



Florida Agricultural Statistics Service  
1222 Woodward Street  
Orlando, Florida 32803  
407 / 648-6013

<http://www.nass.usda.gov/fl>

# CITRUS

## DECEMBER FORECAST MATURITY TEST RESULTS AND FRUIT SIZE



December 12, 2000

### ALL ORANGES 229.0 MILLION BOXES

The December forecast of Florida all oranges (excluding Temples) for the 2000-01 season is 229.0 million boxes, 11 million boxes or five percent less than the October forecast. If realized, this crop will now be two percent below the 233.0 million boxes of last season. The decrease from October affects both the early-midseason and Valencia crops. In the past 10 seasons, the December forecast has deviated from final utilization by an average of 3.5 percent. Four seasons were above and six below the final recorded utilization.

The weather since the initial forecast can only be characterized as much drier than normal. All areas of Florida's citrus belt are dry and need rain. Caretakers are irrigating around the clock to maintain good tree condition. Water reservoirs of all kinds are at very low levels. On-tree fruit color is good but fruit sizes are small.

### EARLY-MIDSEASONS DECREASED TO 127.0 MILLION BOXES

The early-midseason orange forecast is 127.0 million boxes, eight million boxes or six percent below the October forecast and five percent less than last season's crop. Objective surveys conducted since the initial forecast in October indicate that fruit sizes will be considerably lower than originally projected. Fruit size may end up as the smallest

| FORECAST DATES 2000-01 SEASON |                |
|-------------------------------|----------------|
| January 10, 2001              | April 10, 2001 |
| February 8, 2001              | May 10, 2001   |
| March 8, 2001                 | June 12, 2001  |
| July 11, 2001                 |                |

in the last ten years. The current survey is also suggesting a near record low drop. This lower than expected drop partially offsets the smaller fruit sizes as far as fruit available for harvest. The **Navel** forecast is unchanged at 5.5 million boxes. Navel sizes, unlike other early-midseason oranges, are only slightly below average.

Early and midseason fruit have good on-tree color and harvest is moving at a good pace. Fresh fruit packinghouses are all very busy trying to meet the Christmas holiday shipping demands. Most processing plants are open and taking field run fruit and packinghouse eliminations.

Citrus production, December 1, 2000  
forecasts by varieties and states, with comparisons

| Crop and State                          | Production     |                | Forecast       |                |
|---|----------------|----------------|----------------|----------------|
|   | 1998-99        | 1999-00        | Nov 9, 2000    | Dec 12, 2000   |
| --- 1,000 boxes ---                     |                |                |                |                |
| Early, Midseason,<br>and Navel Oranges: |                |                |                |                |
| <b>FLORIDA</b>                          | <b>112,000</b> | <b>134,000</b> | <b>135,000</b> | <b>127,000</b> |
| California                              | 21,000         | 40,000         | 34,000         | 34,000         |
| Texas                                   | 1,250          | 1,540          | 1,800          | 1,800          |
| Arizona                                 | 550            | 600            | 550            | 550            |
| Total Above Varieties                   | 134,800        | 176,140        | 171,350        | 163,350        |
| Valencias:                              |                |                |                |                |
| <b>FLORIDA</b>                          | <b>74,000</b>  | <b>99,000</b>  | <b>105,000</b> | <b>102,000</b> |
| California                              | 15,000         | 27,000         | 25,000         | 25,000         |
| Texas                                   | 180            | 200            | 200            | 200            |
| Arizona                                 | 600            | 500            | 500            | 500            |
| Total Valencias                         | 89,780         | 126,700        | 130,700        | 127,700        |
| All Oranges:                            |                |                |                |                |
| <b>FLORIDA</b>                          | <b>186,000</b> | <b>233,000</b> | <b>240,000</b> | <b>229,000</b> |
| California                              | 36,000         | 67,000         | 59,000         | 59,000         |
| Texas                                   | 1,430          | 1,740          | 2,000          | 2,000          |
| Arizona                                 | 1,150          | 1,100          | 1,050          | 1,050          |
| Total All Oranges                       | 224,580        | 302,840        | 302,050        | 291,050        |

### VALENCIAS NOW 102.0 MILLION BOXES

The Valencia forecast is decreased 3.0 million to 102.0 million boxes. This forecast is three percent below October but three percent above the 1999-2000 crop. The current survey indicates smaller fruit sizes than projected in October. Drop, while low, remains unchanged from October. If realized, the crop will be the second largest on record, two million boxes less than the record 1997-98 crop of 104.0 million boxes.

### FCOJ REMAINS AT 1.55 GALLONS

The all orange FCOJ yield projection is unchanged at 1.55 gallons per box of 42.0 degrees Brix concentrate. The final all orange yield for the 1999-2000 season as reported by the Florida Citrus Processors Association was 1.547702 gallons per box. Separate projections for early-midseason and Valencia categories will be made in the January crop report. All projections of yield assume that the processing relationships this year will be similar to those of the past several years. The results of orange and grapefruit maturity testing are found on page 3 of this report.

The weather during this fall has been unseasonably dry. Temperatures during November were generally below average. Pounds of juice per box and pounds solids are both ahead of last year at this time.

## TOTAL GRAPEFRUIT REMAINS AT 50.0 MILLION BOXES

The all grapefruit forecast is maintained at 50.0 million boxes. The varietal breakdown of all white grapefruit at 20.0 million boxes and 30.0 million boxes of the colored varieties is also continued. The total forecast continues to be six percent less than the recorded use of 53.4 million boxes last season and 10.4 percent below the record 55.8 million boxes utilized in the 1996-97 season.

Even though the weather during the last two months has been exceptionally dry, below average temperatures and the extensive use of irrigation appear to have produced offsetting effects. Although sizes are smaller than anticipated, droppage is lower. Average fruit size for both white and colored grapefruit was small through the September survey and was projected to be well below the 10 season average at harvest date. Through November, the average white size is above three of the seasons and colored above two. Only slightly smaller sizes are now anticipated.

The most interesting factor to date is the lack of loss from droppage, which for both categories is the lowest of the series. The small fruit, irrigation and low temperatures may have all contributed to this. A reduction in expected loss to harvest was made in both varieties.

Estimated utilization through December 3, 2000 for white grapefruit is 0.9 million boxes, as compared with 1.3 last season and 1.5 in 1998-99. Colored is 3.7 million boxes as compared with 4.5 last season and 5.6 in 1998-99.

The forecasts are based on objective fruit count and measurement surveys, conducted by the Florida Agricultural Statistics Service. The indicators are viewed in

Citrus production, December 1, 2000  
forecasts by varieties and states, with comparisons

| Crop and State                  | Production    |               | Forecast      |               |
|---------------------------------|---------------|---------------|---------------|---------------|
|                                 | 1998-99       | 1999-00       | Nov 9, 2000   | Dec 12, 2000  |
| --- 1,000 boxes ---             |               |               |               |               |
| Grapefruit:                     |               |               |               |               |
| <b>FLORIDA-All</b>              | <b>47,050</b> | <b>53,400</b> | <b>50,000</b> | <b>50,000</b> |
| <b>White</b> <sup>1/</sup>      | <b>18,350</b> | <b>21,500</b> | <b>20,000</b> | <b>20,000</b> |
| <b>Colored</b>                  | <b>28,700</b> | <b>31,900</b> | <b>30,000</b> | <b>30,000</b> |
| Texas                           | 6,100         | 5,930         | 6,500         | 6,500         |
| Arizona                         | 750           | 500           | 600           | 600           |
| California                      | 7,300         | 7,000         | 7,200         | 7,200         |
| <b>Total Grapefruit</b>         | <b>61,200</b> | <b>66,830</b> | <b>64,300</b> | <b>64,300</b> |
| Lemons:                         |               |               |               |               |
| California                      | 16,200        | 19,600        | 21,000        | 21,000        |
| Arizona                         | 3,450         | 3,100         | 3,600         | 3,600         |
| <b>Total Lemons</b>             | <b>19,650</b> | <b>22,700</b> | <b>24,600</b> | <b>24,600</b> |
| <b>Limes: Florida</b>           | <b>500</b>    | <b>600</b>    | <b>250</b>    | <b>250</b>    |
| <b>Temples: Florida</b>         | <b>1,800</b>  | <b>1,950</b>  | <b>1,800</b>  | <b>1,800</b>  |
| <b>Tangelos: Florida</b>        | <b>2,550</b>  | <b>2,200</b>  | <b>2,100</b>  | <b>2,100</b>  |
| <b>K-Early: Florida</b>         | <b>80</b>     | <b>110</b>    | <b>60</b>     | <b>60</b>     |
| Tangerines:                     |               |               |               |               |
| <b>FLORIDA-All</b>              | <b>4,950</b>  | <b>7,000</b>  | <b>6,300</b>  | <b>6,300</b>  |
| <b>Early</b> <sup>2/</sup>      | <b>3,050</b>  | <b>4,350</b>  | <b>3,700</b>  | <b>3,700</b>  |
| <b>Honey</b>                    | <b>1,900</b>  | <b>2,650</b>  | <b>2,600</b>  | <b>2,600</b>  |
| <b>California</b> <sup>3/</sup> | <b>1,500</b>  | <b>2,300</b>  | <b>2,000</b>  | <b>2,000</b>  |
| <b>Arizona</b> <sup>3/</sup>    | <b>950</b>    | <b>850</b>    | <b>850</b>    | <b>850</b>    |
| <b>Total Tangerines</b>         | <b>7,400</b>  | <b>10,150</b> | <b>9,150</b>  | <b>9,150</b>  |

<sup>1/</sup> Includes seedy. <sup>2/</sup> Robinson, Fallglo, Sunburst, and Dancy. <sup>3/</sup> Includes tangelos.

relationship with their performance to the recorded utilization of the past 10 seasons. All citrus forecasts project the final certification of commercial fresh and processed use, including less than two percent for unrecorded use.

## ALL TANGERINES STAY AT 6.3 MILLION BOXES

The forecast for all varieties of tangerines is continued at 6.3 million boxes, down 10 percent from the record use of 7.0 million boxes last season. **Early** varieties, consisting of **Fallglo**, **Robinson**, **Sunburst** and **Dancy**, total 3.7 million boxes. The harvest of **Fallglo** and **Robinson** are almost complete while harvest of **Sunburst**, the predominate variety, is well underway. **Dancy** harvest has not started. Estimated certifications through December 3, 2000 are 1.9 million boxes, compared with 2.2 million boxes last season.

The late tangerine variety (**Honey**) forecast is held at 2.6 million boxes. Harvest has not started. The monthly surveys indicate that average fruit size is well above average and advanced over the past two seasons. However, the loss from droppage is projected to be closer to the 10 season average that ranges between 21 and 62 percent. Last season the loss was less than 22 percent by late January.

## TEMPLES REMAIN AT 1.8 MILLION BOXES

The Temple forecast is continued at 1.8 million boxes. If realized, this crop would be down eight percent from last season and would equal the production of 1998-99. The two monthly surveys confirm that average fruit size continues to be at the smallest level in the past 10 seasons. Loss from droppage is increased. However, the combined effect is insufficient to change the forecast.

## TANGELOS HELD AT 2.1 MILLION BOXES

The 2.1 million box forecast for all varieties of tangelos is maintained at 2.1 million boxes. This is the lowest indication of crop size since the recorded 1.8 million boxes in the 1968-69 season. Slight reductions in both average fruit size, which is well below the mean of the past 10 seasons, and loss from droppage are incorporated. These factors offset each other and no change is indicated in the expected utilization. Only about 17 percent of the forecast had been utilized through December 3, 2000

## K-EARLY CITRUS STAYS AT 60,000 BOXES

The K-Early Citrus Fruit forecast at 60,000 boxes is continued. Through December 3, 2000, half of this amount had already been certified. If realized, this crop will be only about 55 percent of the amount recorded last season.

## LIMES 400,000 BUSHEL

The 2000-01 lime crop, first forecast in April 2000, is continued at 400,000 bushels (250,000 boxes). Bearing acreage is now estimated at 1,200, down from 2,700 last season. Loss of trees exposed to citrus canker has caused this reduction in acres and anticipated production.

**Unadjusted Maturity Tests:** Average of regular bloom fruit from sample groves, 1999-00 and 2000-01 seasons

| Fruit type<br>(No. groves)<br>test date   | Acid    |         | Solids<br>(Brix) |         | Ratio   |         | Unfinished juice<br>per box |         | Solids<br>per box |         |
|---|---------|---------|------------------|---------|---------|---------|-----------------------------|---------|-------------------|---------|
|   | 1999-00 | 2000-01 | 1999-00          | 2000-01 | 1999-00 | 2000-01 | 1999-00                     | 2000-01 | 1999-00           | 2000-01 |
|   | Percent |         | Percent          |         |         |         | Pounds                      |         | Pounds            |         |
| Juice and solids per box are unadjusted and not comparable to plant test results. |         |         |                  |         |         |         |                             |         |                   |         |
| <b>ORANGES:</b>   |         |         |                  |         |         |         |                             |         |                   |         |
| Early (102-101)   |         |         |                  |         |         |         |                             |         |                   |         |
| Sep 1   | 1.75    | 1.66    | 9.35             | 9.79    | 5.45    | 6.01    | 40.81                       | 42.62   | 3.81              | 4.17    |
| Oct 1   | 1.22    | 1.12    | 9.33             | 9.84    | 7.80    | 8.96    | 46.18                       | 49.00   | 4.30              | 4.82    |
| Nov 1   | 0.95    | 0.97    | 9.69             | 10.72   | 10.41   | 11.30   | 49.85                       | 51.16   | 4.83              | 5.47    |
| Dec 1   | 0.81    | 0.89    | 10.80            | 11.45   | 13.42   | 13.14   | 50.78                       | 51.08   | 5.48              | 5.85    |
| Mid (51-51)   |         |         |                  |         |         |         |                             |         |                   |         |
| Sep 1   | 2.01    | 1.79    | 9.13             | 9.32    | 4.63    | 5.26    | 39.35                       | 44.43   | 3.59              | 4.14    |
| Oct 1   | 1.42    | 1.23    | 9.08             | 9.48    | 6.51    | 7.84    | 46.89                       | 49.99   | 4.26              | 4.73    |
| Nov 1   | 1.11    | 1.06    | 9.53             | 10.44   | 8.75    | 10.12   | 51.14                       | 53.53   | 4.88              | 5.59    |
| Dec 1   | 0.93    | 0.95    | 10.91            | 11.37   | 11.91   | 12.17   | 52.15                       | 53.29   | 5.69              | 6.06    |
| Late (150-150)  |         |         |                  |         |         |         |                             |         |                   |         |
| Sep 1   | NA      | NA      | NA               | NA      | NA      | NA      | NA                          | NA      | NA                | NA      |
| Oct 1   | 2.51    | 2.45    | 8.55             | 8.80    | 3.45    | 3.65    | 43.36                       | 46.50   | 3.71              | 4.09    |
| Nov 1   | 2.06    | 2.00    | 8.72             | 9.46    | 4.30    | 4.80    | 47.53                       | 50.80   | 4.15              | 4.81    |
| Dec 1   | 1.70    | 1.74    | 9.81             | 10.37   | 5.85    | 6.03    | 51.38                       | 52.17   | 5.04              | 5.41    |
| <b>GRAPEFRUIT:</b>  |         |         |                  |         |         |         |                             |         |                   |         |
| White Seedless (48-46)  |         |         |                  |         |         |         |                             |         |                   |         |
| Sep 1   | 1.85    | 1.83    | 10.29            | 10.15   | 5.60    | 5.47    | 28.77                       | 32.70   | 2.96              | 3.32    |
| Oct 1   | 1.63    | 1.58    | 9.82             | 10.22   | 6.07    | 6.52    | 34.37                       | 36.84   | 3.37              | 3.76    |
| Nov 1   | 1.45    | 1.50    | 9.60             | 10.38   | 6.67    | 6.98    | 37.92                       | 40.56   | 3.64              | 4.20    |
| Dec 1   | 1.42    | 1.47    | 10.07            | 10.78   | 7.16    | 7.36    | 42.31                       | 41.79   | 4.25              | 4.50    |
| Colored Seedless (41-44)  |         |         |                  |         |         |         |                             |         |                   |         |
| Sep 1   | 1.77    | 1.76    | 10.17            | 10.37   | 5.77    | 5.91    | 28.29                       | 33.37   | 2.88              | 3.46    |
| Oct 1   | 1.57    | 1.51    | 9.78             | 10.44   | 6.29    | 6.96    | 35.08                       | 37.15   | 3.43              | 3.87    |
| Nov 1   | 1.38    | 1.43    | 9.72             | 10.68   | 7.06    | 7.53    | 37.58                       | 40.53   | 3.65              | 4.33    |
| Dec 1   | 1.36    | 1.39    | 10.20            | 10.88   | 7.60    | 7.87    | 45.34                       | 43.32   | 4.63              | 4.71    |

NOTICE: All samples were run through an FMC 091 machine using mechanical pressure only. This machine utilizes a .040 short strainer and standard 5/8-inch orifice tube. The beam settings are also identical to past tests and no restrictors are used.

Maturity test averages by areas, December 1, 2000

| Fruit type         | Groves<br>sampled | Acid    | Solids<br>(Brix) | Ratio | Unfinished<br>juice per box | Solids<br>per box |
|--------------------|-------------------|---------|------------------|-------|-----------------------------|-------------------|
|                    | Number            | Percent | Percent          |       | Pounds                      | Pounds            |
| <b>ORANGES:</b>    |                   |         |                  |       |                             |                   |
| Early              |                   |         |                  |       |                             |                   |
| Indian River Dist. | 11                | 0.92    | 12.06            | 13.29 | 50.68                       | 6.11              |
| Other Areas        | 90                | 0.88    | 11.38            | 13.12 | 51.13                       | 5.81              |
| Midseason          |                   |         |                  |       |                             |                   |
| Indian River Dist. | 11                | 0.90    | 11.32            | 12.79 | 53.69                       | 6.08              |
| Other Areas        | 40                | 0.96    | 11.39            | 12.00 | 53.18                       | 6.06              |
| Late               |                   |         |                  |       |                             |                   |
| Indian River Dist. | 25                | 1.81    | 10.68            | 5.97  | 53.20                       | 5.69              |
| Other Areas        | 125               | 1.73    | 10.30            | 6.04  | 51.96                       | 5.35              |
| <b>GRAPEFRUIT:</b> |                   |         |                  |       |                             |                   |
| White Seedless     |                   |         |                  |       |                             |                   |
| Indian River Dist. | 33                | 1.49    | 10.91            | 7.35  | 41.58                       | 4.54              |
| Other Areas        | 13                | 1.43    | 10.44            | 7.37  | 42.32                       | 4.42              |
| Colored Seedless   |                   |         |                  |       |                             |                   |
| Indian River Dist. | 36                | 1.41    | 11.07            | 7.89  | 43.18                       | 4.78              |
| Other Areas        | 8                 | 1.33    | 10.11            | 7.63  | 43.55                       | 4.41              |

## FRUIT SIZE COMPARISONS BY TYPES TO PREVIOUS SEASONS

Size frequency distributions are from the November size survey conducted in sample groves during the period of November 1 through 22, 2000. The distributions are by percent from fruit within the size range of each 4/5 bushel container. These percents relate only to fruit from spring bloom and exclude summer bloom fruit in all seasons.

Florida Citrus: Size frequency distributions  
from November measurements

| Type of fruit and size<br>in 4/5-bushel containers | 1998 | 1999 | 2000 |
|--|------|------|------|
| --- Percent ---                                    |      |      |      |
| <b>Early and midseason oranges:</b>                |      |      |      |
| <b>(excluding Navels)</b>                          |      |      |      |
| 64 and larger                                      | 0.8  | 2.3  | 0.5  |
| 80   | 7.2  | 13.0 | 5.0  |
| 100  | 30.8 | 36.9 | 24.2 |
| 125  | 40.9 | 32.4 | 39.1 |
| 163 and smaller                                    | 20.3 | 15.4 | 31.2 |
| <b>Navel oranges:</b>                              |      |      |      |
| 64 and larger                                      | 47.8 | 72.2 | 56.7 |
| 80   | 34.2 | 19.8 | 28.9 |
| 100  | 14.5 | 6.5  | 12.1 |
| 125  | 3.2  | 1.4  | 2.1  |
| 163 and smaller                                    | 0.3  | 0.1  | 0.2  |
| <b>White seedless grapefruit:</b>                  |      |      |      |
| 32 and larger                                      | 10.6 | 11.7 | 9.5  |
| 36   | 17.5 | 17.3 | 15.9 |
| 40   | 21.9 | 19.9 | 21.6 |
| 48   | 21.0 | 18.3 | 21.8 |
| 56   | 11.8 | 11.5 | 12.2 |
| 63 and smaller                                     | 17.2 | 21.3 | 19.0 |
| <b>Colored seedless grapefruit:</b>                |      |      |      |
| 32 and larger                                      | 7.1  | 5.0  | 4.7  |
| 36   | 16.3 | 11.3 | 11.0 |
| 40   | 20.9 | 19.9 | 20.0 |
| 48   | 22.3 | 21.2 | 21.9 |
| 56   | 13.1 | 14.3 | 16.5 |
| 63 and smaller                                     | 20.3 | 28.3 | 25.9 |
| <b>Sunburst tangerines:</b>                        |      |      |      |
| 150 and larger                                     | 67.4 | 71.7 | 72.4 |
| 176  | 16.0 | 13.9 | 16.2 |
| 210  | 10.9 | 9.2  | 8.8  |
| 246  | 4.0  | 4.2  | 2.4  |
| 294 and smaller                                    | 1.7  | 1.0  | 0.2  |
| <b>Temples:</b>                                    |      |      |      |
| 80 and larger                                      | 16.8 | 14.9 | 12.3 |
| 100  | 39.2 | 33.7 | 37.4 |
| 120  | 33.0 | 29.3 | 38.0 |
| 156 and smaller                                    | 11.0 | 22.1 | 12.3 |
| <b>Honey tangerines:</b>                           |      |      |      |
| 150 and larger                                     | 73.2 | 63.4 | 74.9 |
| 176  | 15.7 | 15.8 | 11.8 |
| 210  | 7.1  | 11.1 | 9.1  |
| 246  | 3.2  | 6.3  | 3.4  |
| 294 and smaller                                    | 0.8  | 3.4  | 0.8  |
| <b>Tangelos:</b>                                   |      |      |      |
| 80 and larger                                      | 26.1 | 40.4 | 22.4 |
| 100  | 33.0 | 31.3 | 38.3 |
| 120  | 25.7 | 18.4 | 28.2 |
| 156 and smaller                                    | 15.2 | 9.9  | 11.1 |

The charts below describe the relationships of the fruit size measurements with those taken in the previous year. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.

CHART 1: Early and midseason oranges (excluding Navels) size frequency by diameter from November measurements.

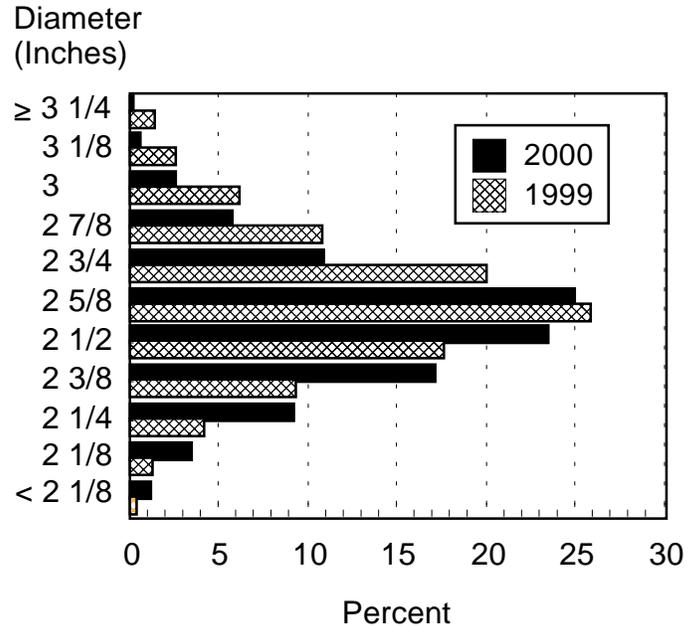


CHART 2: White seedless grapefruit size frequency by diameter from November measurements.

