**CUCUMBER, 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 | | | | |
| Cucumbers (1 1/9 bu box) | 500 | boxes | $ 9.50 | $ 4,750.00 | a,b | |
| | | | | $ - | | |
| **Total Returns** | | | | **$ 4,750.00** | | |
| | | | | | | |
| **VARIABLE COSTS** | | | | | | |
| Production | | | | | | |
| Cucumber Seed (F1) | 2 | lbs | $ 100.00 | $ 200.00 | | |
| N Fertilizer: Urea | 100 | lbs | $ 0.40 | $ 40.00 | | |
| K Fertilizer: Potash (0-0-60) | 80 | lbs | $ 0.30 | $ 24.00 | | |
| N Fertilizer: Fertigation (Calcium Nitrate) | 372 | lbs | $ 0.45 | $ 167.40 | 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 (Row Middles) | 1 | acre | $ 12.69 | $ 12.69 | | |
| Insecticides | 1 | acre | $ 20.52 | $ 20.52 | d | |
| Fungicides | 1 | acre | $ 144.21 | $ 144.21 | 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** | | | | **$ 1,457.43** | | |
| | | | | | | |
| **HARVESTING AND MARKETING** | | | | | | |
| Plastic Disposal | 18 | hours | $ 12.50 | $ 225.00 | | |
| Hired Labor | | | | | | |
| Harvest | 500 | box | $ 1.25 | $ 625.00 | f | |
| Packing | 500 | box | $ 1.90 | $ 949.85 | f | |
| Boxes | 500 | boxes | $ 1.40 | $ 700.00 | | |
| Marketing Costs (10% of Gross) | 10% | gross | | $ 475.00 | | |
| Hauling Variable Costs | 500 | boxes | $ 0.07 | $ 35.00 | e | |
| **Total Harvesting and Marketing Cost** | | | | **$ 3,009.85** | | |
| Interest on Variable Costs | | | | $ 88.87 | | |
| **TOTAL VARIABLE COST** | | | | **$ 4,556.15** | | |
| **RETURN ABOVE VARIABLE COSTS** | | | | **$ 193.85** | | |
| | | | | | | |
| **FIXED COSTS** | | | | | | |
| Machinery and Equipment | | | | $ 68.99 | e | |
| Irrigation System Capital Recovery | | | | $ 328.40 | c | |
| Taxes on Land | | | | $ 5.00 | | |
| Insurance | | | | $ 45.56 | | |
| **TOTAL FIXED COSTS** | | | | **$ 447.95** | | |
| **TOTAL EXPENSES** | | | | **$ 5,004.10** | | |
| **RETURN TO OPERATOR LABOR, LAND, CAPITAL, & MGT.** | | | | $ (254.10) | | |
| Operator Labor (machinery and irrigation) | 15 | hrs. | $ 15.00 | $ 225.00 | | |
| **RETURN TO LAND, CAPITAL, AND MANAGEMENT** | | | | **$ (479.10)** | | |

a,b **Boxes picked/hour** **10**
**Boxes packed/hour** **6.58**

a Yields based on UK variety trials and grower yield estimates.
b Price based on shipping point prices from MO and NC and terminal market price trends in Atlanta, 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. Fungicide program can vary greatly according to downy mildew pressure.
e Machinery costs generator (ISU, 2002) using updated fuel, purchase price and replacement cost estimates.
f Based on state budgets with revisions by Kentucky vegetable experts.
g Fertilizer assumption: 2.375 lbs 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, 1 ft between plants)