### Freeze Damage Report for Valencia Oranges

The table below presents results of a freeze damage survey conducted in conjunction with the monthly Row Count and Maturity Surveys on February 3-4. Results of surveys from previous January freezes (all conducted approximately two weeks after the freeze event) are shown for comparison.

<table>
<thead>
<tr>
<th>Year</th>
<th>Damage at 1/4&quot; cut</th>
<th>Damage at 1/2&quot; cut</th>
<th>Damage at center cut</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-71</td>
<td>67</td>
<td>3</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>1976-77</td>
<td>63</td>
<td>15</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1980-81</td>
<td>87</td>
<td>14</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>1981-82</td>
<td>88</td>
<td>14</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

The table above shows that the damage at center cut was the most significant, with percentages ranging from 8% to 11%. The freeze damage was most severe in the early 1970s and early 1980s, with minor damage in 1976-77. The data suggests that the freeze damage is a consistent issue across the years.

### Crop Year 1994-95

The damage at center cut for the crop year 1994-95 was significant, with a minor damage of 8% and a major damage of 11%. This indicates that the freeze damage is a persistent issue that needs to be monitored and managed.
**SEEDLESS GRAPEFRUIT HILL: 580 M. BOXES**

The seedless grapefruit forecast is continued at 580 million boxes. The white and colored divisions are maintained at 28.5 and 31.5 million boxes, respectively.

The January fruit size survey conducted to show the averages of both white and colored is almost identical with the mean size of the historic series. However, the averages are much smaller than the past two seasons. In standard box equivalents, white seedless would require 13 more fruit than last season and 7 more fruit than in the 1994-95 season. Colored seedless would require 10 more fruit and 8 more fruit, in relation to the same seasons. Fruit loss from droppingage after late January continues to be considerably less than average and near the minimal loss of last season. The resultant computations did not change the objective count surveys estimates of crop size, relative to the previous season's recorded utilization.

The initial Row Count (route survey) was conducted on February 3-4, 1997. As is usual at this time of the year, the reliability of this survey is subject to the relationship of "spot picked" (where the majority of regular bloom fruit remains) and "clean harvest" groves.

However, the all seedless percent of row harvest is only slightly less than the percent of recorded utilization to the same dates. The Row Count indicator, obviously, improves as a greater percent harvest is recorded and near one-half of the crop is indicated.

Recorded utilization is lagging behind last season in both categories. It is estimated to February 2, 1997, that only 4.4 million boxes of white and 12.7 million boxes of colored had been used.

CITRUS PRODUCTION, February 1, 1997 forecasts by varieties and states, with comparisons

<table>
<thead>
<tr>
<th>Crop and State</th>
<th>Production</th>
<th>Forecast</th>
<th>Crop and State</th>
<th>Production</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,000</td>
<td></td>
<td></td>
<td>1,000</td>
<td></td>
</tr>
</tbody>
</table>

Grapefruit:
- **FLORIDA-All**
  - 55,700
- **Seedless**
  - 54,700
- **White**
  - 25,700
- **Colored**
  - 28,700
- **Seedy (Other)**
  - 1,300
- **Texas**
  - 4,650
- **Arizona**
  - 1,400
- **California**
  - 9,300

Total Grapefruit: 71,050

Lemons:
- **California**
  - 20,000
- **Arizona**
  - 3,600

Total Lemons: 23,600

Limes: Florida:
- 230

Temple:
- 2,550

Tangelos: Florida:
- 3,150

K-Early: Florida:
- 120

Tangerines:
- **Florida-All**
  - 3,550
- **Early**
  - 2,350
- **Honey**
  - 1,200
- **California**
  - 2,850
- **Arizona**
  - 650

Total Tangerines: 7,600

**JEEDY GRAPEFRUIT 1.0 MILLION BOXES**

The seedly (Duncan) grapefruit forecast is continued at 1.0 million boxes. Harvest is slowly progressing, with only 100,000 boxes recorded as of February 3, 1997. The January size survey indicated the average was at the historic series mean, but smaller than the last two seasons. Fruit loss from droppingage also is at the historic mean and slightly above the past two seasons. This crop is only utilized in processed form and utilization depends on load records.

**ALL TANGERINES INCREASED TO 6.2 MILLION BOXES**

The all tangerine forecast is increased by 200,000 boxes to 6.2 million boxes. The early portion, comprised of Robinson, Fallglo, Dancy, and mostly Sunburst, is increased by 300,000 boxes to 4.5 million boxes. Recent weekly estimates of utilization have continued beyond expectations. As of February 2, 1997, including 100,000 boxes of gift fruit and other use, 4,450,000 boxes had been harvested.

The Honey tangerine portion is decreased 100,000 boxes to 1.7 million boxes. Loss from fruit dropping has been a record low through the January survey period and, if accepted at face value, would have indicated an increase in the forecast. However, with the below freezing weather, it is projected that dropping will accelerate on affected crops that are not harvested rapidly. Harvest has just begun in volume, with only 430,000 boxes used to February 2, 1997.

**TEMPLES HELD AT 2.5 MILLION BOXES**

The Temple forecast is continued at 2.5 million boxes. The January surveys of fruit size and drop indicate average size at the historic small mean and fruit loss also at the historic low. The Row Count survey, relative to historic relationships, supported the forecast level. About 20 percent of the forecast amount was harvested by February 2, 1997.

**TANGELOS NOW 4.0 MILLION BOXES**

The tangelo forecast is increased 200,000 boxes to 4.0 million boxes. Estimated utilization, as of February 2, 1997, including a 200,000 box pre-season allocation for unrecorded gift fruit and other use, was 3,650 million boxes. The Row Count survey indicated about 10 percent of the boxes remaining. This is the largest utilized tangelo crop since 1987-88.

**K-EARLY CITRUS FINAL**

The 1996-97 K-Early Citrus estimate is final at 150,000 boxes. Last season's final was 160,000 boxes.