



## 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

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








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