Seeding and Nitrogen Rate Effects on Wheat Yield

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 6.6; P 56ppm;  
Cooperator: Dennis Baker  
County/Town: Darke/ Greenville  
Drainage: Subsurface  
Major Soil Type: Miami  
Previous Crop: Soybean  
Tillage: None  
Planting Date: October 15, 1996  
Harvest Date: July 16, 1997

Materials and Methods

Two replications were planted using 60 lb/A and 120 lb/A seeding rates in combination with 75 lb/A and 125 lb/A nitrogen top-dress rates. Plots were harvested with like replications together.

Results

<table>
<thead>
<tr>
<th>Seeding Rate</th>
<th>Nitrogen Rate</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 lb/A</td>
<td>75 lb/A</td>
<td>47.7 bu./A</td>
</tr>
<tr>
<td>60 lb/A</td>
<td>125 lb/A</td>
<td>56.4 bu./A</td>
</tr>
<tr>
<td>120 lb/A</td>
<td>125 lb/A</td>
<td>63.8 bu./A</td>
</tr>
<tr>
<td>120 lb/A</td>
<td>75 lb/A</td>
<td>52.9 bu./A</td>
</tr>
</tbody>
</table>

Summary and Notes

Nitrogen was applied in the form of urea in early April. It appears that some of the nitrogen was lost, since the lower yields were on those plots where a "normal" rate of topdress N was applied.

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