November 10, 1999

## ORANGES 211.0 MILLION BOXES

The October 1 orange forecasts for all states are repeated in this report since no November forecasts are made. The Florida all orange forecast is 14 percent more than the 185.7 million boxes recorded last season. During the past 10 seasons, the October forecast has deviated from final recorded utilization by an average of 3.1 percent; four of the seasons averaged 4.7 percent above and the remaining six averaged 2.1 percent below the final estimates of utilization.

## FCOJ YIELD 1.60 GALLONS PER BOX

Since there are no November forecasts or projections, the forecast for FCOJ remains at 1.60 gallons per box at 42.0 degrees Brix equivalent. Maturity test results on fruit collected October 25 and 26 are presented on page 3. All averages are unadjusted as in prior seasons and provide a measure of changes occurring in fruit still on the trees. The tests do not reflect the same levels of maturity as those being reported by processors from plant tests or plant recovery rates because the latter relate to fruit that has been harvested.

The final 1998-99 all orange season average FCOJ yield as reported by the Florida Citrus Processors Association was 1.63 gallons per box. The next FCOJ projection will be released with the box forecasts on December 10.

Citrus production, October 1, 1999
forecasts by varieties and states, with comparisons

| Crop and State | Production |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $1996-97$ | $1997-98$ | $1998-99$ | Forecast |
| Early, Midseason, |  | $--1,000$ | boxes $-\cdots$ |  |
| and Navel Oranges: |  |  |  |  |
| FLORIDA | 134,200 | 140,000 | 112,000 | 124,000 |
| California | 40,000 | 44,000 | 21,000 | 40,000 |
| Texas | 1,300 | 1,350 | 1,250 | 1,300 |
| Arizona | 550 | 350 | 550 | 400 |
| Total Above Varieties | 176,050 | 185,700 | 134,800 | 165,700 |
| Valencias: |  |  |  |  |
| FLORIDA | 92,000 | 104,000 | 73,700 | 87,000 |
| California | 24,000 | 25,000 | 17,000 | 27,000 |
| Texas | 120 | 175 | 180 | 300 |
| Arizona | 850 | 650 | 600 | 500 |
| Total Valencias | 116,970 | 129,825 | 91,480 | 114,800 |
| All Oranges: |  |  |  |  |
| FLORIDA | 226,200 | 244,000 | 185,700 | 211,000 |
| California | 64,000 | 69,000 | 38,000 | 67,000 |
| Texas | 1,420 | 1,525 | 1,430 | 1,600 |
| Arizona | 1,400 | 1,000 | 1,150 | 900 |
| Total All Oranges | 293,020 | 315,525 | 226,280 | 280,500 |

## FORECAST DATES 1999-00 SEASON

December 10, 1999
J anuary 11, 2000
February 11, 2000
March 10, 2000
A pril 11, 2000
May 12, 2000
J une 9, 2000
July 12, 2000

## GRAPEFRUIT NOW 46.0 MILLION BOXES

The all grapefruit forecast is decreased 4.0 million boxes (eight percent) from October to 46.0 million boxes. White seedless grapefruit is now forecast at 18.5 million boxes, dow 2.0 million from October. Colored seedless varieties are also down 2.0 million to 27.0 million boxes.

The reduction is a result of fruit blow $n$ off the trees and a slightly increased droppage rate for fruit remaining on the trees. Most of the reduction is in the Indian River area where Hurricane Irene passed on October 15 and 16. Some fruit was also lost in the lower interior counties of Hendry and Collier, but harvest $w$ as more advanced in that area and $w$ inds not as high. No other areas were affected. Although the loss from the winds is of the larger more mature fruit, some increased sizing is expected on fruit remaining on the trees.

Additional loss may occur in coming months from increased droppage because of high water levels in some groves and increased incidence of disease because of the excessive water.

With this reduction, this season's forecast of all grapefruit is about 1 million boxes less than last season's 47.05 million boxes utilized. White seedless is up 700,000 boxes from last season and colored varieties down 1.7 million boxes. Seedy utilization at 500,000 boxes is near the same as last season.

University of Florida
Institute of Food and Agricultural Sciences

FLORIDA CITRUS: Distribution of 1998-99 production and 1999-00
forecast by marketing districts and fruit types

| Fruit type | Indian River |  | Gulf |  | Florida Sun Ridge |  | State total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998-99 | 1999-00 | 1998-99 | 1999-00 | 1998-99 | 1999-00 | 1998-99 | 1999-00 |
| ORANGES: $\quad--1,000$ boxes |  |  |  |  |  |  |  |  |
| Early \& Midseason |  |  |  |  |  |  |  |  |
| (Including Navels) | 9,500 | 10,200 | 22,600 | 24,900 | 79,900 | 88,900 | 112,000 | 124,000 |
| Valencia | 7,600 | 12,400 | 19,400 | 21,800 | 46,700 | 52,800 | 73,700 | 87,000 |
| All | 17,100 | 22,600 | 42,000 | 46,700 | 126,600 | 141,700 | 185,700 | 211,000 |
| GRAPEFRUIT: |  |  |  |  |  |  |  |  |
| White Seedless | 12,700 | 13,500 | 1,400 | 1,300 | 3,700 | 3,700 | 17,800 | 18,500 |
| Colored Seedless | 18,800 | 17,700 | 5,300 | 4,800 | 4,600 | 4,500 | 28,700 | 27,000 |
| Other (Seedy) | 50 | 50 | -- | -- | 500 | 450 | 550 | 500 |
| All | 31,550 | 31,250 | 6,700 | 6,100 | 8,800 | 8,650 | 47,050 | 46,000 |

Citrus production, November 1, 1999
forecasts by varieties and states, with comparisons

| Crop and State | Production |  | Forecast |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1997-98 ${ }^{\text {1/ }}$ | 1998-99 | Oct 8 '99 | Nov 10 '99 |
| -- 1,000 boxes --- |  |  |  |  |
| Grapefruit: |  |  |  |  |
| FLORIDA-All | 49,550 | 47,050 | 50,000 | 46,000 |
| Seedless | 48,900 | 46,500 | 49,500 | 45,500 |
| White | 18,300 | 17,800 | 20,500 | 18,500 |
| Colored | 30,600 | 28,700 | 29,000 | 27,000 |
| Seedy (Other) | 650 | 550 | 500 | 500 |
| Texas | 4,800 | 6,100 | 5,500 | 5,500 |
| A rizona | 800 | 750 | 650 | 650 |
| California | 8,000 | 7,500 | 8,000 | 8,000 |
| Total Grapefruit | 63,150 | 61,400 | 64,150 | 60,150 |
| Lemons: |  |  |  |  |
| California | 21,000 | 16,200 | 20,500 | 20,500 |
| A rizona | 2,600 | 3,450 | 3,900 | 3,900 |
| Total Lemons | 23,600 | 19,650 | 24,400 | 24,400 |
| Limes: Florida | 440 | 500 | 600 | 600 |
| Temples: Florida | 2,250 | 1,800 | 2,100 | 2,100 |
| Tangelos: Florida | 2,850 | 2,550 | 2,600 | 2,600 |
| K-Early: Florida | 40 | 80 | 70 | 70 |
| Tangerines: |  |  |  |  |
| FLORIDA-All | 5,200 | 4,950 | 6,400 | 6,400 |
| Early ${ }^{2 /}$ | 3,200 | 3,050 | 4,200 | 4,200 |
| Honey | 2,000 | 1,900 | 2,200 | 2,200 |
| California ${ }^{3 /}$ | 2,400 | 1,500 | 2,300 | 2,300 |
| Arizona ${ }^{3 /}$ | 600 | 950 | 700 | 700 |
| Total Tangerines | 8,200 | 7,400 | 9,400 | 9,400 |

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

## ESTIMATE OF PRODUCTION BY MARKETING DISTRICTS

The production forecasts made in October for Florida oranges and updated for grapefruit have been divided between marketing districts for this report. These are shown in the table above with the 1998-99 production for comparison.

## MATURITY AND WEATHER

The maturity test results reported on page 3 are from fruit collected October 25-26 and tested October 27-29. These samples were collected from the same trees as the September and October surveys and reflect maturity levels for unharvested fruit.

The next maturity tests and FCOJ yield projection will be released with the crop forecast December $10^{\text {th }}$ at 8:30 a.m.

Weather during October was very wet in all citrus producing areas of Florida. The first week of October a tropical depression dumped several inches of rain on most citrus counties. Hurricane Irene moved through the low er interior and east coast citrus areas on October 15 and 16 leaving many groves with excessive moisture conditions. Growers started pumping water out of the groves immediately. Brown rot is reported affecting some early oranges, causing drop of mature fruit.

Loss of fruit was greatest on grapefruit in the windy areas. Valencia oranges and specialty types did not lose as much due to their smaller size and general immature status. Maturity levels are behind last year as they have been all of this season. The Brix and pounds of juice are lagging on all types of oranges which combine to give a lower pounds solids per box.

| Fruit type (No. groves) test date | Acid |  | $\begin{aligned} & \hline \text { Solids } \\ & \text { (Brix) } \end{aligned}$ |  | 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 (118-118)

| Sep 1 | 1.73 | 1.73 | 9.53 | 9.35 | 5.66 | 5.52 | 42.10 | 41.03 | 4.01 | 3.82 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Oct 1 | 1.15 | 1.20 | 9.37 | 9.36 | 8.29 | 7.94 | 47.90 | 46.41 | 4.48 | 4.34 |
| Nov 1 | 0.90 | 0.94 | 10.15 | 9.69 | 11.49 | 10.53 | 51.07 | 49.98 | 5.18 | 4.84 |
| (54-54) |  |  |  |  |  |  |  |  |  |  |
| Sep 1 | 1.94 | 1.99 | 9.42 | 9.13 | 4.98 | 4.68 | 42.53 | 39.46 | 4.01 | 3.60 |
| Oct 1 | 1.30 | 1.41 | 9.14 | 9.10 | 7.18 | 6.55 | 48.30 | 46.88 | 4.42 | 4.27 |
| Nov 1 | 1.06 | 1.10 | 10.01 | 9.54 | 9.58 | 8.55 | 52.92 | 51.06 | 5.30 | 4.88 |
| (150-150) |  |  |  |  |  |  |  |  |  |  |
| Sep 1 | NA | NA | NA | NA | NA | $N A$ | $N A$ | $N A$ | $N A$ | $N A$ |
| Oct 1 | 2.44 | 2.51 | 8.65 | 8.55 | 3.60 | 3.45 | 45.68 | 43.36 | 3.95 | 3.71 |
| Nov 1 | 2.02 | 2.06 | 8.98 | 8.72 | 4.51 | 4.30 | 50.66 | 47.53 | 4.55 | 4.15 |

GRA PEFRUIT:
Seedless
White (47-49)

| Sep 1 | 1.81 | 1.84 | 10.10 | 10.28 | 5.58 | 5.61 | 30.66 | 29.07 | 3.09 | 2.98 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Oct 1 | 1.56 | 1.62 | 9.77 | 9.81 | 6.32 | 6.11 | 35.94 | 34.56 | 3.51 | 3.38 |
| Nov 1 | 1.48 | 1.44 | 10.10 | 9.59 | 6.87 | 6.71 | 38.66 | 38.04 | 3.90 | 3.65 |
| lored (44-46) |  |  |  |  |  |  |  |  |  |  |
| Sep 1 | 1.79 | 1.76 | 9.97 | 10.12 | 5.60 | 5.77 | 31.48 | 28.64 | 3.14 | 2.90 |
| Oct 1 | 1.49 | 1.55 | 9.64 | 9.75 | 6.51 | 6.34 | 34.99 | 35.28 | 3.37 | 3.44 |
| Nov 1 | 1.37 | 1.38 | 9.99 | 9.67 | 7.32 | 7.05 | 40.18 | 38.08 | 4.01 | 3.68 |

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, November 1, 1999

| 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. | 11 | 0.94 | 9.92 | 10.67 | 48.59 | 4.82 |
| Other Areas | 107 | 0.94 | 9.67 | 10.52 | 50.12 | 4.84 |
| Midseason |  |  |  |  |  |  |
| Indian River Dist. | 11 | 1.14 | 9.62 | 8.60 | 50.14 | 4.81 |
| Other Areas | 43 | 1.09 | 9.52 | 8.91 | 51.30 | 4.89 |
| Late |  |  |  |  |  |  |
| Indian River Dist. | 25 | 2.15 | 9.09 | 4.29 | 47.58 | 4.32 |
| Other Areas | 125 | 2.04 | 8.65 | 4.31 | 47.52 | 4.11 |
| GRAPEFRUIT: |  |  |  |  |  |  |
| White Seedless |  |  |  |  |  |  |
| Indian River Dist. | 35 | 1.47 | 9.69 | 6.63 | 37.22 | 3.60 |
| Other Areas | 14 | 1.36 | 9.33 | 6.90 | 40.11 | 3.75 |
| Colored Seedless |  |  |  |  |  |  |
| Indian River Dist. | 38 | 1.39 | 9.75 | 7.05 | 37.59 | 3.66 |
| Other Areas | 8 | 1.32 | 9.29 | 7.07 | 40.37 | 3.76 |

Florida Citrus: Size frequency distributions from October measurements

| Type of fruit and size in 4/5-bushel containers | 1997 | 1998 | 1999 |
| :---: | :---: | :---: | :---: |
|  | -- Percent -- |  |  |
| Early and midseason oranges: (excluding Navels) |  |  |  |
| 64 and larger | 1.6 | 0.5 | 1.3 |
| 80 | 8.1 | 3.9 | 9.5 |
| 100 | 25.5 | 21.1 | 29.8 |
| 125 | 36.8 | 42.9 | 36.4 |
| 163 and smaller | 28.0 | 31.6 | 23.0 |
| Navel oranges: |  |  |  |
| 64 and larger | 48.4 | 36.3 | 60.6 |
| 80 | 31.8 | 35.6 | 25.9 |
| 100 | 15.7 | 21.1 | 10.4 |
| 125 | 3.5 | 5.4 | 2.7 |
| 163 and smaller | 0.6 | 1.6 | 0.4 |
| White seedless grapefruit: |  |  |  |
| 32 and larger | 12.7 | 5.7 | 7.2 |
| 36 | 13.9 | 11.7 | 12.7 |
| 40 | 17.2 | 18.0 | 16.6 |
| 48 | 20.3 | 20.9 | 17.2 |
| 56 | 13.2 | 14.6 | 13.9 |
| 63 and smaller | 22.7 | 29.1 | 32.4 |
| Colored seedless grapefruit: |  |  |  |
| 32 and larger | 8.1 | 3.7 | 4.8 |
| 36 | 12.6 | 9.6 | 9.6 |
| 40 | 18.3 | 18.5 | 14.0 |
| 48 | 21.4 | 22.8 | 19.3 |
| 56 | 15.5 | 15.8 | 15.0 |
| 63 and smaller | 24.1 | 29.6 | 37.3 |
| Fallglo tangerines: |  |  |  |
| 150 and larger | 98.2 | 90.9 | 81.2 |
| 176 | 1.8 | 5.2 | 9.7 |
| 210 | -- | 3.9 | 2.3 |
| 246 | -- | -- | 5.1 |
| 294 and smaller | -- | -- | 1.7 |
| Robinson tangerines: |  |  |  |
| 150 and larger | 51.3 | 64.6 | 84.8 |
| 176 | 18.2 | 17.2 | 10.6 |
| 210 | 20.1 | 10.1 | 3.8 |
| 246 | 7.1 | 5.1 | 0.8 |
| 294 and smaller | 3.3 | 3.0 | -- |
| Sunburst tangerines: |  |  |  |
| 150 and larger | 50.2 | 38.8 | 50.2 |
| 176 | 19.0 | 19.0 | 15.5 |
| 210 | 13.3 | 17.6 | 13.6 |
| 246 | 10.7 | 14.1 | 11.4 |
| 294 and smaller | 6.8 | 10.5 | 9.3 |
| Tangelos: |  |  |  |
| 80 and larger | 17.8 | 6.2 | 15.7 |
| 100 | 28.2 | 17.3 | 27.1 |
| 120 | 31.4 | 36.1 | 29.1 |
| 156 and smaller | 22.6 | 40.4 | 28.1 |

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

Diameter
(Inches)


CHART 2: White seedless grapefruit size frequentcy by diameter from October measurements.


