Fresh Market Tomato Trial 2004
Pinney-Purdue Ag. Center, Wanatah, IN

Tracy Sandy Loam soil
Preplant fertilizer 60 lb./A N from 19-19-19
Additional 40 lb. N through drip irrigation.
8 plants per plot, 3 replications, randomized block. Also 6 unreplicated plots.
Beds on 5’ centers, covered with black plastic mulch.
Supported with stake and weave system; not pruned.
Weed control with metribuzin between rows and hand-weeding.
Bravo, Kocide, Cabrio to control diseases.
Dipel to control caterpillars.
Harvested 8/21, 8/31, 9/9, 9/23-24. All fruit from first two harvests graded and a subsample of fruits from 9/9 harvest graded into US No.1, No. 2 and culls. US No.1 further sorted into USDA size classes based on diameter. For final harvest fruit was not graded.
Tomato Information Presented

Yield of No. 1 fruit, lb. per plant (LSD.05 = 2)
Average wt. per fruit of No. 1, lb. (LSD.05 = .05)
Percent of No. 1 fruit that were maximum large
Percent of all fruit harvested by Aug. 31
Photos of plants and selected fruit
Florida 7514

Lb/plt: 15.4
lb/ft: 0.47
% MaxLg: 25
% by 8/31: 26
Amelia

Lb/plt  14.5  lb/ft  .62  %MaxLg  56  %by8/31  31
**Biltmore**

- Lb/plt: 12.6
- lb/frt: .79
- % Max Lg: 79
- % by 8/31: 12
<table>
<thead>
<tr>
<th>Variety</th>
<th>Lb/plt</th>
<th>lb/frt</th>
<th>% Max Lg</th>
<th>% by 8/31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mt. Fresh</td>
<td>12.5</td>
<td>.59</td>
<td>44</td>
<td>16</td>
</tr>
<tr>
<td>Variety</td>
<td>Lb/plt</td>
<td>lb/frt</td>
<td>% Max Lg</td>
<td>% By 8/31</td>
</tr>
<tr>
<td>-------------</td>
<td>--------</td>
<td>--------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Red Sun</td>
<td>12.1</td>
<td>0.74</td>
<td>72</td>
<td>25</td>
</tr>
</tbody>
</table>

PPAC 2004
Debut

Lb/plt: 10.8
lb/frt: .49
% MaxLg: 36
% by 8/31: 72
<table>
<thead>
<tr>
<th>Soraya</th>
<th>Lb/plt</th>
<th>lb/ft</th>
<th>% MaxLg</th>
<th>% by 8/31</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2</td>
<td>0.59</td>
<td>46</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>
Sebring

Lb/plt: 9.0
lb/frt: 0.62
% Max Lg: 50
% by 8/31: 10

PPAC 2004
Bell Pepper Trial 2004
Pinney-Purdue Ag. Center, Wanatah, IN

Tracy Sandy Loam soil
Preplant fertilizer 60 lb./A N from 19-19-19
Additional 30 lb. N through drip irrigation.
Seeded April 15, transplanted June 7, 2004. ‘Alliance’ seeded Apr. 25
12 plants per 9-ft. plot, 3 replications, randomized block.
Double rows on top of beds on 5’ centers, covered with black plastic mulch.
Weed control with Sandea between rows and hand-weeding.
Mustang on 8/31 to control European corn borer.
Harvested 8/9, 8/23-24, 9/9, 9/27. All fruit from first three harvests
graded into USDA Fancy, No. 1+No. 2, and culls. USDA Fancy
further sorted into size classes: jumbo, extra large, and large. For
harvest 2 and 3 number of fancy fruit with 2, 3, and 4 lobes
recorded. For final harvest fruit was not graded.
Bell Pepper Information Presented

Yield of US Fancy peppers, lb. per plant (NS)
Average wt. per fruit of Fancy, No. 1 and No. 2, lb. (LSD.05=.05)
Percent of Fancy fruit that were jumbo
Percent of all fruit harvested by Aug. 9 (LSD.05=6)
Photos from Aug. 9 and Aug. 23-34 harvests
Alliance
seeded 10 days after other cultivars

<table>
<thead>
<tr>
<th>Lb/plt</th>
<th>lb/frt</th>
<th>% Jumbo</th>
<th>% by 8/9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>.60</td>
<td>56</td>
<td>22</td>
</tr>
</tbody>
</table>

PPAC 2004
E. Meynard, Purdue University, January 2005
Aristotle X3R

Lb/plt: 1.5
lb/frt: 0.55
% Jumbo: 30
% by 8/9: 10

PPAC 2004
E. Minardi, Purdue University, January 2005
<table>
<thead>
<tr>
<th>Variety</th>
<th>Lb/plt</th>
<th>lb/frt</th>
<th>% Jumbo</th>
<th>% by 8/9</th>
</tr>
</thead>
<tbody>
<tr>
<td>King Arthur</td>
<td>1.8</td>
<td>.56</td>
<td>26</td>
<td>14</td>
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<tr>
<td>Variety</td>
<td>Lb/plt</td>
<td>lb/frt</td>
<td>% Jumbo</td>
<td>% by 8/9</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
<td>--------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>Crusader</td>
<td>1.2</td>
<td>.54</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>
Jalapeno Pepper Trial 2004
Pinney-Purdue Ag. Center, Wanatah, IN

Tracy Sandy Loam soil
Preplant fertilizer 60 lb./A N from 19-19-19
Additional 30 lb. N through drip irrigation.
12 plants per 9-ft. plot, 3 replications, randomized block.
Double rows on top of beds on 5’ centers, covered with black plastic mulch.
Weed control with Sandea between rows and hand-weeding.
Mustang on 8/31 to control European corn borer.
Harvested 8/11, 9/13-15. Fruit from first harvest sampled to determine average fruit wt., length, diameter and wall thickness.
Jalapeno Pepper Information Presented

Yield, lb. per plant (LSD.05=0.7)
Average wt. per fruit, oz. (LSD.05=0.2)
Wall thickness, mm (LSD.05=0.7)
Photo from September harvest
<table>
<thead>
<tr>
<th>SXP 4517</th>
<th>Lb/plt</th>
<th>oz/frt</th>
<th>Wall (mm)</th>
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<tbody>
<tr>
<td></td>
<td>5.0</td>
<td>1.6</td>
<td>5.3</td>
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</tbody>
</table>
Conchos

Lb/plt: 4.6
oz/lb: 2.1
Wall (mm): 5.9
Homoyzygous se and Synergistic Sweet Corn 2004 Trial at PPAC, Wanatah, Indiana

Tracy Sandy Loam soil
Preplant fertilizer with 60 lb./A N from 19-19-19
Sidetread 40 lb./A N from UAN
Weed control with atrazine and Dual II Magnum, cultivation, hand-weeding
Irrigation as needed; Insecticide as needed.
Single-row plots 25 ft. long, 3 replications, randomized block
Emergence determined June 2, 2004, thinned to 20,328/acre.
Each plot harvested when marketable.
Marketable ear number and weight, length and width of 3 husked ears, ratings for husk cover, tip fill, and overall ear quality, plant height, ear height, tillering, vigor
Tip Fill Evaluation: 9=best, 5=ok
Husk Cover Evaluation:
9 = best, 5 = ok
Sweet Corn Information Presented

Days from planting to harvest in this trial
Endosperm genetics
Yield, dozens per acre
Ear length, inches
Ear diameter, inches
Husk cover, 1 to 9 scale
Tip fill, 1 to 9 scale
Emergence, %
Luscious

78 sel-se

Tablesweet™

<table>
<thead>
<tr>
<th>Doz./A</th>
<th>Lgth</th>
<th>Dia</th>
<th>HC</th>
<th>TF</th>
<th>Em%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1597</td>
<td>7.7</td>
<td>2.0</td>
<td>8.8</td>
<td>6.1</td>
<td>97</td>
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</table>
**Nantasket**

<table>
<thead>
<tr>
<th>Doz./A</th>
<th>Lgth</th>
<th>Dia</th>
<th>HC</th>
<th>TF</th>
<th>Em%</th>
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</thead>
<tbody>
<tr>
<td>1500</td>
<td>7.3</td>
<td>1.9</td>
<td>8.7</td>
<td>7.4</td>
<td>80</td>
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<tr>
<td>1533</td>
<td>7.7</td>
<td>1.9</td>
<td>8.1</td>
<td>7.7</td>
<td>95</td>
</tr>
<tr>
<td>1468</td>
<td>7.8</td>
<td>1.9</td>
<td>9.0</td>
<td>7.8</td>
<td>92</td>
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</tbody>
</table>

82 synergistic
<table>
<thead>
<tr>
<th>Montauk</th>
<th>Doz./A</th>
<th>Lgth</th>
<th>Dia</th>
<th>HC</th>
<th>TF</th>
<th>Em%</th>
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</thead>
<tbody>
<tr>
<td>85-86 synergistic</td>
<td>1629</td>
<td>8.2</td>
<td>2.0</td>
<td>8.2</td>
<td>7.6</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>1662</td>
<td>8.3</td>
<td>2.0</td>
<td>9.0</td>
<td>8.4</td>
<td>93</td>
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</tbody>
</table>
Providence

86 synergistic
Triplesweet™

Doz./A  Lgth  Dia  HC  TF  Em%
1597  8.6  1.8  9.0  8.0  91

PPAC 2004
BC 0805

88 synergistic Triplesweet™

Doz./A  Lgth  Dia  HC  TF  Em%
1662   8.5   1.9  9.0  8.2  93
Pollination Groups
Avoid cross-pollination between groups II and III

II. SU and SE
- sugary
- sugar-enhanced
- synergistic
  - Tablesweet™
  - TripleSweet™
  - Sweet Generation™

III. SH2
- supersweet
- augmented supersweet
  - Xtra-Tender Brand
  - Gourmet Sweet Brand
  - Multisweet™
  - Mirai™
Augmented Supersweet Corn
2004 Trial at PPAC, Wanatah, Indiana

Tracy Sandy Loam soil
Preplant fertilizer with 60 lb./A N from 19-19-19
Sidedress 40 lb./A N from UAN
Weed control with atrazine and Dual II Magnum, cultivation, hand-weeding
Irrigation as needed; Insecticide as needed.
Single-row plots 25 ft. long, 3 replications, randomized block
Emergence determined, June 15-16, 2004, thinned to 20,328/acre.
Each plot harvested when marketable.
Marketable ear number and weight, length and width of 3 husked ears, ratings for husk cover, tip fill, and overall ear quality, plant height, ear height, tillering, vigor
Gourmet Sweet

274A 75 augmented sh2

Doz./A  1646
Lgth   7.9
Dia    1.8
HC     9.0
TF     8.6
Em%    87

PPAC 2004
<table>
<thead>
<tr>
<th>Fantastic</th>
<th>Doz./A</th>
<th>Lgth</th>
<th>Dia</th>
<th>HC</th>
<th>TF</th>
<th>Em%</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-79</td>
<td>1436</td>
<td>7.3</td>
<td>1.8</td>
<td>8.9</td>
<td>8.9</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>1581</td>
<td>7.4</td>
<td>1.9</td>
<td>8.3</td>
<td>9.0</td>
<td>93</td>
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</tbody>
</table>
SS 950BC

82 augmented sh2
Multisweet™

Doz./A | Lgth | Dia | HC | TF | Em%  
--- | --- | --- | --- | --- | ---
1662 | 6.9 | 1.7 | 8.3 | 8.4 | 90
Obsession
85 augmented sh2

<table>
<thead>
<tr>
<th>Doz./A</th>
<th>Lgth</th>
<th>Dia</th>
<th>HC</th>
<th>TF</th>
<th>Em%</th>
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</thead>
<tbody>
<tr>
<td>1646</td>
<td>7.8</td>
<td>1.9</td>
<td>7.1</td>
<td>7.2</td>
<td>90</td>
</tr>
</tbody>
</table>
Three Trial Locations

Columbia City
J. Hilger’s field.
Plant: May 28
Harv.: Sept. 7

Lafayette
Meigs Farm,
Throckmorton PAC.
Plant: June 3
Replant flooded area
June 21
Harv.: Sept. 10, 30

New Haven
R. Kurtz Farm.
Plant: June 8
Harv.: Sept. 11
Pumpkins over 24 lb.: Yield

Orange pumpkins, LSD.05 = 3.4

Orange + turning pumpkins

Yield averaged over 3 locations.

03 RPX764
Autumn King
RPX 1003
Harvest Time

Gold Medal

Trojan

Mkt. Yield (tons/acre)

E. Maynard, Purdue University. January, 2005.
Pumpkins over 24 lb.: Ave. Wt.

Cultivar Lb.

Harvest Time 28
Trojan 27
Gold Medal 26
Autumn King 26
RPX 1003 26
03 RPX764 25

Ave. Wt. per Pumpkin (lbs.)

E. Maynard, Purdue University, January, 2005.
Pumpkins 15 - 23 lb.
More pumpkins 15 - 23 lb.
Pumpkins
15 - 23 lb.: Yield

Orange pumpkins, LSD.05 = 3.4
Orange + turning pumpkins
Yield averaged over 3 locations.

E. Maynard, Purdue University, January, 2005.
Pumpkins 15 - 23 lb.: Ave. Wt.

Cultivar Lb.

Aladdin 22
Hybrid 510 21
Gold Gem 21
Magic Lantern 16
RPX 1006 16
03 RPX763 16
RPX 03516 16
New Rocket 15

Ave. Wt. per Pumpkin (lbs.)
Pumpkins
12 - 15 lb.: Yield

- Orange pumpkins, LSD.05 = 3.4
- Orange + turning pumpkins

Yield averaged over 3 locations.

Gold Standard
RPX 03515
Gold Bullion
Howdy Doody
03 RPX763
Magician

Mkt. Yield (tons/acre)

E. Maynard, Purdue University, January, 2005.
Pumpkins 12 - 15 lb.: Ave. Wt.

Cultivar Lb.

Gold Bullion 14
RPX 03515 14
Howdy Doody 14
Magician 13
Gold Standard 12

Ave. Wt. per Pumpkin (lbs.)

E. Maynard, Purdue University. January, 2005.
Acknowledgments