No-till soybeans for organic farms.

Preliminary studies.

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OBJECTIVES: Develop methods for weed suppression and crop management in organic field crops with no tillage (or as little tillage as possible).

Treatments: Various cover crops and kill methods. Mustards did not establish this year. Rye was very successful.

METHODS:
Three treatments for suppressing rye:
1. Roller
2. Mower (brush-hog)
3. Untreated (plant directly into standing rye).
Roller in rye, soybeans planted immediately, June 1, 2006

Roller treatment, September 1.

<table>
<thead>
<tr>
<th>Weed</th>
<th>Soybean Weight</th>
<th>Soybean Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mow</td>
<td>2.7 oz/plot</td>
<td>42 bu/A</td>
</tr>
<tr>
<td>Roll</td>
<td>2.5</td>
<td>39</td>
</tr>
<tr>
<td>No pre</td>
<td>1.0</td>
<td>41</td>
</tr>
<tr>
<td>Control</td>
<td>13.0</td>
<td>-</td>
</tr>
</tbody>
</table>

Two theories for why this worked:
1. Dumb luck.
2. Rye suppressed spring weeds took N away from N-loving weeds produced allelopathic chemicals. Soybeans formed quick canopy fixed their own N. There was ample soil moisture.
In 2007: The Ultimate Test: Giant Ragweed!!

If you're interested in trying this, I'd like to learn from your ideas and experience.

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