

Table 5A. Income and Cash Operating Summary; Broccoli, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Broccoli ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 448.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 7/16/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Broccoli	Crtn	448.00	\$6.67	\$2,988.16	\$2,988.16	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)					168.17	_____	
Tractor/Self Propelled					93.43	_____	
Irrigation					68.24	_____	
Other/ Contract					6.50	_____	
Chemicals and Custom Applications					243.29	_____	
Fertilizer					128.54	_____	
Insecticide					111.45	_____	
Herbicide					3.30	_____	
Farm Machinery and Vehicles					85.69	_____	
Diesel Fuel					35.03	_____	
Repairs and Maintenance					50.66	_____	
Irrigation Water (excluding labor)					15.00	_____	
Water Assessment (See Note Below) **						_____	
Other Purchased Inputs &					484.97	_____	
Seed/Transplants					256.97	_____	
Other Services and Rentals					228.00	_____	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					997.12	_____	
CASH HARVEST AND POST HARVEST EXPENSES							
Paid Labor (including benefits)					19.50	_____	
Tractor/Self Propelled					19.50	_____	
Farm Machinery and Vehicles					16.71	_____	
Diesel Fuel					5.46	_____	
Repairs and Maintenance					11.26	_____	
Custom Harvest/Post Harvest					1321.60	_____	
Other Materials					379.01	_____	
TOTAL HARVEST AND POST HARVEST EXPENSE					1736.82	_____	
OPERATING OVERHEAD PICKUP USE					15.29	_____	
OPERATING INTEREST AT 10.0%					10.80	_____	
TOTAL CASH OPERATING EXPENSES					\$2,760.02	_____	
RETURNS OVER CASH OPERATING EXPENSES					\$228.14	_____	

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

** A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

Table 5B. Allocations of Ownership Costs; Broccoli, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Broccoli ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 448.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 7/16/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$6.67 / Ct	\$2,988.16		\$2,988.16	
TOTAL OPERATING EXPENSES	\$2,760.02		\$2,760.02	
RETURN OVER CASH OPERATING EXPENSES		\$228.14		\$228.14
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	9.38		9.38	
General and Office Overhead (5.0% of Total Operating Exp.)	138.00		138.00	
General Farm Maintenance (3.0% of Total Operating Exp.)	82.80		82.80	
Total Cash Overhead Expenses	230.18		230.18	
Total Cash Operating and Overhead Cost	2,990.20		2,990.20	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$2.04)		(\$2.04)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			55.08	
Interest on Equity, Machinery and Vehicles			19.89	
Total Capital Allocations			74.97	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$2.04)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$77.01)
Land Cost / Ownership (100% Equity)				
Property Taxes (\$619.00 X 16.0% X 0.141)	6.99		6.99	
Opportunity Interest on Land (100% X 6.0 X \$619.00)			18.57	
Water Assessment	10.00		10.00	
Total Land Costs	16.99		35.56	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$19.03)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$112.57)
Management Services (8% of Total Operation Expenses)			220.80	
TOTAL OWNERSHIP COST	247.17		561.51	
TOTAL COST	\$3,007.19		\$3,321.54	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$19.03)		
RETURNS TO RISK (PROFITS) ----->				(\$333.38)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$6.16		\$6.16
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.55		\$1.25
BREAK-EVEN PRICE TO COVER TOTAL COST		\$6.71		\$7.41

Table 5C. Variable Operating Costs; Broccoli, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Broccoli ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 448.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 7/16/99

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	Jul	Rip	0.225	0.250	2.78	2.44			5.22	0.5	2.61	L
2	Jul	Plow	0.450	0.500	6.35	4.87			11.23	1.0	11.23	L
3	Jul	Disk	0.225	0.250	3.35	2.44			5.79	3.0	17.37	L
4	Jul	Laser Level	0.450	0.500	5.40	4.87			10.27	0.5	5.13	L
5	Aug	Apply Herbicide/Ground	0.225	0.250	2.20	2.44		3.30	7.94	1.0	7.94	G
6	Aug	List	0.225	0.250	2.44	2.44			4.87	1.0	4.87	L
7	Sep	Plant	0.600	1.334	8.15	13.00		256.97	278.13	1.0	278.13	L
8	Sep	Apply Insect./Ground	0.150	0.167	1.35	1.63		78.22	81.19	1.0	81.19	G
9	Sep	Buck Rows	0.045	0.050	0.33	0.49			0.82	5.0	4.08	G
10	Sep	Irrigate		1.000		9.75		2.14	11.89	7.0	83.24	G
11	Sep	Disk Ends	0.045	0.050	0.40	0.49			0.89	5.0	4.46	G
12	Sep	Thinning					75.00		75.00	1.0	75.00	G
13	Sep	Cultivate	0.563	0.625	4.33	6.09			10.42	5.0	52.11	G
14	Sep	Soil Fertility					3.00		3.00	1.0	3.00	G
15	Sep	Apply Fert/Ground	0.450	0.500	5.07	4.87		36.35	46.30	2.0	92.59	G
16	Sep	Apply Insect./Ground	0.225	0.250	1.82	2.44		9.73	13.98	2.0	27.97	G
17	Sep	Hand Weeding					75.00		75.00	2.0	150.00	G
18	Oct	Apply Fert/Ground	0.450	0.500	3.39	4.87		27.92	36.18	2.0	72.36	G
19	Nov	Apply Insect./Ground	0.225	0.250	1.82	2.44		13.79	18.05	1.0	18.05	G
20	Nov	Harvest 448 Ct					1232.00	379.01	1611.01	1.0	1611.01	H
21	Nov	Field Transport 448 Ct	1.800	2.000	16.71	19.50			36.21	1.0	36.21	H
22	Nov	Haul, Custom 448 Ct					89.60		89.60	1.0	89.60	H
23	Nov	Disk Residue 448 Ct	0.225	0.250	3.35	2.44			5.79	1.0	5.79	L
		Pickup Use60 Mi/Acre	2.000		15.29				15.29		15.29	
		Operating Interest at 10.0					10.80		10.80		10.80	
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TOTAL CASH OPERATING EXPENSES (includes all times over):												
2760.02 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 \$10.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	325.13
Growing (G)	671.99
Harvest (H)	1,736.82
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	26.09
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Total (T)	\$2,760.02

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

		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%		
Yields			\$5.00	\$6.00	\$6.67	\$7.34	\$8.34	Break-even Price	
- 25%	336.0	-644.12	-307.96	-83.84	140.27	476.44	6.92		
- 10%	403.2	-568.48	-165.08	103.86	372.79	776.19	6.41		
Budgeted	448.0	-518.05	-69.82	228.99	527.81	976.03	6.16		
+ 10%	492.8	-467.62	25.43	354.13	682.82	1,175.87	5.95		
Break-even Yield			908.21	480.84	366.02	295.46	229.19		

Table 5D. Resource and Cash Flow Requirements; Broccoli, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
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 AREA: Salt River Project YIELD: 448.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 7/16/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JUL C			1.38		17.15	13.40				30.55
AUG C			0.75		7.99	7.31	3.30			18.60
SEP C	3.0	18.0	6.80		27.25	66.30	124.29	256.97	153.00	627.82
OCT C	3.0	18.0	6.82	10.00	28.12	66.53	101.91		75.00	281.57
NOV C	1.0	6.0	3.50	5.00	21.89	34.12	13.79	379.01	1321.60	1775.40
Pickup Use60 Mi/Acre					15.29					15.29
Operating Interest at 10.0 Water Assessment				**					10.80	10.80
Total	7.0	42.0	19.25	15.00	117.69	187.67	243.29	635.98	1560.40	2760.02
%				0.54	4.26	6.80	8.81	23.04	56.54	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 198.9
 Total P 230.0
 Total K 0.0
 Total Labor 19.3
 Total Water 42.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 50.1 Gal
 Unleaded Gas 6.0 Gal
 All Direct Energy 7.7 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw 0.60 Hr	Cultivator, Sweep, 3 Rw 2.81 Hr	Directed Spray Rig, 8 0.67 Hr
Directed Spray Rig, 16 0.15 Hr	Drag Scraper, 14' 0.22 Hr	Fert. Side Dress Unit, 0.90 Hr
Fertilizer Broadcaster, 1.13 Hr	Laser, Complete System 0.22 Hr	Lister, 5 Bottom 0.22 Hr
Moldboard Plow, 4-16 2 0.45 Hr	Offset Disk, 10.5' 0.23 Hr	Offset Disk, 16.5' 0.90 Hr
Pickup Truck, 1/2 Ton 2.00 Hr	Planter, Stanhay, 2 Row 0.60 Hr	Rowbuck, 10' 0.23 Hr
Tractor, 70 PTO HP 1.80 Hr	Tractor, 80 PTO HP 5.89 Hr	Tractor, 100 PTO HP 1.05 Hr
Tractor, 150 PTO HP, 1.69 Hr	V-Ripper, 5 Shnk 0.11 Hr	Vegetable Trailer Flat Bed 1.80 Hr

MATERIALS REQUIREMENT (per Acre)

18-46-00, Dry 500.00 Lb	33-00-00, Amm. Nitrate, 330.00 Lb	Broccoli Boxes 448.00 Ct
Broccoli Seed (Hybrid) 90.00 Th	BT 4.00 Lb	Imidacloprid 16.00 Oz
Methomyl 4.50 Pt	Trifluralin 1.00 Pt	Water, District 42.00 AI

LABOR REQUIREMENT (per Acre)

Irrigators 7.00 Hr	Other 0.67 Hr	Tractor 11.58 Hr
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*NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

Table 5E. Schedule of Operations; Broccoli, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop
 CROP: Broccoli ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 448.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 7/16/99

First No.	Month	Times	Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acres/Hr	Material Use and Cost Name	Appl. Rate	\$ / Unit	Service Cost \$ / Unit	Labor Type
1	Jul	0.5	Rip	150 V-Ripper, 5 Shnk	4.00					Tractor
2	Jul	1.0	Plow	150 Moldboard Plow, 4-16 2	2.00					Tractor
3	Jul	3.0	Disk	150 Offset Disk, 16.5'	4.00					Tractor
4	Jul	0.5	Laser Level	150 Drag Scraper, 14' Laser, Complete System	2.00					Tractor
5	Aug	1.0	Apply Herbicide/Ground	100 Fertilizer Broadcaster,	4.00	Trifluralin	1.00 Pt	24.95 Ga		Tractor
6	Aug	1.0	List	100 Lister, 5 Bottom	4.00					Tractor
7	Sep	1.0	Plant	100 Planter, Stanhay, 2 Row Bed Shaper, 4 Rw	1.50	Broccoli Seed (Hybrid)	90.00 Th	2.70 Th		Tractor Other
8	Sep	1.0	Apply Insect./Ground	80 Directed Spray Rig, 16 Row	6.00	Imidacloprid	16.00 Oz	591.67 Ga		Tractor
9	Sep	5.0	Buck Rows	80 Rowbuck, 10'	20.00					Tractor
10	Sep	7.0	Irrigate		1.00	Water, District	6.00 Al	4.29 AF		Irrigators
11	Sep	5.0	Disk Ends	80 Offset Disk, 10.5'	20.00					Tractor
12	Sep	1.0	Thinning	CST Thinning					75.00 Ac	
13	Sep	5.0	Cultivate	80 Cultivator, Sweep, 3 Rw	1.60					Tractor
14	Sep	1.0	Soil Fertility	CST Soil Analysis (Surface)					3.00 Ac	
15	Sep	2.0	Apply Fert/Ground	80 Fert. Side Dress Unit, 4Row	2.00	18-46-00, Dry	250.00 Lb	275.00 Tn		Tractor
16	Sep	2.0	Apply Insect./Ground	80 Directed Spray Rig, 8 Row	4.00	Methomyl	1.50 Pt	49.05 Ga		Tractor
17	Sep	2.0	Hand Weeding	CST Hand Weeding					75.00 Ac	
18	Oct	2.0	Apply Fert/Ground	80 Fertilizer Broadcaster,	2.00	33-00-00, Amm. Nitrate,	165.00 Lb	320.00 Tn		Tractor
19	Nov	1.0	Apply Insect./Ground	80 Directed Spray Rig, 8 Row	4.00	Methomyl BT	1.50 Pt 4.00 Lb	49.05 Ga 0.96 Lb		Tractor
20	Nov	1.0	Harvest	CST Cut/Pack/Load Broccoli		Broccoli Boxes	448.00 Ct	0.80 Ct	2.75 Ct	
21	Nov	1.0	Field Transport	70 Vegetable Trailer Flat Bed	0.50					Tractor
22	Nov	1.0	Haul, Custom	CST Haul Broccoli					0.20 Ct	
23	Nov	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.

ARIZONA COOPERATIVE EXTENSION
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