2000-2001 Spring-planted Onion Cultivar Trials at New Mexico State University

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Materials and Methods

Fourteen entries were placed in the early maturing group (Table 11); five entries were placed in the intermediate-maturing group (Table 13); and five entries were placed in the late-maturing group (Table 15). Seeded Jan. 26, 2001. Thinned on Feb. 21, 2001 to 6 (10 cm) between plants. Plots were 6 (2.5 m) long and 40 (1 m wide) across center. RCBD within maturity group. 4 replications per entry. Standard cultural practices used. All entries have yellow skin, except ‘NuMex Snowball’, which has white skin.

Table 11. Spring seeded, early-maturing, 2000-2001 onion cultivar trial results at Fabian Garcia Research Center in Las Cruces, NM.

<table>
<thead>
<tr>
<th>Seed source</th>
<th>Harvest date</th>
<th>Harvest maturity</th>
<th>Fusarium rot</th>
<th>Pink root</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hidalgo</td>
<td>July 28</td>
<td>89</td>
<td>45</td>
<td>53</td>
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For all entries, please see Table 11 for a complete list of seed sources, harvest dates, and maturity and disease scores.

Results

Early maturing entries (Table 11)

- Pink root severity was generally low among entries (70.4%) with ‘NuMex Snowball’, ‘Hidalgo’, and ‘HSO 102’ having severe pink root symptoms (greater than 20% incidence).
- Fusarium basal rot (FBR) severity was low across all entries except ‘Candies’ (10.8%) (Table 11).
- The percentage of marketable bulbs was very high (99%) with several entries producing 100% marketable bulbs.
- Pink root was variable across entries, with ‘NuMex Snowball’ having the lowest percentage (10.4%) and ‘Riviera’ having the highest (53.1%).
- Fusarium basal rot was variable across entries, with ‘NuMex Snowball’ having the lowest (0.4%) and ‘Candies’ having the highest (4.6%).

Intermediate-maturing entries (Table 13)

- The average maturity of the intermediate-maturing, spring-seeded entries was July 12, 2001 (Table 13).
- Pink root severity was low across entries (10.4%) with ‘NuMex Snowball’ having the highest percentage (53.1%)
- Fusarium basal rot (FBR) severity was low across all entries except ‘Candies’ (10.8%) (Table 13).
- The percentage of marketable bulbs was variable among entries, with ‘NuMex Snowball’ having the highest percentage (99%) and ‘Candies’ having the lowest (78%).
- Pink root was variable across entries, with ‘NuMex Snowball’ having the highest percentage (53.1%) and ‘Candies’ having the lowest (11.3%).
- Fusarium basal rot was variable across entries, with ‘NuMex Snowball’ having the lowest percentage (0.4%) and ‘Candies’ having the highest (4.6%).

Late maturing entries (Table 15)

- The average maturity of the late maturing, spring-seeded entries was July 27, 2001 (Table 15).
- Pink root severity was low across entries (10.4%) with ‘NuMex Snowball’ having the highest percentage (53.1%)
- Fusarium basal rot (FBR) severity was low across all entries except ‘Candies’ (10.8%) (Table 15).
- The percentage of marketable bulbs was variable among entries, with ‘NuMex Snowball’ having the highest percentage (99%) and ‘Candies’ having the lowest (78%).
- Pink root was variable across entries, with ‘NuMex Snowball’ having the highest percentage (53.1%) and ‘Candies’ having the lowest (11.3%).
- Fusarium basal rot was variable across entries, with ‘NuMex Snowball’ having the lowest percentage (0.4%) and ‘Candies’ having the highest (4.6%).

Recommendations

- ‘Sierra Blanca’ for early July maturity of white onions.
- ‘Candy’, ‘NMSU 00-31’, and ‘Utopia’ for mid-July harvest of yellow onions.
- ‘NMSU 00-28-1’ and ‘NuMex Casper’ for mid-July harvest of white onions.
- ‘NMSU 00-32’, ‘NuMex Arthur’, and ‘NuMex Centric’ for late July harvest of yellow onions.
- ‘NuMex Snowball’ for late July harvest of white onions.

Acknowledgements

We would like to thank Jim Fowler and the farm staff at the Fabian Garcia Research Center for their assistance with these trials. Finally, we would like to thank the students who worked to plant, thin, weed, harvest, and grade the trials.

Table 15. Spring seeded, late-maturing, 2000-2001 onion cultivar trial results at Fabian Garcia Research Center in Las Cruces, NM.

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