BROCCOLI, FALL FRESH MARKET, TRICKLE IRRIGATED
Kentucky Estimated per Acre Costs and Returns for 2017
Large Scale (5 or more acres trickle irrigated)*
NOT TO BE CONSIDERED CROPPING RECOMMENDATIONS OR PROFITABILITY PROJECTIONS. FOR COMPARISON AND PLANNING PURPOSES ONLY.

CENTER FOR CROP DIVERSIFICATION

	Quantity	Unit	$/Unit	Total		
GROSS RETURNS						
Broccoli (20-23 lb box)	450	boxes	$ 15.00	$ 6,750.00	a,b	Boxes harvested **4.16**
				$ -		& packed/hour
Total Returns				**$ 6,750.00**		
VARIABLE COSTS						**Your Numbers**
Production						
Broccoli Transplants	15.0	thousand	$ 45.00	$ 675.00		
N Fertilizer: Urea	100	lbs	$ 0.40	$ 40.00		
Starter Fertilizer	65	lbs	$ 0.60	$ 39.00		
N Fertilizer: Fertigation (Calcium Nitrate)	645	lbs	$ 0.45	$ 290.25	g	
Plastic Mulch	1	acre	$ 290.00	$ 290.00		
Drip Lines & Irrigation Fittings	1	acre	$ 495.00	$ 495.00		
Herbicides	1	acre	$ 16.68	$ 16.68		
Insecticides	1	acre	$ 84.10	$ 84.10	d	
Fungicides	1	acre	$ 22.43	$ 22.43	d	
Irrigation	1	acre	$ 50.00	$ 50.00	c	
Hired Labor (Planting)	25	hrs.	$ 12.50	$ 312.50		
Machinery Variable Costs	1	acre	$ 49.35	$ 49.35	e	
Total Preharvest Variable Costs				**$ 2,364.31**		
HARVESTING AND MARKETING						
Plastic Disposal	24	hours	$ 12.50	$ 300.00		
Harvest and Pack	450	boxes	$ 3.00	$ 1,352.16	f	
Ice and Cooling	2,100	lbs	$ 0.10	$ 210.00		
Boxes	450	boxes	$ 1.40	$ 630.00		
Marketing Costs (10% of Gross)	10.0%	gross		$ 675.00		
Total Harvesting and Marketing Cost				**$ 3,167.16**		
Interest on Variable Costs				$ 118.44		
TOTAL VARIABLE COST				**$ 5,649.91**		
RETURN ABOVE VARIABLE COSTS				**$ 1,100.09**		
FIXED COSTS						
Machinery and Equipment				$ 78.44	e	
Irrigation System Capital Recovery				$ 351.70	c	
Taxes on Land				$ 5.00		
Insurance				$ 56.50		
TOTAL FIXED COSTS				**$ 491.64**		
TOTAL EXPENSES				**$ 6,141.55**		
RETURN TO OPERATOR LABOR, LAND, CAPITAL, & MGT.				$ 608.45		
Operator Labor (machinery and irrigation)	20	hrs.	$ 15.00	$ 300.00		
RETURN TO LAND, CAPITAL, AND MANAGEMENT				**$ 308.45**		

a Yields based on prior UK budget yield assumption.
b Price based on 2016 wholesale and terminal market prices for Sept/Oct 2016 at Atlanta and St. Louis.
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.
e Machinery costs generator (ISU, 2002) using updated fuel, purchase price and replacement cost estimates.
f Updates past harvest and packing cost assumptions and compares to recently published university budget assumptions.
g Fertilizer assumption: 64.5 lbs calcium nitrate per week per acre.
* Farm has 5 or more acres total in trickle-irrigated crops