Tomatoes

Nine varieties of tomatoes were grown at the Horticulture Research Center (HRC) outside of Fort Collins, Colorado during the 2004 growing season. Transplants were started in the greenhouse on April 1st. Seeds were planted into 72-cell trays filled with Sunshine No. 3 brand soil mix and topped with vermiculite to aid in keeping the seeds moist. Seedlings were fertilized once a week with fish emulsion fertilizer fed through an injector. Between 25 to 35 plants of each variety were transplanted at the HRC on May 21st into black plastic mulch on beds with 30” centers, in a single row at 50 cm spacing with one line of drip tape. Plastic hoops were used to support row cover from transplanting time until mid-July when we removed the covers and began trellising the tomatoes using the Florida weave. See our Techniques page for more about row covers, plasticulture, and the Florida weave.

Unfortunately, we had a severe golf-ball sized hail storm on August 10th. Many tomatoes were knocked off of the vine or otherwise damaged. The cool spring weather that continued into the summer (see our Study Area page for more weather information) caused the tomatoes to develop and ripen later, and few of the heirlooms produced any ripe fruit except for Cherokee Purple. The tomato plants also appeared to have psyllid yellows around August 31st. Below are photos, average fruit weight, and production notes for each of the varieties.

Yields were so compromised by the season (cool weather and hail damage) that we are not reporting yield data.

<table>
<thead>
<tr>
<th>Photo</th>
<th>Variety/Type</th>
<th>Avg. Fruit Weight (oz.)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="First Lady" /></td>
<td><strong>First Lady</strong> Indeterminate</td>
<td>2.8 oz./fruit</td>
<td>81% germination rate, early production, medium size, holds calyx OK, tomatoey flavor, somewhat acid, mellow flavor, subtle, quintessential</td>
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<tr>
<td><img src="image2.jpg" alt="New Girl" /></td>
<td><strong>New Girl</strong> Indeterminate</td>
<td>2.2 oz./fruit</td>
<td>100% germination rate, less acidic than First Lady, loose calyx, medium to small fruit, sweet flavor, thick skin, musky aftertaste, tart</td>
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<tr>
<td><img src="image3.jpg" alt="Early Cascade" /></td>
<td><strong>Early Cascade</strong> Indeterminate</td>
<td>1.7 oz./fruit</td>
<td>100% germination, easy calyx removal, tough skin, vigorous plant habit, fair uniformity, tall plant size, excellent yield potential, round, small fruit size, cluster potential, moderate to low psyllid damage, excellent for sauces and canning but not much taste for a slicer, low marketability, nice tomatoey flavor, tangy, not as tart as New Girl, refreshing</td>
</tr>
</tbody>
</table>
| **Big Beef**  
Indeterminate | 5.4 oz./fruit | 94% germination, stiff calyx, tomato flavor acid, vigorous growth habit, nice large fruit, moderate resistance to psyllids |
| **Orange Blossom**  
Determinate | 3.0 oz./fruit | 72% germination, strongly determinate growth habit, short plant size, large, round, uniform fruits, medium to large fruit size, short plant size, excellent yield potential, low to medium vigor, high yield, low to medium pest resistance, low disease resistance (seems to have wilt), high marketability - excellent color, fair taste, very tart, citrusy |
| **Striped German**  
Heirloom | negligable harvest | 69% germination, late maturing, large fruit, large vine, high marketability if you can get them to produce, some severe psyllid damage |
| **Brandywine**  
Heirloom | 7.0 oz./fruit | 61% germination, light yield, large vegetative plant, many aborted flowers (psyllids?), succulent, meaty, great flavor, savory |
| **Cherokee Purple**  
Heirloom | 7.4 oz./fruit | 100% germination, very large fruit and vine, cracking fruit, not well suited to Florida weave trellising system, too vegetative, some severe psyllid damage, taste - subtle and unobtrusive, thin skin, meaty |
| **Sugary Cherry**  
Sweet, nice aftertaste, strongly determinate, good producer, AAS Winter | |