



# CITRUS MARCH FORECAST

## MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department of Agriculture & Consumer Services  
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March 10, 2014

**Florida All Orange Production Down 1 Percent**  
**Florida Non-Valencia Orange Production Down 2 Percent**  
**Florida Valencia Orange Production Unchanged**  
**Florida All Grapefruit Production Down 6 Percent**  
**Florida All Tangerine Production Down 7 Percent**  
**Florida Tangelo Production Up 13 Percent**  
**Florida FCOJ Yield 1.61 Gallons per Box (42° Brix)**

FORECAST DATES	–	2013-2014 SEASON
[Release time 12:00 p.m. EDT]		
April 9, 2014		May 9, 2014
June 11, 2014		July 11, 2014

### Citrus Production by Type and State – United States

Crop and State	Production <sup>1</sup>			2013-2014 Forecasted Production <sup>1</sup>	
	2010-2011 (1,000 boxes)	2011-2012 (1,000 boxes)	2012-2013 (1,000 boxes)	February (1,000 boxes)	March (1,000 boxes)
<b>Non-Valencia Oranges <sup>2</sup></b>					
Florida .....	70,300	74,200	67,100	54,000	53,000
California <sup>3</sup> .....	48,000	45,500	44,000	42,000	42,000
Texas <sup>3</sup> .....	1,700	1,108	1,499	1,455	1,455
United States .....	120,000	120,808	112,599	97,455	96,455
<b>Valencia Oranges</b>					
Florida .....	70,200	72,500	66,500	61,000	61,000
California .....	14,500	12,500	12,500	11,500	12,000
Texas <sup>3</sup> .....	249	311	289	370	370
United States .....	84,949	85,311	79,289	72,870	73,370
<b>All Oranges</b>					
Florida .....	140,500	146,700	133,600	115,000	114,000
California .....	62,500	58,500	56,500	53,500	54,000
Texas <sup>3</sup> .....	1,949	1,419	1,788	1,825	1,825
United States .....	204,949	206,119	191,888	170,325	169,825
<b>Grapefruit</b>					
Florida-All .....	19,750	18,850	18,350	17,000	16,000
White .....	5,850	5,350	5,250	4,500	4,000
Colored .....	13,900	13,500	13,100	12,500	12,000
California <sup>3</sup> .....	4,310	4,000	4,000	4,000	4,000
Texas <sup>3</sup> .....	6,300	4,800	6,100	5,370	5,370
United States .....	30,360	27,650	28,450	26,370	25,370
<b>Lemons</b>					
California <sup>3</sup> .....	20,500	20,500	21,000	20,000	20,000
Arizona <sup>3</sup> .....	2,500	750	1,800	1,785	1,785
United States .....	23,000	21,250	22,800	21,785	21,785
<b>Tangelos</b>					
Florida .....	1,150	1,150	1,000	800	900
<b>Tangerines</b>					
Florida-All .....	4,650	4,290	3,280	3,500	3,250
Early <sup>4</sup> .....	2,600	2,330	1,910	1,800	1,750
Honey .....	2,050	1,960	1,370	1,700	1,500
California <sup>3,5</sup> .....	10,600	10,800	13,000	13,200	13,200
Arizona <sup>3,5</sup> .....	300	200	200	200	200
United States .....	15,550	15,290	16,480	16,900	16,650

<sup>1</sup> Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California-80, Florida-85, Texas-80; lemons-80; tangelos-90; tangerines and mandarins in Arizona and California-80, Florida-95.

<sup>2</sup> Navel and miscellaneous varieties in California. Early (including Navel) and midseason varieties in Florida and Texas. Includes small quantities of tangerines in Texas and Temples in Florida.

<sup>3</sup> Estimates carried forward from January forecast.

<sup>4</sup> Fallglo and Sunburst varieties.

<sup>5</sup> Includes tangelos and tangors.

## **All Oranges 114.0 Million Boxes**

The 2013-2014 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 114.0 million boxes, down 1.0 million boxes from February and 15 percent less than last season's production. The total includes 53.0 million boxes of non-Valencia oranges (early, midseason, Navel, and Temple varieties) and 61.0 million boxes of Valencia oranges. The hurricane seasons of 2004-2005 and 2005-2006 have been excluded from the usual 10-year regression, and from comparisons of the current season to previous seasons, unless otherwise noted. For those previous 8 seasons, the March forecast has deviated from final production by an average of 2 percent with 3 seasons below and 5 above, with differences ranging from 3 percent below to 4 percent above. All references to "average", "minimum", or "maximum" refer to the previous 8 non-hurricane seasons unless noted.

## **Non-Valencia Oranges 53.0 Million Boxes**

The forecast of non-Valencia orange production is decreased by 1.0 million boxes to 53.0 million boxes, based on utilization to the 1<sup>st</sup> of the month. The Row Count survey conducted February 25-26 showed 98 percent of the rows have been harvested. The Navel portion of the non-Valencia forecast is final at 1.95 million boxes, 4 percent of the total.

## **Valencia Oranges 61.0 Million Boxes**

The forecast of Valencia production remains at 61.0 million boxes. Limited harvest has begun. Fruit size is projected to be below the minimum, requiring 242 pieces of fruit to fill a 90-pound box. The projection of 26 percent droppage is above the maximum.

## **All Grapefruit 16.0 Million Boxes**

The forecast of all grapefruit production is lowered by 1.0 million boxes to 16.0 million boxes. Both the white and colored components are reduced by 500 thousand boxes, resulting in forecasts of 4.0 million boxes of white and 12.0 million boxes of colored grapefruit. Although size and drop components were final last month, a follow-up survey was conducted in February, which shows white grapefruit size continues near the minimum, and colored grapefruit size is the smallest in the series dating back to the 1968-1969 season. Results of this survey show both colored grapefruit and white grapefruit droppage is the highest of any non-hurricane season. The Row Count survey indicated 52 percent of the white grapefruit and 62 percent of the colored grapefruit rows have been harvested.

## **All Tangerines 3.25 Million Boxes**

The forecast of all tangerine production is lowered by 250 thousand boxes to 3.25 million boxes. The early tangerine forecast (Fallglo and Sunburst) is adjusted from 1.80 to 1.75 million boxes, with the harvest season complete for those varieties. The forecast of the later maturing Honey variety is reduced 200 thousand boxes to 1.5 million boxes. The Row Count survey showed 45 percent of the Honey tangerine rows have been harvested.

## **Tangelos 900 Thousand Boxes**

The forecast of tangelo production is raised 100,000 boxes to 900,000 boxes, including an allocation of 100,000 boxes for non-certified use. Estimated utilization for the week ending March 2, as reported by the Citrus Administrative Committee, is 12,000 boxes. The Row Count survey conducted February 25-26 showed 92 percent of the rows have been harvested.

## **FCOJ Yield 1.61 Gallons per Box**

The projection for frozen concentrated orange juice (FCOJ) remains at 1.61 gallons per box of 42° Brix concentrate. The yield projection for the non-Valencia oranges is lowered to 1.52 gallons per box while the projection for Valencia oranges continues at 1.69 gallons per box. Last season's final yield for all oranges was 1.587680 gallons per box, as reported by the Florida Department of Citrus. Last season's final yield for the components were 1.508465 for non-Valencia oranges and 1.692050 for Valencia oranges.

## Forecast Components, by Type — Florida: March 2014

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

Type	Bearing trees (1,000 trees)	Fruit per tree (number)	Droppage (percent)	Fruit per box (number)
<b>ORANGES</b>				
Early-midseason .....	23,660	918	23	286
Navel .....	985	429	19	144
Valencia .....	32,149	614	26	242
<b>GRAPEFRUIT</b>				
White .....	1,282	555	29	118
Colored .....	3,617	500	25	123

## Maturity

Regular bloom fruit samples of Valencia oranges were collected from groves on established routes on February 25-26, 2014, in Florida's five major citrus producing areas and tested February 27, 2014. The acid level is higher than the previous season while solids (Brix) is lower, resulting in lower ratios. In comparison to last season, unfinished juice per box is up but solids per box is down.

Acids and solids (Brix) in fruit from the Indian River are lower than in other areas and ratios are higher. Unfinished juice per box and solids per box for Indian River fruit are lower compared to other areas and also lower than last season's values.

## Citrus Unadjusted Maturity Tests — Florida: 2012-2013 and 2013-2014

[Averages of regular bloom fruit from sample groves. Juice and solids per box are unadjusted and not comparable to juice processing plant test results. 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]

Fruit type (number of groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>LATE ORANGES (149-147)</b>										
Oct 1 .....	2.16	2.19	8.81	8.65	4.17	4.01	44.92	46.38	3.96	4.01
Nov 1 .....	1.69	1.84	9.29	9.25	5.60	5.08	51.30	50.84	4.76	4.70
Dec 1 .....	1.51	1.51	10.10	10.06	6.83	6.76	53.53	54.28	5.41	5.46
Jan 1 .....	1.34	1.27	10.90	10.88	8.26	8.66	54.52	54.21	5.94	5.90
Feb 1 .....	1.13	1.20	11.80	11.22	10.62	9.50	55.56	55.47	6.55	6.22
Mar 1 .....	1.04	1.06	12.19	11.90	11.93	11.34	54.92	55.76	6.69	6.63

## Citrus Maturity Test Averages, by Areas — Florida: March 1, 2012-2013 and 2013-2014

Fruit type (number of groves)	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>LATE ORANGES</b>										
Indian River (27-29).....	1.09	1.05	12.33	11.78	11.44	11.45	55.86	55.61	6.88	6.55
Other Areas (122-118)..	1.02	1.07	12.16	11.93	12.04	11.32	54.71	55.80	6.65	6.65

## Fruit Size Comparisons by Types to Previous Seasons

Size frequency distributions from the February 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 include fruit from regular bloom and exclude fruit from summer bloom.

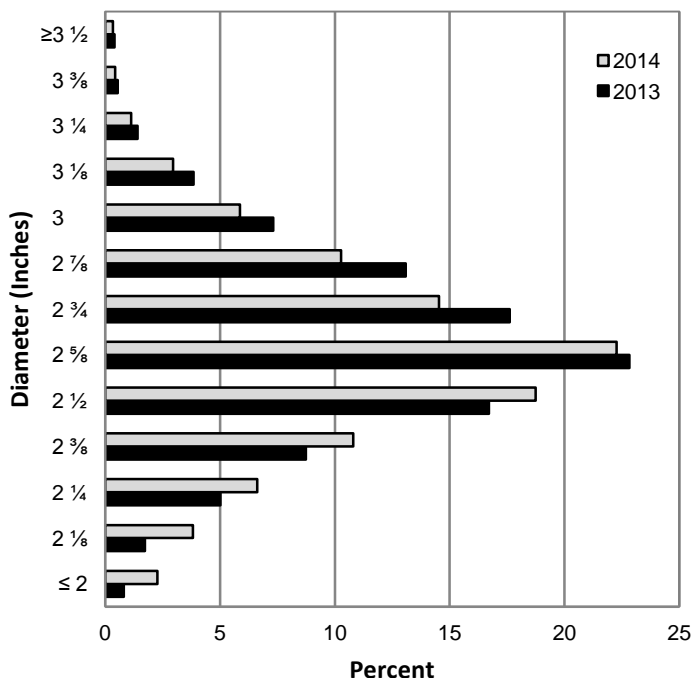
### Citrus Size Frequency Measurement Distributions, by Type — Florida: February Survey

Type and number of fruit per 4/5 – bushel containers	2012	2013	2014	Type and number of fruit per 4/5 – bushel containers	2012	2013	2014
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
<b>VALENCIA ORANGES</b>				<b>WHITE GRAPEFRUIT <sup>1</sup></b>			
64 or less .....	6.5	4.1	3.0	32 or less .....	15.9	6.3	8.1
80 .....	25.3	15.5	12.2	36 .....	19.6	9.7	10.9
100 .....	40.1	34.8	30.1	40 .....	14.7	8.8	8.9
125 .....	21.6	29.3	31.2	48 .....	14.6	14.3	12.1
163 or more .....	6.5	16.3	23.5	56 .....	9.4	10.1	9.3
				63 or more .....	25.8	50.8	50.7
<b>HONEY TANGERINES</b>				<b>COLORED GRAPEFRUIT</b>			
80 or less .....	16.4	17.2	8.1	32 or less .....	12.2	1.3	4.8
100 .....	24.1	24.6	13.7	36 .....	11.9	7.0	6.1
120 .....	25.9	23.2	21.9	40 .....	14.3	10.3	8.3
176 .....	15.9	11.6	17.1	48 .....	16.9	13.9	12.6
210 or more .....	17.7	23.4	39.2	56 .....	12.9	12.0	11.2
				63 or more .....	31.8	55.5	57.0

<sup>1</sup> Excludes seedy.

The charts below show the distribution of fruit sizes in 2014 compared to 2013. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.

**Fruit Size Frequency Measurements, Valencia Oranges, by Diameter - Florida: February Survey**



**Fruit Size Frequency Measurements, White Seedless Grapefruit, by Diameter - Florida: February Survey**

