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Cultivar Trial of Four Commercially Available and Six New Junebearing Strawberry Selections in Iowa

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Cultivar Trial of Four Commercially Available and Six New Junebearing Strawberry Selections in Iowa

Abstract
Dr. Brian Smith at the University of Wisconsin, Riverfalls, has continued breeding Junebearing strawberries with an interest in their adaptability in the Midwest. The objective of the study was to evaluate six new selections of Wisconsin Junebearing strawberries and compare them with four established cultivars Annapolis, Cavendish, Honeoye, and Jewel.

Keywords
RFR A1045, Horticulture

Disciplines
Agricultural Science | Agriculture | Fruit Science | Horticulture
Cultivar Trial of Four Commercially Available and Six New Junebearing Strawberry Selections in Iowa

**RFR-A1045**

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**Introduction**

Dr. Brian Smith at the University of Wisconsin, Riverfalls, has continued breeding Junebearing strawberries with an interest in their adaptability in the Midwest. The objective of the study was to evaluate six new selections of Wisconsin Junebearing strawberries and compare them with four established cultivars Annapolis, Cavendish, Honeoye, and Jewel.

**Materials and Methods**

The 10 cultivars and selections were established at the ISU Horticulture Research Station, Ames, IA, in spring 2009. Dormant crowns were planted two feet apart and six feet between cultivars within rows. Rows were spaced 48 in. apart. Five replications of five plants were established as a matted row in a randomized complete block design. Data were collected on runner development in fall 2009 to assess establishment and yield in spring 2010.

**Results and Discussion**

All 10 cultivars and selections established full matted rows. The new selection 150-RF produced more runners than Cavendish, 70-RF, or 120-RF. Jewel and 70-RF produced the greatest yield and number of berries per plot, but did not differ from 110-RF, 150-RF, or 250-RF. The commercially available cultivars Honeoye, Cavendish, and Annapolis produced less berries and lower yield than all the selections in the first year of bearing. The trial selections 120-RF and 110-RF and the commercially available cultivars Cavendish and Annapolis had a larger berry size than the trial selection 150-RF and the commercially available cultivar Honeoye.

**Acknowledgements**

We thank the Horticulture Research Station staff for their assistance.

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**Table 1. Runner development in fall 2009 and yield from spring 2010 of four commercially available and six new trial selections of Junebearing strawberry developed at the University of Wisconsin by Brian Smith.**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Number of runners developed from mother plant</th>
<th>Number berries per plot</th>
<th>Total yield per plot (kg)</th>
<th>Average berry weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jewel</td>
<td>9 ab</td>
<td>833 a</td>
<td>7.4 a</td>
<td>11.5 bcd</td>
</tr>
<tr>
<td>Honeoye</td>
<td>8 ab</td>
<td>169 f</td>
<td>1.5 d</td>
<td>8.13 d</td>
</tr>
<tr>
<td>Cavendish</td>
<td>7 b</td>
<td>188 f</td>
<td>2.1 d</td>
<td>12.6 ab</td>
</tr>
<tr>
<td>Annapolis</td>
<td>8 ab</td>
<td>69 f</td>
<td>0.9 d</td>
<td>13.9 ab</td>
</tr>
<tr>
<td>70-RF</td>
<td>7 b</td>
<td>821 ab</td>
<td>7.4 a</td>
<td>11.8 bc</td>
</tr>
<tr>
<td>120-RF</td>
<td>7 b</td>
<td>387 e</td>
<td>4.5 e</td>
<td>15.6 a</td>
</tr>
<tr>
<td>110-RF</td>
<td>8 ab</td>
<td>521 de</td>
<td>5.9 abc</td>
<td>12.6 ab</td>
</tr>
<tr>
<td>150-RF</td>
<td>10 a</td>
<td>777 abc</td>
<td>6.6 ab</td>
<td>8.9 ed</td>
</tr>
<tr>
<td>250-RF01</td>
<td>8 ab</td>
<td>619 cd</td>
<td>5.5 bc</td>
<td>10.7 bcd</td>
</tr>
<tr>
<td>250-RF02</td>
<td>8 ab</td>
<td>672 bcd</td>
<td>6.9 ab</td>
<td>11.8 bc</td>
</tr>
<tr>
<td>LSD P ≤ 0.05*</td>
<td>159</td>
<td>1.6</td>
<td>3.4</td>
<td></td>
</tr>
</tbody>
</table>

*Means are average of five treatment replications.

*Plot size was 10 ft of matted row strawberry plants.

*Least significant difference at P ≤ 0.05.