Quick Turnaround Cover Crops

Objectives: 1. Evaluate performance of cover crop species and mixes as quick-turnaround covers in the field and the high tunnel (% cover, weed suppression, biomass). 2. Determine if quick-turnaround cover crops affect yield of the following cash crop.

Farmer-cooperator, Rob Faux, will:
- Take photos throughout the project and send to PFI for use in research report and blog.
- Keep in contact with PFI with updates and questions.
- Summer 2015, establish cover crops in randomized, replicated plots as in diagram below.
  - In high tunnel, plant cover crops in plots in June.
  - In field, first harvest garlic in July, then till and plant cover crops in plots, irrigate to establish.
- After 6 weeks of growth, sample weed pressure and cover crop ground cover and aboveground biomass prior to terminating cover crop in both high tunnel and field.
- Plant late-season cash crops in both high tunnel and field.
- Fall 2015, record yield of fall crop in both high tunnel and field from each plot separately.
- Turn in all data by October 2015.

<table>
<thead>
<tr>
<th>Rep 1</th>
<th>Rep 2</th>
<th>Rep 3</th>
<th>Rep 4</th>
<th>Rep 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Pea</td>
<td>No cover (control)</td>
<td>Millet</td>
<td>Buckwheat</td>
<td>Clover</td>
</tr>
<tr>
<td>Clover</td>
<td>Field Pea</td>
<td>No cover (control)</td>
<td>Millet</td>
<td>Buckwheat</td>
</tr>
<tr>
<td>Buckwheat</td>
<td>Clover</td>
<td>Buckwheat</td>
<td>No cover (control)</td>
<td>Millet</td>
</tr>
<tr>
<td>Millet</td>
<td>Buckwheat</td>
<td>Clover</td>
<td>Field Pea</td>
<td>No cover (control)</td>
</tr>
<tr>
<td>No cover (control)</td>
<td>Millet</td>
<td>Field Pea</td>
<td>Clover</td>
<td>Field Pea</td>
</tr>
</tbody>
</table>

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.
- Reimburse costs of seed.
- Provide $550 cooperator payment at conclusion of project year.

Contact: Liz Kolbe, Horticulture Coordinator
(515) 232-5661
liz@practicalfarmers.org