United States Department of Agriculture
National Agricultural Statistics Service

# CITRUS JANUARY FORECAST MATURITY TEST RESULTS AND FRUIT SIZE

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## ALL ORANGES REDUCED TO 162.0 MILLION BOXES

The Florida all orange forecast released today by the USDA Agricultural Statistics Board is 162.0 million boxes, down 3.0 million boxes from last month. The decrease is entirely in the early-midseason-Navel (including Temples) portion of the crop now forecast at 84.0 million boxes. The Valencia portion is unchanged at 78.0 million boxes. If realized, this forecast would be five percent less than last season's harvest but 26 percent more than the 2006-07 production. In the past eight non-hurricane seasons, the January forecast has differed from actual production by an average of 3.4 percent, with five forecasts higher and three lower. Estimated utilization to January 1 is 34.0. million boxes, compared to 29.2 million boxes actual utilization the same time last season.

## EARLY-MIDSEASON-NAVELS NOW 84.0 MILLION BOXES

The forecast of early-midseason-Navel oranges (including Temples) is lowered from 87.0 million boxes to 84.0 million boxes. If realized, the forecast will be less than one percent greater than last season's actual production and the most harvested since 2003-04. The route survey conducted December 29-30, 2008 showed 32 percent of the rows harvested, below the average of the past 10 seasons. Objective survey measurements taken in December are the final components used in the forecast model. The fruit size projected earlier in the season to be near, but below average, was not attained. The smaller size requires an additional eight pieces of fruit to fill a 90-pound equivalent box. Droppage continued at an above average rate and the projected final droppage is slightly above the previous projection.

**FORECAST DATES — 2008-09 SEASON**

| | |
|---|---|
| February 9, 2009 | May 12, 2009 |
| March 11, 2009 | June 10, 2009 |
| April 9, 2009 | July 10, 2009 |

Navels account for 3.0 million boxes of the category, down from 3.1 million boxes from last month, based upon the current utilization and results of the route survey. About 84 percent of the rows are harvested, which is considerably higher than the average of the previous 10 seasons.

## VALENCIAS STAY AT 78.0 MILLION BOXES

The Valencia forecast remains at 78.0 million boxes. Objective survey measurements resulted in slight, offsetting changes in the projections due to a slower growth rate and lighter droppage. Current fruit size and the final projection are below average. Compared to the previous projection, it will take an additional three pieces of fruit to fill a 90-pound equivalent box. Current drop and the final projection are below average. Very limited harvest has begun.

**CITRUS PRODUCTION:** JANUARY 1, 2009
Forecasts by varieties and states, with comparisons

| Crop and State | Production | | Forecast | |
|---|---|---|---|---|
| | 2006-07 | 2007-08 | Dec 11, 2008 | Jan 12, 2009 |
| | *1,000 boxes* | | | |
| **EARLY, MIDSEASON, AND NAVEL ORANGES:** | | | | |
| **FLORIDA**[1/] | **65,600** | **83,500** | **87,000** | **84,000** |
| California | 34,500 | 48,500 | 32,000 | 34,500 |
| Texas | 1,600 | 1,500 | 1,300 | 1,450 |
| Arizona | 200 | 230 | 150 | 150 |
| Total Above Varieties | 101,900 | 133,730 | 120,450 | 120,100 |
| **VALENCIAS:** | | | | |
| **FLORIDA** | **63,400** | **86,700** | **78,000** | **78,000** |
| California | 11,500 | 16,000 | 12,000 | 12,000 |
| Texas | 380 | 234 | 200 | 200 |
| Arizona | 100 | 150 | 100 | 100 |
| Total Valencias | 75,380 | 103,084 | 90,300 | 90,300 |
| **ALL ORANGES:** | | | | |
| **FLORIDA** | **129,000** | **170,200** | **165,000** | **162,000** |
| California | 46,000 | 64,500 | 44,000 | 46,500 |
| Texas | 1,980 | 1,734 | 1,500 | 1,650 |
| Arizona | 300 | 380 | 250 | 250 |
| Total All Oranges | 177,280 | 236,814 | 210,750 | 210,400 |

[1/] Includes Temples.

**COMPONENTS USED IN THE JANUARY FORECAST** [1/]

| Type | Bearing trees | Fruit per tree | Percent droppage | Fruit per box |
|---|---|---|---|---|
| | *(1,000)* | | | |
| **ORANGES:** | | | | |
| Early-mid | 24,596 | 1,079 | 11 | 257 |
| Navel | 1,231 | 469 | 11 | 139 |
| Valencia | 34,151 | 574 | 14 | 209 |

[1/] Survey data is considered final in December for Navels, January for early-midseason oranges, and April for Valencias.

## FCOJ YIELD 1.62 GALLONS PER BOX

The FCOJ all orange yield projection is raised from 1.58 to 1.62 gallons per box. Initial component projections are 1.58 gallons per box for the early-midseason category and 1.66 gallons per box for the late fruit. Last season, the all orange yield was a record high 1.672737 gallons per box as reported by the Florida Department of Citrus.

## GRAPEFRUIT CONTINUED AT 23.0 MILLION BOXES

The Florida forecast of grapefruit for utilization (including an allocation of 700,000 boxes of gift fruit and local sales) is unchanged at 23.0 million boxes. Making up the forecast are 7.0 million boxes of white and 16.0 million boxes of colored grapefruit. If realized, this forecast will be 14 percent less than last season's 26.6 million box utilization.

The principal grapefruit growing regions have experienced dry weather and warm temperatures since early December. Growers have irrigated regularly in order to keep both the trees and the fruit in good condition. A short cold snap during the third week of November was beneficial to the color and the overall quality of the fruit.

The fruit size and drop measurements obtained in December are the primary indicators used in setting this month's forecast. Fruit sizes for **white** grapefruit are projected to be larger than average at harvest. The expected number of fruit required to fill a 1-3/5 bushel box is now at 86 pieces. Projected droppage, at 11 percent, remains unchanged from the October forecast. Almost two-thirds of the white grapefruit has been processed this season. Estimated utilization to January 1 is 1.1 million boxes, compared to actual utilization of 1.3 million boxes at the same time last season.

Projected average size of **colored** grapefruit has increased and is slightly larger than the adopted size used in the October forecast. It is anticipated it will take 95 pieces of fruit to fill a 1-3/5 bushel box. The projected drop rate, at 12 percent, is unchanged from the initial October forecast. Colored grapefruit have been of excellent quality this year, and to this point in time about two-thirds of the colored grapefruit has gone fresh. Estimated utilization to January 1 is 4.5 million boxes, compared to 4.2 million boxes actually utilized the same time last year.

**CITRUS PRODUCTION**: January 1, 2009
forecasts by varieties and States, with comparisons

| Crop and State | Production | | Forecast | |
|---|---|---|---|---|
| | 2006-07 | 2007-08 | Dec 11, 2008 | Jan 12, 2009 |
| | *1,000 boxes* | | | |
| **GRAPEFRUIT**: | | | | |
| **Florida**-All | **27,200** | **26,600** | **23,000** | **23,000** |
| **White** | **9,300** | **9,000** | **7,000** | **7,000** |
| **Colored** | **17,900** | **17,600** | **16,000** | **16,000** |
| California | 5,500 | 5,700 | 5,500 | 4,500 |
| Texas | 7,100 | 6,100 | 5,300 | 5,700 |
| Arizona | 100 | 100 | 150 | 150 |
| Total Grapefruit | 39,900 | 38,500 | 33,950 | 33,350 |
| **LEMONS**: | | | | |
| California | 18,500 | 17,000 | 19,000 | 19,000 |
| Arizona | 2,500 | 1,500 | 2,500 | 2,500 |
| Total Lemons | 21,000 | 18,500 | 21,500 | 21,500 |
| **TANGELOS**: **Florida** | **1,250** | **1,500** | **1,500** | **1,500** |
| **TANGERINES**: | | | | |
| **Florida**-All | **4,600** | **5,500** | **4,900** | **4,900** |
| **Early** [1/] | **2,400** | **2,600** | **2,900** | **2,900** |
| **Honey** | **2,200** | **2,900** | **2,000** | **2,000** |
| California [2/] | 3,500 | 5,700 | 6,300 | 7,000 |
| Arizona [2/] | 300 | 400 | 300 | 250 |
| Total Tangerines | 8,400 | 11,600 | 11,500 | 12,150 |

[1/] Fallglo and Sunburst varieties.
[2/] Includes tangelos and tangors.

**COMPONENTS USED IN THE JANUARY FORECAST** [1/]

| Type | Bearing trees | Fruit per tree | Percent droppage | Fruit per box |
|---|---|---|---|---|
| | *(1,000)* | | | |
| **GRAPEFRUIT:** | | | | |
| White [2/] | 1,688 | 401 | 11 | 86 |
| Colored | 4,035 | 425 | 12 | 95 |

[1/] January data is considered final.
[2/] Seedless variety only.

## ALL TANGERINES UNCHANGED AT 4.9 MILLION BOXES

The forecast of all tangerines remains at 4.9 million boxes. The total consists of the early varieties (**Fallglo and Sunburst**) at 2.9 million boxes and the later maturing **Honey** tangerine at 2.0 million boxes. The early varieties of tangerines are nearly 80 percent harvested.

Utilization for early tangerines is unchanged from the initial October forecast. The **Fallglo** harvest is complete for the season at 615,000 boxes, and the **Sunburst** tangerine estimated harvest as of January 1 is 1,694,000 boxes.

**Honey** tangerines account for 41 percent of the total tangerine forecast and remain unchanged at 2.0 million boxes. Harvesting of Honeys is just beginning, and is expected to continue into late May or early June. The size and drop surveys conducted in December are the main indicators used in setting the January forecast. While Honey sizes are running below average, droppage was slightly above average. It will take approximately 253 pieces of fruit to fill a 1-3/5 bushel box.

## TANGELOS STAY AT 1.5 MILLION BOXES

The **tangelo** forecast remains unchanged and is equal to the initial October forecast of 1.5 million boxes (including an allocation of non-certified use of 100,000 boxes). The Row Count survey, conducted December 29-30, 2008, showed approximately 33 percent of the rows harvested, which compared to utilization supports the current forecast. Estimated utilization to the first of the month is 519,000 boxes, or the equivalent of 35 percent of the forecast total. The size and drop survey data for tangelos was final in November. It will require approximately 234 pieces of fruit to fill one 90-pound equivalent box of tangelos.

**UNADJUSTED MATURITY TESTS**: Average of regular bloom fruit from sample groves, 2007-08 and 2008-09 seasons

| Fruit type (No. groves) test date | Acid | | Solids (Brix) | | Ratio | | Unfinished juice per box | | Solids per box | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| | *Percent* | | *Percent* | | | | *Pounds* | | *Pounds* | |

*Juice and solids per box are unadjusted and not comparable to plant test results.*

**ORANGES**:

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Early (75-78) | | | | | | | | | | |
| Sep 1 | 1.78 | 1.46 | 9.42 | 9.23 | 5.43 | 6.43 | 41.34 | 46.58 | 3.89 | 4.30 |
| Oct 1 | 1.28 | 1.09 | 10.27 | 9.61 | 8.17 | 8.97 | 45.88 | 48.58 | 4.71 | 4.66 |
| Nov 1 | 0.90 | 0.84 | 10.16 | 10.18 | 11.51 | 12.37 | 51.01 | 53.31 | 5.18 | 5.42 |
| Dec 1 | 0.84 | 0.80 | 10.90 | 11.09 | 13.19 | 14.02 | 52.09 | 52.25 | 5.67 | 5.79 |
| Jan 1 | 0.75 | 0.78 | 11.79 | 11.82 | 15.96 | 15.47 | 51.02 | 51.83 | 6.01 | 6.13 |
| Midseason (49-41) | | | | | | | | | | |
| Sep 1 | 2.01 | 1.67 | 9.63 | 8.99 | 4.87 | 5.45 | 41.64 | 44.30 | 4.01 | 3.98 |
| Oct 1 | 1.51 | 1.31 | 9.60 | 9.38 | 6.48 | 7.37 | 46.14 | 50.01 | 4.43 | 4.69 |
| Nov 1 | 1.01 | 0.90 | 10.32 | 10.17 | 10.43 | 11.49 | 51.14 | 54.27 | 5.28 | 5.52 |
| Dec 1 | 0.97 | 0.88 | 11.22 | 11.14 | 11.74 | 12.82 | 50.59 | 53.29 | 5.67 | 5.93 |
| Jan 1 | 0.87 | 0.87 | 12.29 | 11.81 | 14.55 | 13.82 | 52.06 | 52.02 | 6.40 | 6.15 |
| Late (149-150) | | | | | | | | | | |
| Sep 1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Oct 1 | 2.62 | 2.48 | 9.47 | 8.86 | 3.66 | 3.62 | 43.86 | 47.40 | 4.15 | 4.20 |
| Nov 1 | 1.95 | 1.86 | 9.27 | 9.30 | 4.82 | 5.07 | 48.85 | 51.82 | 4.53 | 4.82 |
| Dec 1 | 1.70 | 1.61 | 10.11 | 10.19 | 6.02 | 6.40 | 52.22 | 54.06 | 5.28 | 5.51 |
| Jan 1 | 1.36 | 1.39 | 11.14 | 11.14 | 8.27 | 8.12 | 53.58 | 55.76 | 5.97 | 6.21 |

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, JANUARY 1, 2009**

| Fruit type | Groves sampled | Acid | Solids (Brix) | Ratio | Unfinished juice per box | Solids per box |
|---|---|---|---|---|---|---|
| | *Number* | *Percent* | *Percent* | | *Pounds* | *Pounds* |
| **ORANGES**: | | | | | | |
| Early | | | | | | |
| Indian River District | 8 | 0.81 | 11.92 | 14.96 | 53.08 | 6.33 |
| Other Areas | 70 | 0.77 | 11.81 | 15.53 | 51.69 | 6.11 |
| Midseason | | | | | | |
| Indian River District | 10 | 0.95 | 12.33 | 13.05 | 55.56 | 6.86 |
| Other Areas | 31 | 0.84 | 11.64 | 14.07 | 50.88 | 5.92 |
| Late | | | | | | |
| Indian River District | 27 | 1.51 | 11.42 | 7.61 | 54.98 | 6.27 |
| Other Areas | 123 | 1.36 | 11.07 | 8.23 | 55.94 | 6.19 |

## FRUIT SIZE COMPARISONS BY TYPES TO PREVIOUS SEASONS

Size frequency distributions developed from the December size survey are shown in the following table. The distributions are by percent of fruit falling within the size range of each 4/5-bushel container. These frequency distributions relate to fruit from regular bloom and exclude summer bloom in all years.

**FLORIDA CITRUS**: Size frequency distributions from December measurements

| Type of fruit and size in 4/5-bushel containers | 2006 | 2007 | 2008 |
|---|---|---|---|
| | *- - - Percent - - -* | | |
| **EARLY AND MIDSEASON ORANGES:** | | | |
| 64 and larger | 6.1 | 1.7 | 2.4 |
| 80 | 17.8 | 10.0 | 10.5 |
| 100 | 35.2 | 28.1 | 31.7 |
| 125 | 27.2 | 34.4 | 36.1 |
| 163 and smaller | 13.7 | 25.8 | 19.3 |
| **VALENCIA ORANGES:** | | | |
| 64 and larger | 5.9 | 2.6 | 2.6 |
| 80 | 24.9 | 15.1 | 19.0 |
| 100 | 38.8 | 35.2 | 43.9 |
| 125 | 22.8 | 30.0 | 26.7 |
| 163 and smaller | 7.6 | 17.1 | 7.8 |
| **WHITE SEEDLESS GRAPEFRUIT:** | | | |
| 32 and larger | 19.1 | 5.1 | 18.3 |
| 36 | 22.4 | 14.5 | 25.7 |
| 40 | 23.7 | 20.1 | 20.4 |
| 48 | 16.2 | 24.0 | 17.8 |
| 56 | 8.1 | 14.5 | 8.1 |
| 63 and smaller | 10.5 | 21.8 | 9.7 |
| **COLORED SEEDLESS GRAPEFRUIT:** | | | |
| 32 and larger | 7.0 | 4.1 | 13.6 |
| 36 | 17.2 | 10.1 | 19.1 |
| 40 | 25.3 | 17.4 | 17.5 |
| 48 | 20.6 | 20.6 | 20.1 |
| 56 | 13.8 | 15.9 | 12.6 |
| 63 and smaller | 16.1 | 31.9 | 17.1 |
| **HONEY TANGERINES:** | | | |
| 80 and larger | 27.7 | 13.0 | 21.6 |
| 100 | 35.6 | 29.6 | 36.1 |
| 120 | 21.3 | 28.4 | 23.8 |
| 176 | 8.2 | 14.8 | 7.4 |
| 210 and smaller | 7.2 | 14.2 | 11.1 |

The charts to the right 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 December measurements

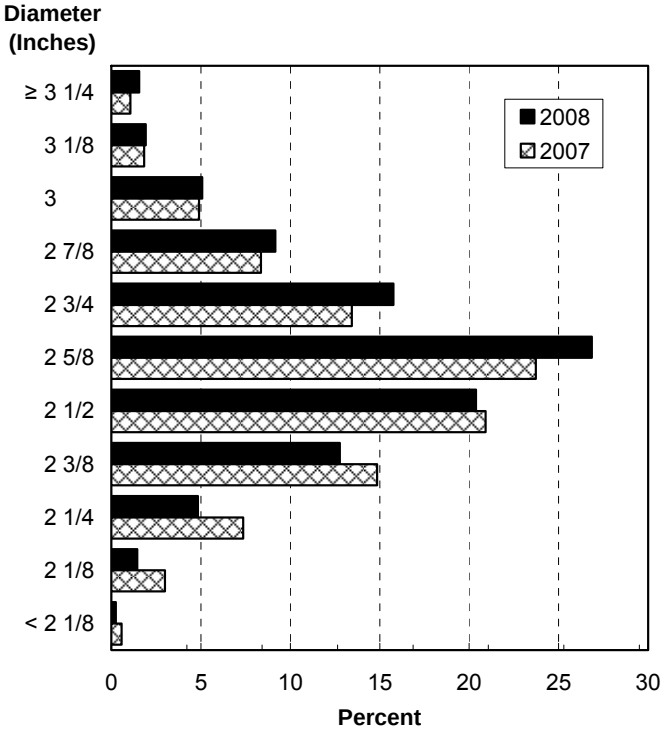


**CHART 2:** White seedless grapefruit size frequency by diameter from December measurements