# **Northeast Organic Farming Association of Vermont**

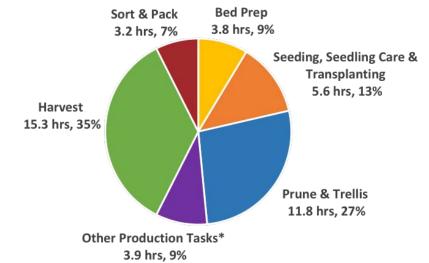
# **Cost of Production Project:**



# GREENHOUSE CUCUMBERS

Over the course of the 2019 season, 7 organic farms in Vermont tracked and analyzed their cucumber costs of production.



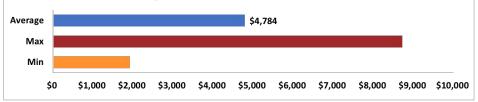


\*Other production tasks include handweeding, irrigation, rolling sides up/down, sidedressing, spraying, and foliar feeding.

This data is aggregated from 7 farms, which grew 1,268 to 12,190 square feet of greenhouse cucumbers in 2019. One farm grew in a heated tunnel, two farms used ground heat, and four farmers grew in unheated tunnels

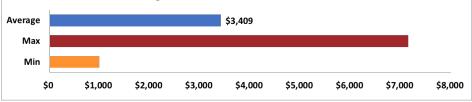
# Gross Sales/1,000 Sq Ft





Yield and sales price are two of the biggest factors impacting crop profitability. Farms with highest gross sales had good yields as well as good sales prices.

**Gross Profit/1,000 Sq Ft** 



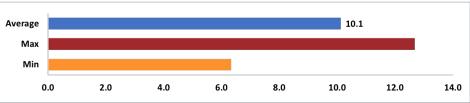
Gross Profit is defined as total sales minus production expenses, not including overhead and marketing expenses

#### Net Profit/1,000 Sq Ft



Net profit is defined as total sales minus total cash expenses, including overhead and marketing expenses.

# **Yield (lbs) per Plant**



Yield was most heavily influenced by fertility inputs and effective pest and disease management (not correlated with heat vs. no heat).

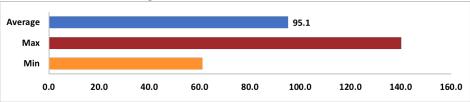
#### **Average Price per Case**



There was significant variation in prices received by farmers, with the highest price commanded by the earliest cucumbers. One case is 20 pounds.

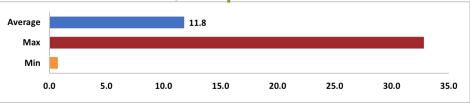
# Cases Sold/1,000 Sq Ft





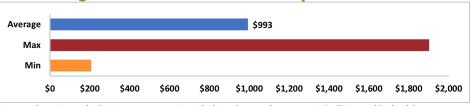
One farm with high yields did not have a market for all cucumbers produced. One case is 20 pounds.

#### Prune & Trellis Hours/1,000 Sq Ft



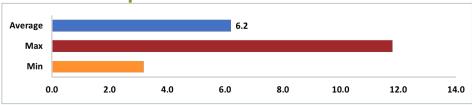
The farm with the lowest time used netting and did not prune. The farm that spent the most time also had the longest harvest window.

# All Growing & Cultivation Costs/1,000 Sq Ft



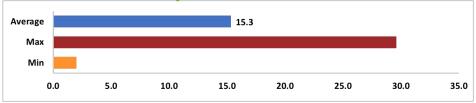
Increased growing and cultivation costs were primarily driven by more hours pruning/trellising and higher labor rates.

# **Cases Harvested per Hour**



The fastest time was achieved by harvesting into bags, then transferring cukes into bins. One case is 20 pounds.

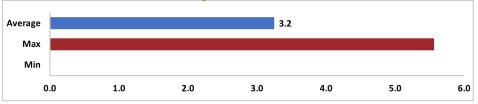
# Harvest Hours/1,000 Sq Ft



There was more total time spent harvesting on the farms with the longest harvest windows and least pest and disease pressure.

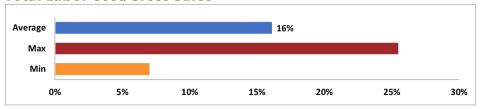


#### Sort & Pack Hours/1,000 Sq Ft

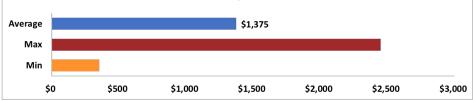


The farm with no sort/pack hours picked directly into totes for distribution, sorting out seconds as they picked.

#### **Total Labor Cost/Gross Sales**



# **Total Production Costs/1,000 Sq Ft**



Primary variables affecting total cost included: labor rate, length of harvest, heating expenses, additional fertility inputs, and the annual cost of the greenhouse.



This project was designed to help farmers strategically increase the profitability of their farm businesses.

To learn more, download our cost of production workbook, or request technical assistance in calculating your own cost of production, visit www.nofavt.org/resources/cost-production-project or contact Jen Miller, (802) 434-4122, jen@nofavt.org.

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