WATERMELON (Seeded), TRICKLE IRRIGATED

Kentucky Estimated Costs and Returns for 2017
Market Garden Scale (700 row feet, Approx. 0.12 acre, Direct Market)
NOT TO BE CONSIDERED CROPPING RECOMMENDATIONS OR PROFITABILITY PROJECTIONS.
FOR COMPARISON AND PLANNING PURPOSES ONLY.

CENTER FOR CROP DIVERSIFICATION

	Quantity	Unit	$/Unit	Total		Your Numbers
GROSS RETURNS						
Watermelons, Seeded	450	melons	$ 4.00	$ 1,800.00	a,b	
				$ -		
Total Returns				**$ 1,800.00**		
VARIABLE COSTS						
Production						
Seeded Watermelon Seeds	263	seeds	$ 0.30	$ 78.90		
Cost of Growing Transplants - Labor, Media, Utilities	263	plants	$ 0.20	$ 52.60		
N Fertilizer: Urea	13	lbs	$ 0.40	$ 5.20		
K Fertilizer: Potash (0-0-60)	10	lbs	$ 0.30	$ 3.00		
N Fertilizer: Fertigation (Calcium Nitrate or Potassium Nitrate)	50	lbs	$ 0.45	$ 22.50		
Plastic Mulch	700	feet	$ 0.03	$ 21.00	c	
Drip Lines & Irrigation Fittings	700	feet	$ 0.05	$ 35.00	c	
Weed Control	1	plot	$ 51.52	$ 51.52	d	
Insect Control	1	plot	$ 24.21	$ 24.21	d	
Disease Control	1	plot	$ 37.32	$ 37.32	d	
Pollination	0.33	hive	$ 75.00	$ 25.00		
Irrigation	1	plot	$ 6.00	$ 6.00	c	
Hired Labor (Planting, Hand Weeding)	4	hrs.	$ 12.50	$ 50.00		
Machinery Variable Costs	1	plot	$ 8.72	$ 8.72	e	
Total Preharvest Variable Costs				**$ 420.97**		
HARVESTING AND MARKETING						
Plastic Disposal	2	hours	$ 12.50	$ 25.00		
Harvest Bin & Boxes	1		$ 200.00	$ 200.00		
Hired Labor						
Harvest & Field Grading	15	hours	$ 12.50	$ 187.50	f	
Marketing Costs (10% of Gross)	10.0%	gross		$ 180.00		
Transport to Market	200	miles	$ 0.55	$ 110.00	e	
Total Harvesting and Marketing Cost				**$ 702.50**		
Interest on Variable Costs				$ 23.17		
TOTAL VARIABLE COST				**$ 1,146.64**		
RETURN ABOVE VARIABLE COSTS				**$ 653.36**		
FIXED COSTS						
Machinery and Equipment				$ 14.90	e	
Irrigation System Capital Recovery				$ 107.60	c	
Taxes on Land				$ 1.00		
Insurance				$ 11.47		
TOTAL FIXED COSTS				**$ 134.97**		
TOTAL EXPENSES				**$ 1,281.60**		
RETURN TO OPERATOR LABOR, LAND, CAPITAL, & MGT.				$ 518.40		
Operator Labor (machinery and irrigation)	10	hrs.	$ 15.00	$ 150.00		
RETURN TO LAND, CAPITAL, AND MANAGEMENT				**$ 368.40**		

a Yields based on UK variety trials and grower yield estimates. Yields on plastic with trickle irrigation are likely to be higher than bare field.
b Price based on Kentucky farmers market and auction prices.
c Fuel and power for irrigation system. Assumes established well or water source. Depreciation fixed costs in capital recovery line.
d Pesticide costs based on recommended applications of various products using 2017 product costs, plus extra labor.
Product costs for 0.12 acre: Herbicide $1.52; Insecticide $9.21; Fungicide $22.32
e Machinery cost calculator updated for vegetable production in 2017.
f Based on state budgets with revisions by Kentucky vegetable experts.