tractor
Apr	1.0	Roll Beds	60	Bed Roller, 4 Rw	7.00						Tractor
Apr	1.0	Dig	150	Potato Harvester, 4 Row	1.00						Tractor
											Other
Apr	1.0	Haul	60	Vegetable Trailer Flat Bed	0.50						Tractor
											Other
May	1.0	Disk Residue	150	Offset Disk, 16.5'	4.00						Tractor
		Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50						

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

Table 16F Operations Calendar; Red Potatoes, 2001

COUNTY: Pinal FARM: Southern Vegetables WATER SOURCE: Coolidge, Electric TILLAGE: Conventional
 CROP: Potatoes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Coolidge Area YIELD: 291.0 Cw/Acre PREVIOUS CROP: Wheat, Winter DATE: 10/09/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip												0.5 P
2	Plow												1.0 P
3	Disk												2.0 P
4	List												1.0 P
5	Buck Rows	1.0 C			1.0 C								1.0 P
6	Preirrigate												1.0 P
7	Mulch												1.0 P
8	Prep/Haul Seed Potato												1.0 P
9	Plant												1.0 P
10	Apply Herbicide/Ground	1.0 C											
11	Hilling	1.0 C		1.0 C	1.0 C								
12	Disk Ends	1.0 C			1.0 C								
13	Irrigate/Run Fertilizer	1.0 C	1.0 C										
14	Irrigate		2.0 C	2.0 C	2.0 C								
15	Apply Insecticide/Air				1.0 C								
16	Prepare Ends				1.0 C								
17	Cut Vines				1.0 C								
18	Disk Ends				1.0 C								
19	Knock Ditches				1.0 C								
20	Roll Beds				1.0 C								
21	Dig				1.0 C								
22	Haul				1.0 C								
23	Disk Residue												1.0 C

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