New Varieties for the Desert Citrus Industry

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Lemons

- Early season sizing
- Precocity
- High yields
Cavers Lisbon

- Early size
- Good yield
- Fruits throughout tree
- Vigorous
Limonero Fino 49

- Winter lemon of Spain
- Early size
- Good yield
- Thorny
- Fruits throughout tree
- Vigorous
2001-02 Block 17 Lemon Yields

Letters indicate significant differences, within harvest dates or for total yield (bold letters), between cultivars tested.
Letters indicate significant differences, within harvest dates or for total yield (bold letters), between selections tested. There was no significant effect of selection upon second harvest yield.
2001-02 Block 17 Lemon Packout - 10/3/01 Harvest

Cultivar

Cook Eureka

Allen Eureka

Villafranca

Limoneira 8A Lisbon

Limonero Fino 49

Frost Nucellar Lisbon

Cavers Lisbon

Prior Lisbon

Rosenberger Lisbon

Packout (%)

Letters indicate significant differences, within fruit sizes, between cultivars tested.
2001-02 Block 17 Lemon Packout - 12/14/01 Harvest

Cultivar

Cook Eureka
Allen Eureka
Villafranca
Limoneira 8A Lisbon
Limonero Fino 49
Frost Nucellar Lisbon
Cavers Lisbon
Prior Lisbon
Rosenberger Lisbon

Packout (%)

Letters indicate significant differences, within fruit sizes, between cultivars tested.
Letters indicate significant differences, within fruit sizes, between cultivars tested.
2002-03 Block 17 Lemon Packout - 2/14/03 Harvest

Letters indicate significant differences, within fruit sizes, between cultivars tested.
2001-02 Block 22 Lemon Yields

Approximate yield in field boxes per acre (based on 24 x 24 ft. spacing)

Yield (lbs. per tree)

Cultivar

Letters indicate significant differences, within harvest dates or for total yield (bold letters), between cultivars tested.
Letters indicate significant differences, within harvest dates or for total yield (bold letters), between cultivars tested.
2001-02 Block 22 Lemon Packout - 10/3/01 Harvest

Letters indicate significant differences, within fruit sizes, between cultivars tested.
2001-02 Block 22 Lemon Packout - 12/13/01 Harvest

Cultivar

Limoneira 8A Lisbon

Cavers Lisbon

Limonero Fino 49

Femminello

Santa Teresa

Packout (%)

Letters indicate significant differences, within fruit sizes, between cultivars tested.
2002-03 Block 22 Lemon Packout - 10/14/02 Harvest

Letters indicate significant differences, within fruit sizes, between cultivars tested.
Letters indicate significant differences, within fruit sizes, between cultivars tested.
New Lemon Acquisitions

- Limonero Fino 49
- Cavers Lisbon
- Walker Lisbon
- Taylor Eureka
- Lapithotiki
- Genoa Old Line
- Monroe Lisbon
- Dr. Strong
2002-03 Block 14 Lemon Yields

Field Boxes per Acre (Based on 30 x 30 ft. spacing)

Cultivar

Yield (lbs. per tree)

- Walker Lisbon
- Limoneira 8A Lisbon
- Dr. Strong Lisbon
- Monroe Lisbon
- Genoa (Old Line)
- Taylor Eureka
- Lapithouki

Legend:

- a
- b
- c
- d
Mandarins

- Precocity
- High yields
- No granulation
- Easy peeling
- Seedless
Fallglo Mandarin

- Excellent size
- Good yield
- Does not typically granulate
- Easy to peel
- Early
- Seedy!
- Seedless budwood available soon
Fallglo Mandarin
W. Murcott Afourer (Delite)

- Easy to peel
- Does not apparently granulate in the desert
- Late fruit (December - January)
- Not very seedy especially if isolated
- Smaller fruit (Medium and Large)
- Market window?
### Table 1. Cultivar Effects on Seediness and Internal Quality

<table>
<thead>
<tr>
<th>Scion</th>
<th>Seeds (#/fruit)</th>
<th>SSC (%)</th>
<th>Total Acid (%)</th>
<th>SSC/TA</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Fina</td>
<td>b</td>
<td>9.67</td>
<td>10.88</td>
<td>c</td>
</tr>
<tr>
<td>C. Caffin</td>
<td>d</td>
<td>6.18</td>
<td>c</td>
<td>d</td>
</tr>
<tr>
<td>Clausellina</td>
<td>f</td>
<td>0.00</td>
<td>7.95</td>
<td>f</td>
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<tr>
<td>C. Aissa</td>
<td>c</td>
<td>8.64</td>
<td>10.68</td>
<td>c</td>
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<tr>
<td>Fallglo</td>
<td>a</td>
<td>13.08</td>
<td>10.89</td>
<td>b</td>
</tr>
<tr>
<td>Kuno Wase</td>
<td>e</td>
<td>1.46</td>
<td>1.42</td>
<td>e</td>
</tr>
<tr>
<td>W. Murcott</td>
<td>d</td>
<td>6.07</td>
<td>12.87</td>
<td>d</td>
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<tr>
<td>C. Oroval</td>
<td>d</td>
<td>6.28</td>
<td>10.87</td>
<td>a</td>
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</table>

### Table 2. Cultivar Effects on Yield in Terms of Pounds Per Tree and fruit Number in Each Size Category

<table>
<thead>
<tr>
<th>Scion</th>
<th>Yield (lbs.)</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
<th>Jumbo</th>
<th>Mammoth</th>
<th>Colossal</th>
<th>Super Colossal</th>
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<tbody>
<tr>
<td>C. Fina</td>
<td>bc</td>
<td>a</td>
<td>a</td>
<td>c</td>
<td>c</td>
<td>c</td>
<td>h</td>
<td>b</td>
</tr>
<tr>
<td>C. Caffin</td>
<td>c</td>
<td>b</td>
<td>cd</td>
<td>c</td>
<td>d</td>
<td>b</td>
<td>b</td>
<td>b</td>
</tr>
<tr>
<td>Clausellina</td>
<td>e</td>
<td>17.10</td>
<td>c</td>
<td>d</td>
<td>c</td>
<td>c</td>
<td>b</td>
<td>b</td>
</tr>
<tr>
<td>C. Aissa</td>
<td>c</td>
<td>49.61</td>
<td>cd</td>
<td>b</td>
<td>d</td>
<td>b</td>
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<td>Fallglo</td>
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<td>24.14</td>
<td>d</td>
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<td>c</td>
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<td>d</td>
<td>e</td>
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<td>a</td>
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<td>W. Murcott</td>
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<td>84.11</td>
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<td>a</td>
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<tr>
<td>C. Oroval</td>
<td>b</td>
<td>64.10</td>
<td>cd</td>
<td>c</td>
<td>a</td>
<td>a</td>
<td>h</td>
<td>b</td>
</tr>
</tbody>
</table>
TDE’s and Gold Nugget

- Seedless, easy peeling
- Yield?
- Market window?
Mandarin Trials in progress or planned

- Fallglo Trial – Terminated October 2002
- Seedless Fallglo
  - Yuma – Jan. 2004 (bud seedlings)
- Delite
  - Phoenix – April 2002 (planted)
  - Yuma – June 2003 (planted)
  - Yuma – April 2004 (bud seedlings)
- TDE 1-4
  - Yuma - April 2004 (bud seedlings)
- Gold Nugget
  - Phoenix – April 2002 (planted)
  - Yuma – April 2004 (bud seedlings)