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CITRUS
FLORIDA AGRICULTURE

J ANUARY FORECAST MATURITY TEST RESULTS AND FRUIT SIZE

J anuary 11, 2000

## ALL ORANGES NOW 219.0 MILLION BOXES

The forecast of round oranges is increased two percent to 219.0 million boxes in the J anuary crop report released today by the USDA National A gricultural Statistics Board. This five million box increase from the December report is divided betw een the Early and Midseason portion, up three million boxes, and the Valencia portion, up two million. If realized, this will be 18 percent more than the 185.7 million boxes produced last season. In the past 10 non-freeze seasons, the J anuary forecast has deviated from final utilization by an average of 2.6 percent. Seven seasons were above and three below the final recorded utilization.

Weather conditions during the fall and winter months have been ideal with cool nights and mild but not hot days. Rainfall, although less than normal, has been adequate in most areas. Irrigation has been used where needed to maintain good tree condition.

## EARLY-MIDSEASONS 127.0 MILLION BOXES

The Early-Midseason varieties forecast is increased three million to 127.0 million boxes. Objective surveys conducted during December show fruit sizes have continued to increase and are now larger than anticipated in October. Although higher in areas affected by Hurricane Irene, fruit droppage in the important early-mid areas in the central portion of the state is at record low levels.

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

| Crop and State | Production |  | Forecast |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
|  | $1997-98$ |  |  |  |  | $1998-99$ | Dec 10,1999 | J an 11, 2000 |
| Early, Midseason, | $-\mathbf{- 1 , 0 0 0}$ boxes $\ldots$ |  |  |  |  |  |  |  |
| and Navel Oranges: |  |  |  |  |  |  |  |  |
| FLORIDA | 140,000 | 112,000 | 124,000 | 127,000 |  |  |  |  |
| California | 44,000 | 21,000 | 40,000 | 40,000 |  |  |  |  |
| Texas | 1,350 | 1,250 | 1,300 | 1,300 |  |  |  |  |
| Arizona | 350 | 550 | 400 | 600 |  |  |  |  |
| Total Above Variet- |  |  |  |  |  |  |  |  |
| ies | 185,700 | 134,800 | 165,700 | 168,900 |  |  |  |  |
| Valencias: |  |  |  |  |  |  |  |  |
| FLORIDA | 104,000 | 73,700 | 90,000 | 92,000 |  |  |  |  |
| California | 25,000 | 17,000 | 27,000 | 27,000 |  |  |  |  |
| Texas | 175 | 180 | 300 | 300 |  |  |  |  |
| Arizona | 650 | 600 | 500 | 450 |  |  |  |  |
| Total Valencias | 129,825 | 91,480 | 117,800 | 119,750 |  |  |  |  |
| All Oranges: |  |  |  |  |  |  |  |  |
| FLORIDA | 244,000 | 185,700 | 214,000 | 219,000 |  |  |  |  |
| California | 69,000 | 38,000 | 67,000 | 67,000 |  |  |  |  |
| Texas | 1,525 | 1,430 | 1,600 | 1,600 |  |  |  |  |
| Arizona | 1,000 | 1,150 | 900 | 1,050 |  |  |  |  |
| Total All Oranges | 315,525 | 226,280 | 283,500 | 288,650 |  |  |  |  |

## FORECAST DATES 1999-00 SEASON

| February 11, 2000 | M ay 12, 2000 |
| :--- | ---: |
| March 10, 2000 | J une 9, 2000 |
| April 11, 2000 | J uly 12, 2000 |

The first route survey measuring rows harvested versus estimated utilization to the same date shows the lowest percent row s harvested to J anuary 1 in over nine years. All surveys and objective measurements indicate this increase in the forecast.

Estimated utilization through J anuary 2 is almost 43 million boxes with weekly harvest increasing to over seven million per week. Estimated Navel utilization to J anuary 2 is almost four million boxes.

The Navel portion of the Early-M id forecast is also increased from 5.4 million boxes to 5.6 million. The Row Count survey shows about 60 percent of rows harvested, the low est in three seasons.

## VALENCIAS 92.0 MILLION BOXES

The late type (Valencia) orange forecast is increased two million to 92.0 million boxes. This is the second increase since the initial forecast in October. Fruit sizes are above average but near the October projection. Fruit loss from droppage, how ever, is at the lowest percent measured in December in the history of the survey - 40 years. If this rate of droppage continues to harvest, it will be a new record low. This low droppage rate is the reason for the increase in the forecast.

## FCOJ NOW 1.57 GALLONS PER BOX

The all orange FCOJ yield projection is decreased from 1.60 gallons per box to 1.57 gallons of 42.0 degrees brix concentrate. The Early and Midseason portion is projected at 1.50 gallons per box and Valencias at 1.68 . The final all orange yield for last season w as 1.63 as reported by the Florida Citrus Processors Association. Last season's Early and Midseason yield was 1.58 and the Valencia portion was 1.75 . All yields for last season w ere record high.

Maturity levels of all varieties have been lower than last season and volume harvest for processing was slow starting. Although not excessive, later bloom fruit is contributing to this lower yield projection. Results of the J anuary 1 tests are on page 3.

Florida Department of Agriculture and Consumer Services Division of Marketing and Development

University of Florida
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## SEEDLESS GRAPEFRUIT MAINTAINED

The total seedless grapefruit forecast is held at 45.5 million boxes. This forecast was established in November 1999, reflecting estimated losses from Hurricane Irene. The forecast is 1.0 million boxes less than recorded last season and the smallest indication since 41.2 million boxes utilized in the 1991-92 season. Both varietal forecasts are maintained. White seedless is 18.5 million boxes and the colored varieties total 27.0 million boxes.

The December surveys on fruit size and droppage loss continue to be within the projected ranges for this time in the season. Average fruit size continues to be below the nine season mean for this period. This is as projected, considering the amount of later than normal blooms that were observed during the summer count period. The loss from droppage followed a seasonal normal slope from late November to late December. However, because of additional post-hurricane loss, droppage is still above the nine season mean. There were no indications in the monthly surveys that would cause adjustment of the forecast.

Estimated certifications through J anuary 2, 2000, as shown in Citrus Administrative Committee Bulletin 13, show ed total seedless grapefruit at 9.4 million boxes, as compared with the same date last season at 10.6 million boxes. The white seedless usage is close to last season to date, at 2.2 million boxes, compared with 2.3 million boxes. How ever, the colored varieties are lagging by almost 1.2 million boxes.

Citrus production, J anuary 1, 2000
forecasts by varieties and states, w ith comparisons

| Crop and State | Production |  | Forecast |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $1997-98^{1 /}$ | $1998-99$ | Dec 10, 1999 J an 11, 2000 |  |

-- - 1,000 boxes --
Grapefruit:

| FLORIDA-AII | 49,550 | 47,050 | 46,000 | 46,000 |
| :---: | :---: | :---: | :---: | :---: |
| Seedless | 48,900 | 46,500 | 45,500 | 45,500 |
| White | 18,300 | 17,800 | 18,500 | 18,500 |
| Colored | 30,600 | 28,700 | 27,000 | 27,000 |
| Seedy (Other) | 650 | 550 | 500 | 500 |
| Texas | 4,800 | 6,100 | 5,500 | 5,500 |
| Arizona | 800 | 750 | 650 | 800 |
| California | 8,000 | 7,500 | 8,000 | 8,000 |
| Total Grapefruit | 63,150 | 61,400 | 60,150 | 60,300 |
| Lemons: |  |  |  |  |
| California | 21,000 | 16,200 | 20,500 | 21,000 |
| Arizona | 2,600 | 3,450 | 3,900 | 3,100 |
| Total Lemons | 23,600 | 19,650 | 24,400 | 24,100 |
| Limes: Florida | 440 | 500 | 600 | 600 |
| Temples: Florida | 2,250 | 1,800 | 2,100 | 2,100 |
| Tangelos: Florida | 2,850 | 2,550 | 2,600 | 2,800 |
| K-Early: Florida | 40 | 80 | 90 | 90 |
| Tangerines: |  |  |  |  |
| FLORIDA-All | 5,200 | 4,950 | 6,400 | 6,600 |
| Early ${ }^{2 /}$ | 3,200 | 3,050 | 4,200 | 4,200 |
| Honey | 2,000 | 1,900 | 2,200 | 2,400 |
| California ${ }^{3 /}$ | 2,400 | 1,500 | 2,300 | 2,300 |
| Arizona ${ }^{3 /}$ | 600 | 950 | 700 | 1,100 |
| Total Tangerines | 8,200 | 7,400 | 9,400 | 10,000 |

${ }^{1 /}$ Excludes 6 million boxes of economic abandonment in Fl: 5 million white seedless and 1 million colored. ${ }^{2 /}$ Robinson, Fallglo, Sunburst, and Dancy. ${ }^{3 /}$ Includes tangelos.

## SEEDY GRAPEFRUIT CONTINUED

The seedy (Duncan) grapefruit forecast is held at 500,000 boxes. This amount would be a record low use. Last season 550,000 boxes were recorded. This variety is only recorded as processed use and is dependent on load tickets at the plants. December surveys continued to show fruit size above the seasonal average and loss from droppage below. Harvest of this variety has just begun.

## ALL TANGERINES NOW 6.6 MILLION BOXES

The total tangerine forecast is increased 0.2 million boxes. There is no change in the early portion at 4.2 million boxes. The increase is in the late (Honey) portion to 2.4 million boxes.

The early tangerines are in volume harvest. The Robinson and Fallglo varieties are complete, while Dancy harvest has just started. The major early variety, Sunburst, is w ell underway but with considerable volume yet to go.

The Honey tangerine variety has just started to be harvested. This variety has a wide range of seasonal fruit loss from droppage. From the summer count period to harvest it has varied from 20 to 60 percent, averaging about 45 percent. This season to date, the loss rate has been the lowest on record. Even though the average fruit size is also close to the smallest on record, the combination indicated an increase in the forecast. There is a heavy fruit set on most trees this year but also considerable later than regular bloom.

## TEMPLES HELD AT 2.1 MILLION BOXES

The Temple forecast is continued at 2.1 million boxes. The crop appears to be lagging in maturity. The December surveys continue to show loss from droppage to be below the mean, however, the average fruit size continues to be well below the seasonal average. Harvest has just started.

## TANGELOS NOW 2.8 MILLION BOXES

The tangelo forecast is increased 0.2 million boxes to 2.8 million boxes. The route survey (Row Count) conducted on December 27-28, 1999, indicated that less than one-third of the rows had been harvested. There are some rows of Orlando tangelos that are used as pollinators in other hybrids. It is assumed that the remaining crops will be harvested.

## K-EARLY CITRUS UNCHANGED

The K-Early Citrus Fruit harvest is nearing completion with an estimated 90,000 boxes used this season.

Unadjusted Maturity Tests: Average of regular bloom fruit from sample
groves, 1998-99 and 1999-00 seasons

| Fruit type (No. groves) test date | Acid |  | Solids (Brix) |  | Ratio |  | Unfinished juice per box |  | Solids per box |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998-99 | 1999-00 | 1998-99 | 1999-00 | 1998-99 | 1999-00 | 1998-99 | 1999-00 | 1998-99 | 1999-00 |
| Percent Percent |  |  |  |  |  |  | Pounds |  | Pounds |  |

ORANGES:
Early (68-79)

| Sep 1 | 1.76 | 1.77 | 9.51 | 9.33 | 5.54 | 5.39 | 42.41 | 41.24 | 4.03 | 3.84 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Oct 1 | 1.17 | 1.24 | 9.29 | 9.32 | 8.03 | 7.64 | 47.84 | 46.31 | 4.44 | 4.31 |
| Nov 1 | 0.93 | 0.96 | 10.04 | 9.70 | 11.02 | 10.31 | 50.85 | 50.24 | 5.10 | 4.87 |
| Dec 1 | 0.74 | 0.83 | 11.07 | 10.81 | 15.14 | 13.27 | 51.92 | 50.86 | 5.75 | 5.49 |
| J an 1 | 0.68 | 0.77 | 11.63 | 11.51 | 17.18 | 14.96 | 51.68 | 50.11 | 6.01 | 5.76 |
| d (47-43) |  |  |  |  |  |  |  |  |  |  |
| Sep 1 | 1.96 | 2.01 | 9.43 | 9.11 | 4.92 | 4.59 | 42.52 | 39.06 | 4.01 | 3.56 |
| Oct 1 | 1.30 | 1.43 | 9.16 | 9.06 | 7.19 | 6.44 | 48.38 | 46.61 | 4.43 | 4.23 |
| Nov 1 | 1.06 | 1.10 | 10.01 | 9.48 | 9.57 | 8.73 | 52.91 | 51.14 | 5.29 | 4.85 |
| Dec 1 | 0.84 | 0.93 | 11.19 | 10.89 | 13.57 | 11.87 | 53.91 | 51.92 | 6.04 | 5.66 |
| J an 1 | 0.78 | 0.89 | 12.28 | 12.02 | 15.99 | 13.65 | 53.17 | 51.38 | 6.53 | 6.17 |

Late (150-150)

| Sep 1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Oct 1 | 2.44 | 2.51 | 8.65 | 8.55 | 3.60 | 3.45 | 45.68 | 43.36 | 5.95 | 3.71 |
| Nov 1 | 2.02 | 2.06 | 8.98 | 8.72 | 4.51 | 4.30 | 50.66 | 47.53 | 4.55 | 4.15 |
| Dec 1 | 1.58 | 1.70 | 9.91 | 9.81 | 6.34 | 5.85 | 53.31 | 51.38 | 5.28 | 5.04 |
| J an 1 | 1.33 | 1.47 | 10.79 | 10.81 | 8.18 | 7.43 | 54.20 | 52.51 | 5.85 | 5.68 |

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, J anuary 1, 2000 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fruit type | Groves sampled | Acid | $\begin{aligned} & \hline \text { Solids } \\ & \text { (Brix) } \end{aligned}$ | Ratio | Unfinished juice per box | Solids per box |
|  | Number | Percent | Percent |  | Pounds | Pounds |
| ORANGES: |  |  |  |  |  |  |
| Early |  |  |  |  |  |  |
| Indian River Dist. | 8 |  | 0.78 | 11.90 | 15.26 | 48.21 | 5.75 |
| Other Areas | 71 | 0.77 | 11.46 | 14.92 | 50.32 | 5.76 |
| Midseason |  |  |  |  |  |  |
| Indian River Dist. | 11 | 0.91 | 12.34 | 13.69 | 52.25 | 6.45 |
| Other Areas | 32 | 0.89 | 11.92 | 13.64 | 51.08 | 6.08 |
| Late |  |  |  |  |  |  |
| Indian River Dist. | 25 | 1.52 | 11.28 | 7.55 | 54.84 | 6.18 |
| Other Areas | 125 | 1.46 | 10.72 | 7.41 | 52.05 | 5.58 |

## FRUIT SIZE COMPARISONS BY TYPES TO PREVIOUS SEASONS

Size frequency distributions are from the December size survey conducted in sample groves during the period of December 6 through 23, 1999. 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 December measurements

| Type of fruit and size in 4/5-bushel containers | 1997 | 1998 | 1999 |
| :---: | :---: | :---: | :---: |
|  | -- Percent -- |  |  |
| Early and midseason oranges: (excluding Navels) |  |  |  |
| 64 and larger | 3.7 | 1.9 | 3.4 |
| 80 | 15.1 | 11.7 | 17.2 |
| 100 | 34.7 | 36.9 | 38.3 |
| 125 | 32.5 | 35.2 | 29.9 |
| 163 and smaller | 14.0 | 14.3 | 11.2 |
| Valencia oranges: |  |  |  |
| 64 and larger | 5.7 | 3.7 | 7.0 |
| 80 | 21.0 | 19.5 | 25.3 |
| 100 | 40.6 | 39.7 | 37.0 |
| 125 | 25.4 | 28.1 | 22.2 |
| 163 and smaller | 7.3 | 9.0 | 8.5 |
| White seedless grapefruit: |  |  |  |
| 32 and larger | 25.0 | 15.1 | 13.8 |
| 36 | 22.1 | 20.8 | 18.4 |
| 40 | 21.4 | 21.6 | 21.2 |
| 48 | 14.0 | 18.6 | 18.5 |
| 56 | 7.5 | 9.7 | 10.4 |
| 63 and smaller | 10.0 | 14.2 | 17.7 |
| Colored seedless grapefruit: |  |  |  |
| 32 and larger | 15.1 | 6.6 | 7.6 |
| 36 | 20.7 | 16.6 | 13.5 |
| 40 | 23.3 | 22.9 | 20.8 |
| 48 | 20.1 | 24.4 | 21.2 |
| 56 | 9.9 | 13.7 | 13.8 |
| 63 and smaller | 10.9 | 15.8 | 23.1 |
| Temples: |  |  |  |
| 80 and larger | 40.2 | 24.4 | 32.8 |
| 100 | 39.9 | 46.0 | 32.4 |
| 120 | 14.7 | 23.7 | 23.4 |
| 156 and smaller | 5.2 | 5.9 | 11.4 |
| Honey tangerines: |  |  |  |
| 150 and larger | 90.0 | 90.4 | 79.9 |
| 176 | 5.7 | 5.9 | 9.9 |
| 210 | 2.9 | 2.5 | 6.5 |
| 246 | 1.3 | 1.1 | 2.4 |
| 294 and smaller | 0.1 | 0.1 | 1.3 |

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 frequentcy by diameter from December measurements.


