Eggplant, 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		Your Numbers
GROSS RETURNS		cwt				
Eggplant, 1 1/9 bushel	700	boxes	$ 10.00	$ 7,000.00	a,b	
				$ -		
Total Returns				**$ 7,000.00**		
VARIABLE COSTS						
Production						
Eggplant Transplants	4356	plants	$ 0.20	$ 871.20		
N Fertilizer: Urea	130	lbs	$ 0.40	$ 52.00		
K Fertilizer: Potash (0-0-60)	75	lbs	$ 0.30	$ 22.50		
N Fertilizer: Fertigation (Calcium Nitrate)	387	lbs	$ 0.45	$ 174.15	g	
Plastic Mulch	1	acre	$ 229.00	$ 229.00		
Drip Lines & Irrigation Fittings	1	acre	$ 326.00	$ 326.00		
Pollination	1	hive	$ 75.00	$ 75.00		
Herbicides	1	acre	$ 56.49	$ 56.49		
Insecticides	1	acre	$ 124.49	$ 124.49	d	
Fungicides	1	acre	$ 182.56	$ 182.56	d	
Irrigation	1	acre	$ 50.00	$ 50.00	c	
Hired Labor (Planting)	10	hrs.	$ 12.50	$ 125.00		
Machinery Variable Costs	1	acre	$ 43.61	$ 43.61	e	
Total Preharvest Variable Costs				**$ 2,332.00**		
HARVESTING AND MARKETING						
Plastic Disposal	18	hours	$ 12.50	$ 225.00		
Hired Labor						
Harvest	700	box	$ 1.25	$ 875.00	f	
Packing	700	box	$ 2.00	$ 1,400.00	f	
Boxes	700	boxes	$ 1.40	$ 980.00		
Marketing Costs (10% of Gross)	10%	gross		$ 700.00		
Hauling Variable Costs	700	boxes	$ 0.07	$ 49.00	e	
Total Harvesting and Marketing Cost				**$ 4,229.00**		
Interest on Variable Costs				$ 133.40		
TOTAL VARIABLE COST				**$ 6,694.40**		
RETURN ABOVE VARIABLE COSTS				**$ 305.61**		
FIXED COSTS						
Machinery and Equipment				$ 68.99	e	
Irrigation System Capital Recovery				$ 328.40	c	
Taxes on Land				$ 5.00		
Insurance				$ 66.94		
TOTAL FIXED COSTS				**$ 469.33**		
TOTAL EXPENSES				**$ 7,163.73**		
RETURN TO OPERATOR LABOR, LAND, CAPITAL, & MGT.				$ (163.73)		
Operator Labor (machinery and irrigation)	15	hrs.	$ 15.00	$ 225.00		
RETURN TO LAND, CAPITAL, AND MANAGEMENT				**$ (388.73)**		

Boxes picked/hour **10**
Boxes packed/hour **6.25**

a Yields based on UK variety trials and grower yield estimates.
b Price based on terminal market price trends in 2016.
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 using updated fuel, purchase price and replacement cost estimates.
f Based on state budgets with revisions by Kentucky vegetable experts.
g Fertilizer assumption: 8.875 calcium nitrate per week per 1,000 plants.
* Farm has 5 or more acres total in trickle-irrigated crops
Budget based on 8712 row feet (5 ft between rows, 2 ft between plants)