

Cost of Production - Watermelon		Unit	Qty/acre	Cost/Unit	Total/acre
Variable Costs					
Pre-Harvest					
Land preparation	Soil sampling (nutrient analysis)	Acre	1.00	15.00	15.00
	13-13-13	lb	400.00	0.33	130.00
	Plastic Mulch 48"x4000	Roll 4000	1.81	171.00	309.51
	Labor	Hours	2.00	19.28	38.56
Planting	Transplanting Watermelon	on case 18	10.00	5.50	55.00
Herbicide	Halosulfuron-methyl	oz	1.00	30.00	30.00
	Ethalfuralin	pt	45.37	6.84	310.13
Fungicide	Trifloxystrobin	oz	6.40	5.90	37.76
	Mefenoxam	pt	1.99	15.63	31.09
	Azoxystrobin	oz	16.00	0.80	12.77
	Mancozeb	lb	2.00	36.00	72.00
Insecticide	Spinosad	oz	30.25	15.63	472.66
	Chlorantraniliprole	qt	0.75	375.00	281.25
	Lambda-cyhalothrin; Chlorantraniliprole	oz	45.00	2.02	90.87
Herb.; Fung.; Insect.	Labor	Hours	35.00	19.28	674.80
Irrigation system	Running irrigation system Drip Line	\$	1.00	98.84	98.84
	(Fertigate) 20-20-20	lb	550.00	0.32	173.25
	Fertilizer Injector	Acre	0.30	85.00	25.50
Set up fertigate	Labor	Hours	6.00	19.28	115.68
Set up irrigation	Labor	Hours	8.00	19.28	154.24
Harvest	Labor	Hours	26.00	19.28	501.28
	26" Watermelon bin	Each	20.00	14.94	298.80
Overall Machinery					
Labor	Disk + Incorporate 10 with 2WD 75 hp with	hrs/acre	0.21	6.94	1.49
	Spray (Broadcast) 27 with 2WD 75 hp with	hrs/acre	0.07	6.94	0.45
	Mulch Lifter 1-Row with 2WD 75 hp with	hrs/acre	0.44	6.94	3.08
	Rotary Tiller 5 with 2WD 75 hp with	hrs/acre	0.73	6.94	5.07
	Take Up Reel (M&T) 1-Row with 2WD with 75 hp	hrs/acre	0.44	6.94	3.07
	Plastic Layer Bed 5'cntr with 2WD with 75 hp	hrs/acre	0.97	6.94	6.76
	Pintr/H2O Squash 1R 5'cntr with 2WD with 75 hp	hrs/acre	5.13	6.94	35.62
Fuel	Disk + Incorporate 10 with 2WD 75 hp with	gal/acre	0.42	3.09	1.28
	Spray (Broadcast) 27 with 2WD 75 hp with	gal/acre	0.13	3.09	0.39
	Mulch Lifter 1-Row with 2WD 75 hp with	gal/acre	1.19	3.09	3.67
	Rotary Tiller 5 with 2WD 75 hp with	gal/acre	1.96	3.09	6.05
	Take Up Reel (M&T) 1-Row with 2WD with 75 hp	gal/acre	1.19	3.09	3.66
	Plastic Layer Bed 5'cntr with 2WD with 75 hp	gal/acre	2.61	3.09	8.08
	Pintr/H2O Squash 1R 5'cntr with 2WD with 75 hp	gal/acre	4.17	3.09	12.87
R&M	Disk + Incorporate 10 with 2WD 75 hp with	\$/acre	0.05	1.16	0.06
	Spray (Broadcast) 27 with 2WD 75 hp with	\$/acre	0.01	0.24	0.00
	Mulch Lifter 1-Row with 2WD 75 hp with	\$/acre	0.05	0.75	0.24
	Rotary Tiller 5 with 2WD 75 hp with	\$/acre	0.05	3.95	0.20
	Take Up Reel (M&T) 1-Row with 2WD with 75 hp	\$/acre	0.05	1.79	0.09
	Plastic Layer Bed 5'cntr with 2WD with 75 hp	\$/acre	0.05	3.89	0.19
	Pintr/H2O Squash 1R 5'cntr with 2WD with 75 hp	\$/acre	0.05	4.69	0.23
	Irrigation System R&M Drip Line	\$/acre	1.00	91.96	91.96
Cleanup field	Labor	Hours	16.00	19.28	308.48
Interest on operating expenses	Interest rate	%	4,546.81	0.09	795.69
	Crop Insurance - Fruit and Vegetable*	\$	1.00	125.00	125.00
Total Variable Costs					5,342.50
*Based on USDA FSA NAP Insurance administrative fee of \$325/crop assuming 2.6 acres of production.					
Fixed Costs					
	Irrigation depreciation	System	1.00	262.74	262.74
	Disk + Incorporate 10 with 2WD 75 hp with	\$/acre	0.05	2.95	0.15
	Spray (Broadcast) 27 with 2WD 75 hp with	\$/acre	0.01	0.76	0.01
	Mulch Lifter 1-Row with 2WD 75 hp with	\$/acre	0.05	6.33	0.32
	Rotary Tiller 5 with 2WD 75 hp with	\$/acre	0.05	9.37	0.47
	Take Up Reel (M&T) 1-Row with 2WD with 75 hp	\$/acre	0.05	8.38	0.42
	Plastic Layer Bed 5'cntr with 2WD with 75 hp	\$/acre	0.05	12.42	0.62
	Pintr/H2O Squash 1R 5'cntr with 2WD with 75 hp	\$/acre	0.05	16.98	0.85
	Misc. Overhead	%	5,342.50	0.07	373.97
	Land ownership	-	-	-	-
Total Fixed Costs					639.55
TOTAL COSTS					5,982.04
Total receipts	Watermelon	lb	36,000.00	0.31	11,160.00
Return to land and capital					5,177.96
Initial Capital Investment	..\\..\\Data base\Drip Line - Irrigation System.xlsx	System	1.00	1,839.20	1,839.20

Return to land and capital

PRICE	Price/acre/yield	YIELD				
		-20%	-10%	Expected	10%	20%
		28,800.00	32,400.00	36,000.00	39,600.00	43,200.00
\$0.25	\$1,160.36	\$2,053.16	\$2,945.96	\$3,838.76	\$4,731.56	\$5,624.36
\$0.28	\$2,053.16	\$3,057.56	\$4,061.96	\$5,066.36	\$6,070.76	\$7,075.16
\$0.31	\$2,945.96	\$4,061.96	\$5,177.96	\$6,293.96	\$7,409.96	\$8,531.96
\$0.34	\$3,838.76	\$5,066.36	\$6,293.96	\$7,521.56	\$8,749.16	\$9,998.36
\$0.37	\$4,731.56	\$6,070.76	\$7,409.96	\$8,749.16	\$10,088.36	\$11,477.56

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