



## University of New Hampshire High Tunnel Tomato Variety Trial, 2011 & 2012

**Methods:** Tomatoes were grown in-ground in a 30' x 60' high tunnel in Durham, NH in a randomized complete block design, with four plants per plot replicated four times. Plants were spaced 16" apart in rows on 4.5' centers and were pruned and trellised to a single leader. Fertility supplied before planting with soybean meal (6-1-1) and sulphomag (0-0-22) based on soil test results. Bt (Dipel) was used to control hornworm and yellow striped army worm.

| Variety <sup>a</sup> : | Marketable Yield (lbs) <sup>b, c</sup> |      | % Unmarketable <sup>d</sup> |      | Days to Maturity <sup>e</sup> |      | Fruit Size (oz) <sup>f</sup> |
|------------------------|--|------|-----------------------------|------|-------------------------------|------|------------------------------|
|                        | 2011                                   | 2012 | 2011                        | 2012 | 2011                          | 2012 | 2011 & 2012                  |
| Arbason                | 21                                     | 14   | 23                          | 14   | 69                            | 75   | 8                            |
| Big Beef               | 23                                     | 12   | 11                          | 23   | 61                            | 71   | 10                           |
| Brandywine             | 11                                     | 9    | 45                          | 41   | 64                            | 70   | 12                           |
| Cobra                  | 17                                     | 12   | 13                          | 14   | 68                            | 75   | 8                            |
| Conestoga              | 18                                     | 8    | 22                          | 40   | 61                            | 64   | 7                            |
| Geronimo               | 25                                     | 12   | 14                          | 32   | 67                            | 73   | 10                           |
| Goliath                | n.a.                                   | 10   | n.a.                        | 33   | n.a.                          | 69   | 9                            |
| Imperial 643           | 20                                     | 12   | 18                          | 31   | 70                            | 71   | 10                           |
| Jet Star               | 19                                     | 9    | 9                           | 29   | 66                            | 71   | 8                            |
| Lola                   | 14                                     | 11   | 28                          | 20   | 71                            | 75   | 8                            |
| Martha Washington      | n.a.                                   | 8    | n.a.                        | 36   | n.a.                          | 71   | 7                            |
| Massada                | 18                                     | 10   | 15                          | 30   | 65                            | 67   | 6                            |
| Rebelski               | n.a.                                   | 14   | n.a.                        | 26   | n.a.                          | 71   | 11                           |
| Trust                  | 12                                     | 7    | 25                          | 35   | 68                            | 69   | 8                            |

<sup>a</sup> Seeds were obtained from Johnny's Selected Seeds, Harris Seed, Seedway, Rupp, and High Mowing

<sup>b</sup> Marketable yield = average pounds per plant of marketable fruit produced for the entire growing season

<sup>c</sup> n.a. indicates that data is not available because the variety was not grown in 2011.

<sup>d</sup> Unmarketable yield / Total yield

<sup>e</sup> The average days after transplant until marketable fruit production

<sup>f</sup> The average fruit size of marketable fruit

### Conclusions:

- The "best" performing cultivars are highlighted in red within each column.
- Arbason, Big Beef and Geronimo produced the highest marketable yields in both years. Rebelski produced high yields in the only year in which it was grown.
- Cobra consistently had one of the lowest percentages of unmarketable fruit; other varieties that had relatively few defects in at least one year included Arbason, Big Beef, Jet Star, and Lola. In contrast, Brandywine had the highest percentage unmarketable fruit in both years.
- Days to maturity was not consistent between years, and varieties were slower to mature in 2012 than in 2011.

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