Soybean Row Spacing

Dennis Baker, AGNR Extension Educator- Darke County

Objective

To demonstrate possible effects of two seeding rates combined with two fertilizer rates on wheat yield.

Background

Crop Year: 1997  Soil Test: pH 6.3; P 38; K 157
Cooperator: Dennis Baker  Fertilizer Applied: 100# 0-46-0 & 100# 0-0-60  4/30/97
County/Town: Darke/ Greenville  Herbicide: 1 qt. Roundup; 1.5 qt. Squadron;
Drainage: Subsurface  0.75 pt. Prowl
Major Soil Type: Patton  Variety: Sandusky
Previous Crop: Corn  Planting Date: May 16, 1997
Tillage: None  Harvest Date: October 7, 1997

Materials and Methods

Soybean row width treatments included 30" rows, double-back to make 15" rows, and drilled for 7" rows.

Seeding rates: 30" - 156,000 seeds/A; 15" - 160,000 seeds/A; 7" - 180,000 seeds/A. 30" and 15" plots replicated four times in field length strips; 7" replicated two times in plots twice the width of the other row-width treatments.

Results

<table>
<thead>
<tr>
<th>Row Width</th>
<th>Yield (bu/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30&quot;</td>
<td>37.45</td>
</tr>
<tr>
<td>15&quot;</td>
<td>41.14</td>
</tr>
<tr>
<td>7&quot;</td>
<td>40.62</td>
</tr>
</tbody>
</table>

Comparisons  LSD (0.05)
30" vs. 15"  6.23 bu/A  No sig. difference
30" vs. 7"  7.90 bu/A  No sig. difference
15" vs. 7"  9.20 bu/A  No sig. difference

Note: Since the treatments varied in number of replications, a separate LSD is needed to compare each pairwise comparison. Coefficient of variation equaled 11.1%.

Summary and Notes

Weed control was fair and spread evenly though the experimental plots. Growing conditions were relatively dry in July and August.

For additional information, contact:  Dennis Baker
The Ohio State University
baker.5@osu.edu