WATERMELON (seedless), FRESH MARKET, TRICKLE IRRIGATED Kentucky Estimated <u>per Acre</u> Costs and Returns for 2022 Large Scale (5 or more acres trickle irrigated)*



NOT TO BE CONSIDERED CROPPING RECOMMENDATIONS OR PROFITABILITY

PROJECTIONS. FOR COMPARISON AND PLANNING PURPOSES ONLY.

	Quantity	Unit		\$/Unit		Total				
GROSS RETURNS	450	cwt								
Watermelons, Seedless	67	bins	\$	140.00	\$	9,380.00	a,b	Harvest	4.17	cwt/hour
·					\$	-		Labor		
Total Returns					\$	9,380.00				
VARIABLE COSTS								You	ır Num	bers
Production										
Seedless Plants - \$250 per thousand TOTAL	1815	plants	\$	0.28	\$	508.20				
Pollenizers - \$150 per thousand		plants			_	136.13				
N Fertilizer: Urea	100	lbs	\$	0.40	\$	40.00				
K Fertilizer: Potash (0-0-60)	80	lbs	\$	0.65	\$	52.00				
N Fertilizer: Fertigation (Calcium Nitrate)	483	lbs	\$	0.65		313.95	g			
Plastic Mulch	1	acre	\$	327.00	\$	327.00				
Drip Lines & Irrigation Fittings	1	acre	\$	284.00	\$	284.00	С			
Pollination	1	hive	\$	75.00	\$	75.00	h			
Herbicides (Row Middles)		acre	\$	10.47	\$	10.47				
Insecticides	1	acre	\$	86.00	\$	86.00	d			
Fungicides	1	acre	\$	160.48	\$	160.48	d			
Irrigation		acre		65.00						
Hired Labor (Planting)		hrs.		16.50		264.00				
Machinery Variable Costs		acre		57.76		57.76	е			
Total Preharvest Variable Costs						2,379.99				
						,				
HARVESTING AND MARKETING										
Plastic Disposal	10	hours	¢	16.50	\$	165.00				
Hired Labor	10	nouis	φ	10.50	Φ	103.00				
Harvest & Field Grading	\$ 3.96	CNACT			•	1,781.00	f			
Bins (45-count)		bins	Ф	13.50	_	904.50	!			
Marketing Costs (% of Gross)		gross	φ	13.30	\$	938.00				
Hauling Variable Costs	450		\$	0.50	\$					
Tradiling Variable Costs	430	CWI	Ψ	0.50	Ψ	223.00	-			
Total Harvesting and Marketing Cost					\$	4,013.50				
Total Harvesting and marketing oost					Ψ	4,010.00				
Interest on Variable Costs					\$	131.60				
Interest on Valiable Gosts					Ψ	101.00				
TOTAL VARIABLE COST					\$	6,525.09				
TOTAL VARIABLE GOOT					Ψ	0,020.00				
RETURN ABOVE VARIABLE COSTS					\$	2,854.91				
	<u> </u>				Ť	_,00				
FIXED COSTS					_	400.01				
Machinery and Equipment					\$	106.31				
Irrigation System Capital Recovery					\$	440.00	С			
Taxes on Land					\$	5.00				
Insurance					\$	65.25				
					_					
TOTAL FIXED COSTS					\$	616.56				
TOTAL EXPENSES		-			_	7 4 4 4 0 7				
TOTAL EXPENSES					\$	7,141.65				
DETUDU TO OBERATOR A CORP.	TAL 0.55				_	0.000.05				
RETURN TO OPERATOR LABOR, LAND, CAPI	IAL, & MO	. آ ق			\$	2,238.35				
On another Labora (see abin		la ara	_	10.50		047.50				
Operator Labor (machinery and irrigation)	15	hrs.	Þ	16.50	\$	247.50				
DETURN TO LAND CARITAL AND MANY COM		 	-		_	4 000 05				
RETURN TO LAND, CAPITAL, AND MANAGEM	ENI				\$	1,990.85				

a Yields based on UK variety trials and grower yield estimates. Yields on plastic with trickle irrigation will be 300-400 cwt.

b Price based on shipping point prices from MO and NC and terminal market price trends in Atlanta, 2022; Ky. auctions 2022.

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 2022 product costs.

e Machinery costs generator (ISU, 2002) using updated gasoline, purchase price and replacement cost estimates.

f Based on state budgets with revisions by Kentucky vegetable experts.

g Fertilizer assumption: 17.75 lbs calcium nitrate per week per 1,000 plants.

h Hive rental rates are very dependent on local availability.

^{*} Farm has 5 or more acres total in trickle-irrigated crops