FIELD EXPERIMENT HISTORY

Title: Planter Speed Effects on Stand Variability
Experiment: 11 Planter Speed  Trial ID 1317  Year: 1998
Personnel: J.G. Lauer and K. D. Kohn
Location: Arlington, WI  County: Columbia
Supported By: Hatch

Site Information
Field: 375  Previous Crop: Soybean  Soil Type: Plano Silt Loam
Soil Test: Date: 10/1/98  pH 7.1  OM (%) 3.0  P (ppm) 55  K (ppm) 225

Plot Management
Tillage Operations: Fall Chisel Plow  Field Cultivator
Fertilizer:
- Preplant: 46-0-0  Rate: 300  Date: 5/1/98
- Starter: N/A
- Post plant: N/A
- Manure: None

Herbicide: Lasso @ 2 qts/A; Bladex 90DF @ 2.2 lb/A  Insecticide: None
Irrigation: None
Hybrid: Pioneer 3751

Planting Date: 5/6/98  Planting Depth: 1.5"  Row Width: 30"
Target Plant Density: 31000 plants per acre
Harvest Date: 10/19/98

Harvest Plot Size: 5' x 75'

Experimental Design
Design: RCB  Replications: 3
Plot Size Seeded: 10' x 75'  Experiment Size: 10' x 75'
Harvest Plot Size: 5' x 75'
Harvest Plant Density: 33000 plants per acre
Factors/Treatments:
- Planter Speed:
  - 4 mph
  - 6 mph
  - 8 mph

Results: Table E-35.
Table E-35.  Planter Speed Effects on Stand Variability
Arlington, WI - 1998

<table>
<thead>
<tr>
<th>Planter Speed</th>
<th>Yield Moisture</th>
<th>Test weight</th>
<th>Lodging</th>
<th>Population</th>
<th>Ears Average deviation</th>
<th>Number of doubles (≥ 12&quot; spacing)</th>
<th>Percent of doubles (≥ 12&quot; spacing)</th>
<th>Number of skips (≤ 2&quot; spacing)</th>
<th>Percent of skips (≤ 2&quot; spacing)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>bu/A %</td>
<td>lbs/bu %</td>
<td>plants/A</td>
<td>ears/A</td>
<td>inches</td>
<td>per 1/1000th A</td>
<td>%</td>
<td>per 1/1000th A</td>
<td>%</td>
</tr>
<tr>
<td>4 mph</td>
<td>208</td>
<td>21.4</td>
<td>53</td>
<td>3.9</td>
<td>33852</td>
<td>33852</td>
<td>6.3</td>
<td>± 2.5</td>
<td>2.1</td>
</tr>
<tr>
<td>6 mph</td>
<td>209</td>
<td>21.6</td>
<td>54</td>
<td>1.0</td>
<td>33520</td>
<td>33520</td>
<td>6.4</td>
<td>± 2.6</td>
<td>1.6</td>
</tr>
<tr>
<td>8 mph</td>
<td>199</td>
<td>21.9</td>
<td>53</td>
<td>2.1</td>
<td>32193</td>
<td>32525</td>
<td>6.4</td>
<td>± 3.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Mean</td>
<td>205</td>
<td>21.6</td>
<td>53</td>
<td>2.4</td>
<td>33189</td>
<td>33299</td>
<td>6.4</td>
<td>± 2.7</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**Probability(%)**

| Planter Speed (S) | 24.3 | 6.8  | 48.9 | 30.3 | 13.2 | 32.1 | 62.6 | 14.0 | 4.3  | 4.3 | 77.7 | 77.7 |

**LSD(0.10)**

| Planter Speed (S) | NS | 0.3 | NS | NS | NS | NS | NS | 0.7 | 1.4 | NS | NS |

**CV(%)**

| 4 | 1 | 1 | 83 | 2 | 3 | 3 | 10 | 18 | 18 | 35 | 35 |