Pruning for Productivity

High Tunnel Cherry Tomato Trial 2016 Cornell Willsboro Research Farm Amy Ivy, Eastern NY Commercial Horticulture Program

Project Team: Amy Ivy, Judson Reid, Michael Davis with help from Lauren Fessler and Calvin Arno



Tomatoes thrive in high tunnels



Proper Spacing and Training

- Makes for healthier, more productive plants
- Greater yield
- More efficient work



It is easy for things to get out of hand



We have learned a lot about training and pruning slicing tomatoes



Cherry Tomatoes are challenging to train





Cherry tomatoes are the first to ripen for earliest sales.



Cornell Willsboro Research Farm



Video – early August – different grower We know it's possible to prune them well, but is it worth the effort to train like this? This is what we studied in this trial.



July 10





- Planted May 25
- 3 treatments, 4 reps
- Harvested 3x/week
- July 13 Sept 10
- Supersweet 100



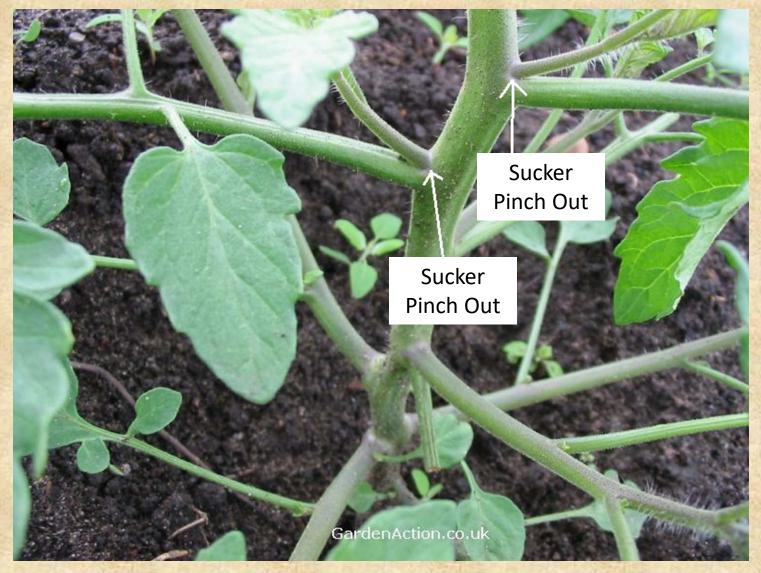


Single Leader remove every sucker



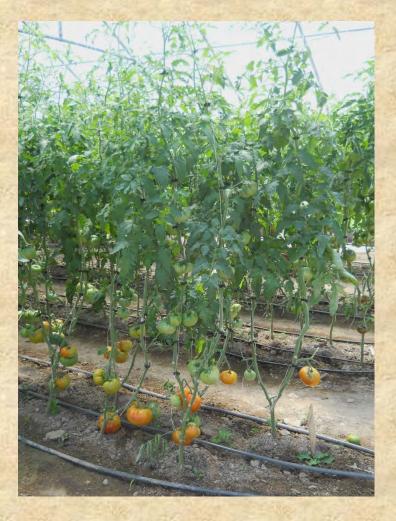


Keep ALL suckers pruned off



Double leader start with 'strong Y'





July 29

Single Leader





Double Leader

4 Leaders Plus

July 29 1 leader/2 leader, 2 leader/4 leader

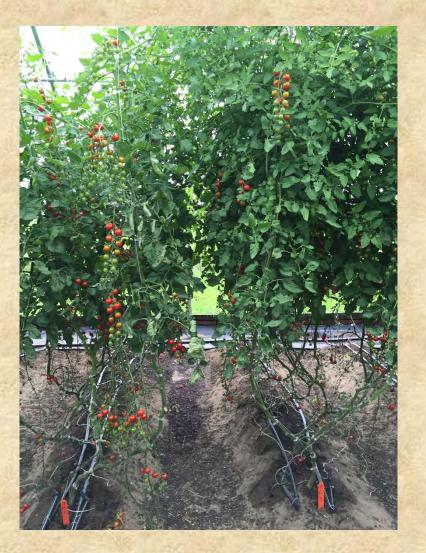


Aug 2 4 on left, single on right

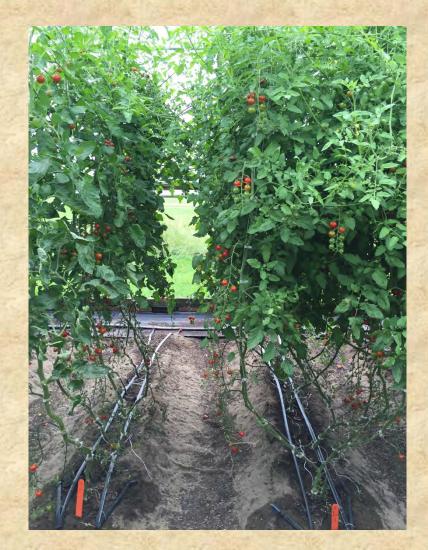


August 31

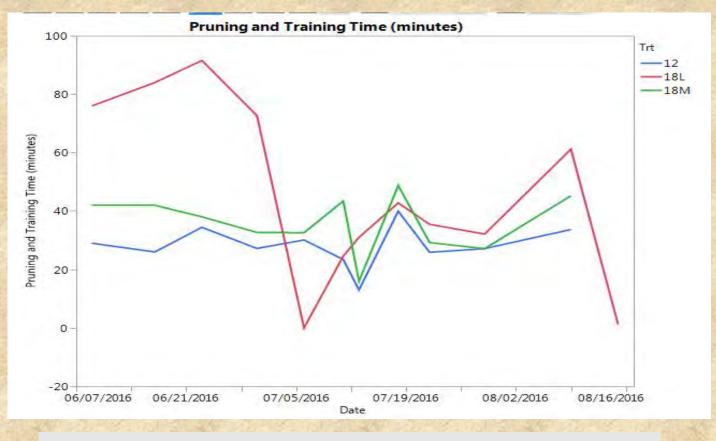
2 leader, 4 leader



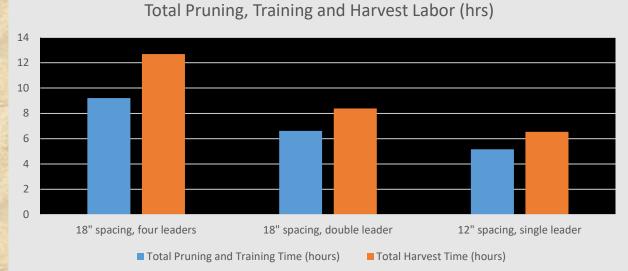
Single leader, 4 leader



Pruning & Training Time

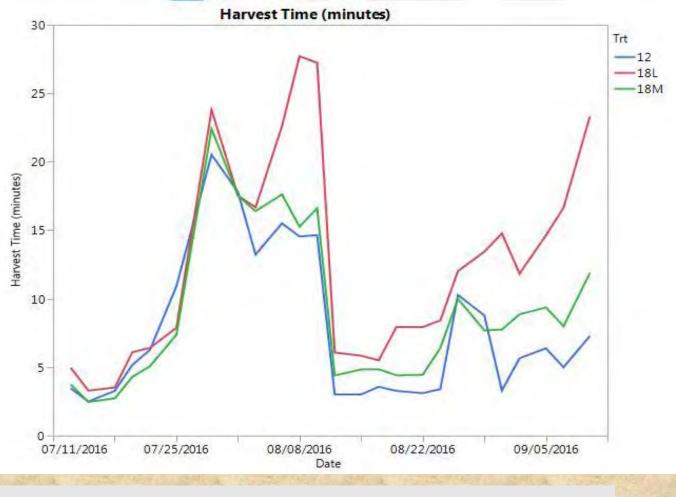


Key: blue line - single leader green line – double leader red line – 4 leaders



Harvest Time

Key: blue line - single leader green line – double leader red line – 4 leaders

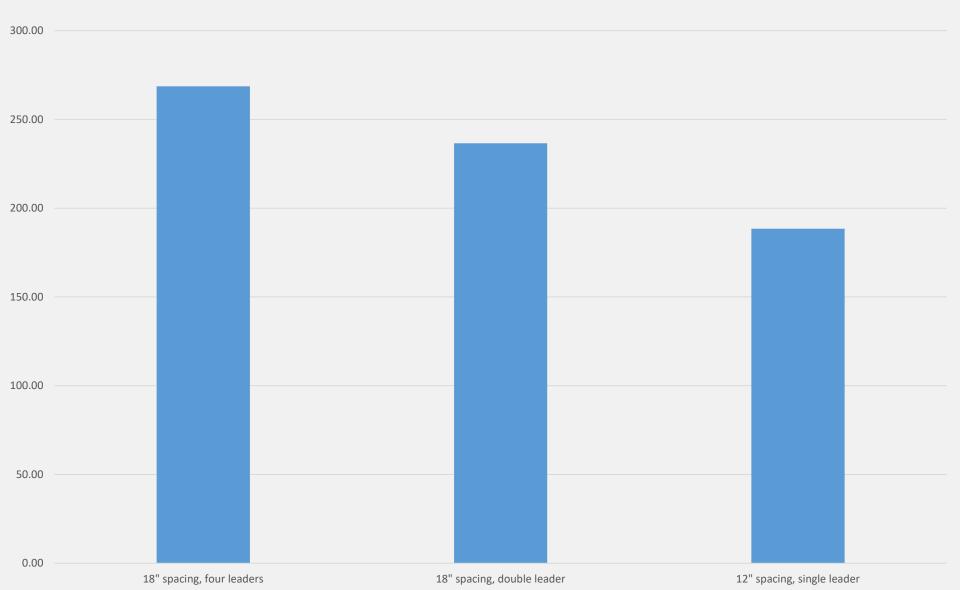


Total Pruning, Training and Harvest Labor (hrs)



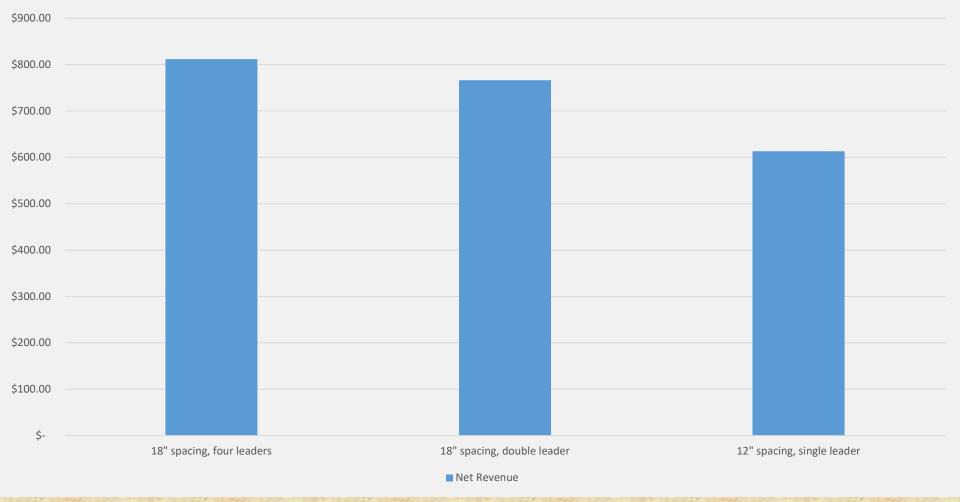
Yield (lbs)

Total Marketable Harvest (lb)

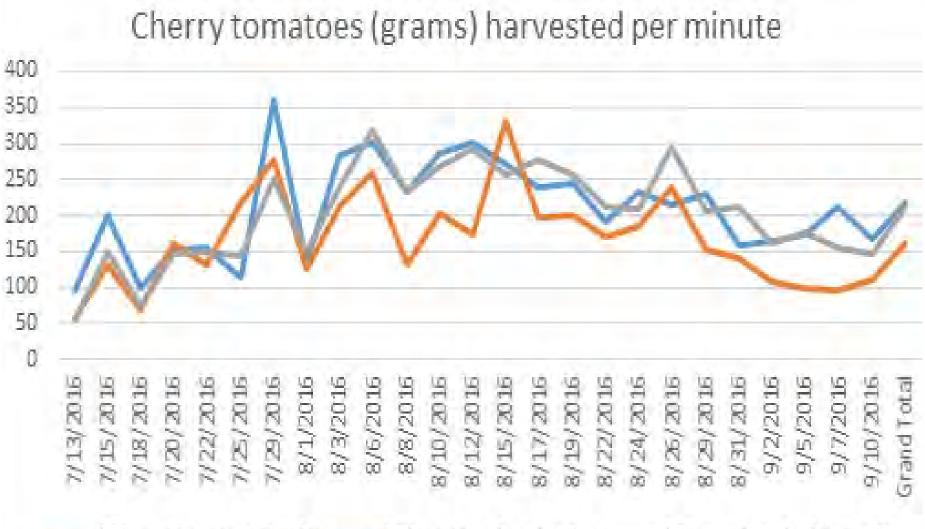


Net Revenue by Treatment

Net Revenue by treatment



Harvest Efficiency



12" spacing, single leader —— 18" spacing, four leaders —— 18" spacing, double leader

Variety Trial of Leaf Mold Resistant Cherry Tomatoes



Early symptoms of leaf mold





Esterina, Natures Bites, Sakura, Sungold*



* Sungold is the variety susceptible to leaf mold

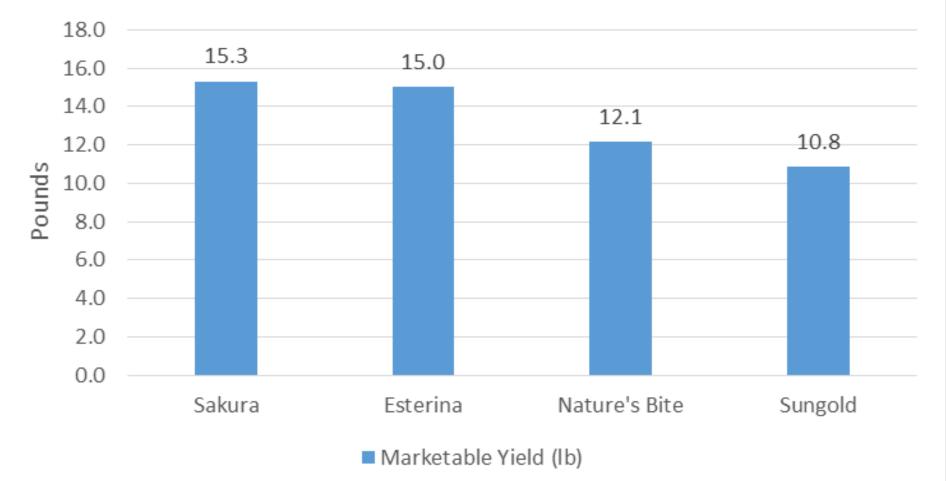




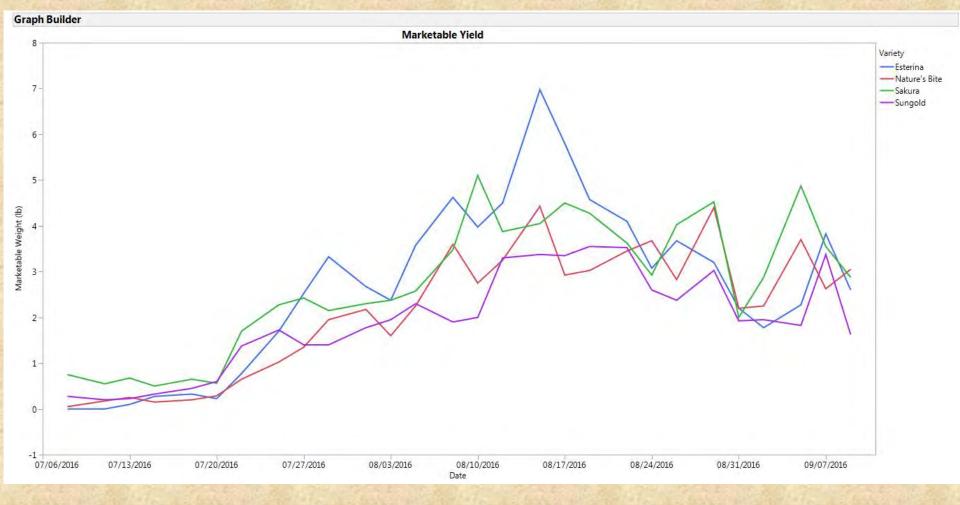
Variety trial at the Cornell Willsboro Research Farm 4 reps, 4 varieties

Marketable Yield 7/13 – 9/10

Total Yield Per Plant (lbs)



Cherry Tomato Trial yield over time



Esterina

Natures Bites Sakura

Sungold

Thank you!

- Northern NY Agricultural Development Program
- Mike Davis, manager of the Cornell Willsboro Research Farm
- Judson Reid, Cornell Vegetable Program
- Lauren Fessler, Cornell Summer Intern
- Calvin Arno, summer farm employee
- We have funding to repeat the pruning trial in 2017



Cornell University Cooperative Extension



Amy Ivy Eastern NY Commercial Horticulture Program adi2@cornell.edu