Wheat

DURUM WHEAT SEEDING RATE TRIAL

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Summary

Researchers Day, et al (1978) and Van Maren (1981) have reported no significant increases in yield as a result of increased seeding rates in wheat above 82 and 80 pounds per acre respectively. Farmers have traditionally tended to increase seeding rates, however, as planting dates extend into mid- and late December. Many farmers have felt also that since research was done under controlled conditions on small test areas, they could not extend these recommendations to large commercial acreages. It was the objective of this trial to determine whether increased seeding rates would result in higher yields on larger commercially treated plots when planted towards the end of December.

Increasing seeding rates from 109, to 147, to 177 and to 193 pounds per acre had no significant effect (P > 0.10) on yield. Individual plots, replicated four times in a randomized complete block design, were almost 1/4 acre in size. Harvesting was done with a commercial combine. Further studies on seeding rate and date of planting interaction will be a part of next year's work.

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**Crop Data**

Elevation: 1500 feet  
Previous Crop: Cotton  
Plot Size: 518 X 20 feet  
Seeding Rates: 175 lbs/acre (wheats) 165 lbs/acre (barleys)  
Herbicide: None  
Insecticide: Penncap M - 2 pints/Acre, flown on 3/21/84; 3 gal. mix Omni Applicators - Aphids.  
Irrigations: 7 for 29.52 acre inches.  
Rainfall: Rainfall contributed an additional 3.81 inches.  
Fertilizer: 4 applications of Trian fertilizer - 216.5 lbs N per acre

Table 1. Durum Seeding Rate Data

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Yield (lbs/plot)</th>
<th>Avel Yield (lbs)</th>
<th>Bu Wt (lbs)</th>
<th>Moisture (%)</th>
<th>Yieldl 2 (lbs/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rep 1</td>
<td>Rep 2</td>
<td>Rep 3</td>
<td>Rep 4</td>
<td></td>
</tr>
<tr>
<td>177 lbs per acre</td>
<td>1269</td>
<td>1262</td>
<td>1257</td>
<td>1271</td>
<td>1265</td>
</tr>
<tr>
<td>193 lbs per acre</td>
<td>1237</td>
<td>1312</td>
<td>1305</td>
<td>1117</td>
<td>1243</td>
</tr>
<tr>
<td>109 lbs per acre</td>
<td>1213</td>
<td>1211</td>
<td>1150</td>
<td>1213</td>
<td>1197</td>
</tr>
<tr>
<td>147 lbs per acre</td>
<td>1216</td>
<td>1260</td>
<td>1136</td>
<td>1111</td>
<td>1181</td>
</tr>
</tbody>
</table>

1/ All yields reported at a 10% moisture content.  
2/ Yields were not significantly different (P>.10)