Objective: Determine if deep trench carrot yield is higher when grown in chopped leaves topped with soil, vs. soil only.

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 October 2017

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.

RESEARCH PROTOCOL

In-field practices:
Each farmer can decide their own in growing practices, but should record what was done and when. Practices separate from the treatment should be consistent in all plots. Some planting information is requested in the excel document.

Field Layout:
- Four replications is preferred, three is ok.

Example Plot Layout

<table>
<thead>
<tr>
<th></th>
<th>Rep 1</th>
<th>Rep 2</th>
<th>Rep 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Leaf Mulch</td>
<td>Leaf Mulch</td>
<td>Leaf Mulch</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>Soil</td>
<td>Soil</td>
</tr>
</tbody>
</table>

Carrots will be planted in a deep trench, double-dug style bed. Leaf mulch trenches will 18 in. deep, with a top layer of 2 in. of soil. Control (soil only) plots will roto-tilled prior to seeding. All beds will be flame weeded just prior to seeding.

Harvest and Data Collection:
- When harvesting, record marketable weight and count of the plot; count cull carrots. An Excel spreadsheet for data collections is attached.

Contact: Liz Kolbe, Horticulture Coordinator
(515) 232-5661
liz@practicalfarmers.org
## CARROTS IN LEAF MULCH TRIAL SETUP DATA

- **Seeding date:**
- **Spacing after thinning:**
- **Between row spacing (inches):**
- **Plot Area (ft²):** 20

## LEAF MULCH FOR CARROTS TRIAL HARVEST DATA

<table>
<thead>
<tr>
<th>Harvest Date</th>
<th>Rep</th>
<th>Treatment (Leaf or Soil)</th>
<th>Plot Marketable Weight (lb)</th>
<th>Plot Marketable Count</th>
<th>Cull Count</th>
<th>notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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