



RESEARCH PROTOCOLS

High Tunnel Tomato Pruning

Objective: What is the impact of double-leader pruning on tomato yield and labor-time in the high tunnel?

Hypothesis: Farmers expect overall yield to be lower in pruned plots, but will save enough labor during harvest to offset the cost.

Farmer-Cooperator will:

- Follow Research Protocols for study
- Take photos throughout the project
- Keep in contact with PFI with updates and questions
- Turn in all data by November 2020

Practical Farmers of Iowa will:

- Help set up research protocol.
- Monitor progress of project and provide support when needed.
- Publish results in a PFI research report, on PFI website, and potentially other outlets.
- Provide \$550 cooperator payment at conclusion of project year.

Project Design:

- Randomized, replicated trial of pruned vs. un-pruned tomatoes in the high tunnel and a record of the labor required by plot.
- The trial will have four replications of each treatment (8 plots total) in the same high tunnel.
- Tomatoes will be pruned to double-leader; all plants will be string-trellised.
- Farmers will track and record all labor in each plot, by task.

Layout example of four replications of each treatment in high tunnel.



Photo List

- early-season field-shot of trial
- photos of pruned and un-pruned plants; before and after
- mid-season field-shot of trial
- groups of fruit during harvest, in bins, etc.
- harvest-time with farmer in the photo, in pruned and un-pruned plots
- bonus for photo of farmer entering data in the field!

Data Collected

- Crop production and trial design information
- All labor for the trial, recorded by plot.
- Harvest data by plot: marketable fruit count, weight, number of surviving plants/plot.

Project Timeline

- | |
|--|
| <ul style="list-style-type: none">• Review research protocol• Complete MOU and pre-project survey |
| April? <ul style="list-style-type: none">• Layout trial in high tunnel and transplant tomatoes. |
| April - September <ul style="list-style-type: none">• Record labor by task in each plot, in accordance with datasheet.• Keep harvest records by plot, in accordance with datasheet |
| <ul style="list-style-type: none">• Enter data and photos (see photo shot list, above), to PFI's google site:
https://sites.google.com/practicalfarmers.org/research/home.• Complete post-project survey. |

Contact: Liz Kolbe, Horticulture and Habitat Programs Manager, (515) 232-5661; liz@practicalfarmers.org