



# CITRUS MARCH FORECAST

## MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department of Agriculture and Consumer Services  
2290 Lucien Way, Suite 300, Maitland, FL 32751-7057  
(407) 648-6013 · (855) 271-9801 FAX · [www.nass.usda.gov/fl](http://www.nass.usda.gov/fl)

March 10, 2015

**Florida All Orange Production Down 1 Percent**  
**Florida Non-Valencia Orange Production Down 2 Percent**  
**Florida Valencia Orange Production Unchanged**  
**Florida All Grapefruit Production Unchanged**  
**Florida All Tangerine Production Unchanged**  
**Florida Tangelo Production Unchanged**  
**Florida FCOJ Yield 1.55 Gallons per Box (42° Brix)**

2014-2015 SEASON FORECAST DATES	
[Release time 12:00 p.m. EDT]	
April 9, 2015	May 12, 2015
June 10, 2015	July 10, 2015

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

Crop and State	Production <sup>1</sup>			2014-2015 Forecasted Production <sup>1</sup>	
	2011-2012	2012-2013	2013-2014	February	March
	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)
<b>Non-Valencia Oranges <sup>2</sup></b>					
<b>Florida</b> .....	<b>74,200</b>	<b>67,100</b>	<b>53,300</b>	<b>48,000</b>	<b>47,000</b>
California <sup>3</sup> .....	45,500	42,500	39,000	40,000	40,000
Texas <sup>3</sup> .....	1,108	1,499	1,400	1,670	1,670
United States .....	120,808	111,099	93,700	89,670	88,670
<b>Valencia Oranges</b>					
<b>Florida</b> .....	<b>72,500</b>	<b>66,500</b>	<b>51,300</b>	<b>55,000</b>	<b>55,000</b>
California .....	12,500	12,000	11,000	10,000	10,000
Texas <sup>3</sup> .....	311	289	376	345	345
United States .....	85,311	78,789	62,676	65,345	65,345
<b>All Oranges</b>					
<b>Florida</b> .....	<b>146,700</b>	<b>133,600</b>	<b>104,600</b>	<b>103,000</b>	<b>102,000</b>
California .....	58,000	54,500	50,000	50,000	50,000
Texas <sup>3</sup> .....	1,419	1,788	1,776	2,015	2,015
United States .....	206,119	189,888	156,376	155,015	154,015
<b>Grapefruit</b>					
<b>Florida-All</b> .....	<b>18,850</b>	<b>18,350</b>	<b>15,650</b>	<b>15,000</b>	<b>15,000</b>
<b>White</b> .....	<b>5,350</b>	<b>5,250</b>	<b>4,150</b>	<b>4,000</b>	<b>4,000</b>
<b>Colored</b> .....	<b>13,500</b>	<b>13,100</b>	<b>11,500</b>	<b>11,000</b>	<b>11,000</b>
California <sup>3</sup> .....	4,000	4,500	4,000	4,000	4,000
Texas <sup>3</sup> .....	4,800	6,100	5,700	6,000	6,000
United States .....	27,650	28,950	25,350	25,000	25,000
<b>Lemons</b>					
California <sup>3</sup> .....	20,500	21,000	19,000	20,000	20,000
Arizona <sup>3</sup> .....	750	1,800	1,800	2,200	2,200
United States .....	21,250	22,800	20,800	22,200	22,200
<b>Tangelos</b>					
<b>Florida</b> .....	<b>1,150</b>	<b>1,000</b>	<b>880</b>	<b>700</b>	<b>700</b>
<b>Tangerines</b>					
<b>Florida-All</b> .....	<b>4,290</b>	<b>3,280</b>	<b>2,900</b>	<b>2,500</b>	<b>2,500</b>
<b>Early</b> <sup>4</sup> .....	<b>2,330</b>	<b>1,910</b>	<b>1,750</b>	<b>1,450</b>	<b>1,450</b>
<b>Honey</b> .....	<b>1,960</b>	<b>1,370</b>	<b>1,150</b>	<b>1,050</b>	<b>1,050</b>
California <sup>3,5</sup> .....	10,800	13,000	14,500	15,500	15,500
Arizona <sup>3,5</sup> .....	200	200	200	220	220
United States .....	15,290	16,480	17,600	18,220	18,220

<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 mandarins, tangelos, and tangors.

## Regressions

Regression data used are from the 2006-2007 through 2013-2014 seasons. All references to “average”, “minimum”, and “maximum” refer to these 8 seasons unless noted.

### All Oranges 102.0 Million Boxes

The 2014-2015 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 102.0 million boxes, down 1.0 million boxes from February and 2 percent less than last season’s production. The total includes 47.0 million boxes of non-Valencia oranges (early, midseason, Navel, and Temple varieties) and 55.0 million boxes of Valencia oranges. For the previous 8 seasons used in the regressions, the March forecast has deviated from final production by an average of 3 percent with 3 seasons below and 5 above, with differences ranging from 3 percent below to 9 percent above.

### Non-Valencia Oranges 47.0 Million Boxes

The forecast of non-Valencia orange production is lowered by 1.0 million boxes to 47.0 million boxes, based on certified utilization to the 1<sup>st</sup> of the month. The Row Count survey conducted March 2-3 showed 99 percent of the rows harvested. The Navel portion of the non-Valencia forecast is final at 1.4 million boxes, 3 percent of the non-Valencia total.

### Valencia Oranges 55.0 Million Boxes

The forecast of Valencia production remains at 55.0 million boxes. Limited harvest has begun. Projected fruit size is below the minimum, requiring 245 pieces of fruit to fill a 90-pound box. Projected droppage is well above average at 28 percent.

### All Grapefruit 15.0 Million Boxes

The forecast of all grapefruit production remains at 15.0 million boxes. The white grapefruit forecast is unchanged at 4.0 million boxes and the colored grapefruit forecast remains at 11.0 million boxes. Although size and drop components were final last month, a follow-up survey was conducted in February. Results show fruit size for both white and colored grapefruit has continued below average, the droppage rate for white grapefruit is below the maximum, and the colored grapefruit droppage is near maximum. The Row Count survey conducted March 2-3, 2015, indicated 58 percent of the colored grapefruit rows and 39 percent of the white grapefruit rows have been harvested.

### All Tangerines 2.5 Million Boxes

The forecast of all tangerine production remains at 2.5 million boxes. The early tangerine varieties (Fallglo and Sunburst) are 1.45 million boxes and the later maturing Honey tangerine variety are unchanged at 1.05 million boxes. Early tangerine harvest is complete for this season, while the harvesting of the Honey tangerine continues at a normal pace. Although size and drop components were final last month, a follow-up survey was conducted in February. Results show fruit size has continued below the minimum and droppage remains at a near maximum level.

### Tangelos 700 Thousand Boxes

The tangelo forecast remains at 700,000 boxes. Estimated utilization to March 1 is 676,000 boxes, including an allocation for non-certified fruit. The Row Count survey conducted March 2-3, 2015, showed 89 percent rows have been harvested.

### FCOJ Yield 1.55 Gallons per Box

The projection for frozen concentrated orange juice (FCOJ) is lowered from 1.57 to 1.55 gallons per box of 42° Brix concentrate. The yield projection for the non-Valencia oranges is lowered from 1.46 to 1.45 gallons per box and the projection for Valencia oranges is lowered from 1.69 to 1.65 gallons per box. Last season’s final yield for all oranges was 1.569080 gallons per box, as reported by the Florida Department of Citrus. Last season’s final yields for the components were 1.521318 for non-Valencia oranges and 1.642463 for Valencia oranges.

## Forecast Components, by Type — Florida: March 2015

[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 .....	22,707	890	22	303
Navel .....	970	295	21	139
Valencia .....	31,190	624	28	245
<b>GRAPEFRUIT</b>				
White .....	1,199	477	24	113
Colored .....	3,374	445	27	118

## Maturity

Regular bloom fruit samples of Valencia oranges were collected from groves on established routes on March 2-3, 2015, in Florida's five major citrus producing areas and tested March 4, 2015. The acid level this season is higher than the previous season while solids (Brix) are lower, resulting in lower ratios. In comparison to last season, unfinished juice per box and solids per box are down.

Acids and solids (Brix) in fruit from the Indian River are higher than in other areas resulting in higher ratios. Unfinished juice per box is lower for Indian River fruit compared to other areas, while solids per box are higher.

## Citrus Unadjusted Maturity Tests — Florida: 2013-2014 and 2014-2015

[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	
	2013-2014	2014-2015	2013-2014	2014-2015	2013-2014	2014-2015	2013-2014	2014-2015	2013-2014	2014-2015
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>LATE ORANGES</b> (147-148)										
Oct 1 .....	2.19	2.08	8.65	8.69	4.01	4.22	46.38	45.19	4.01	3.93
Nov 1 .....	1.84	1.76	9.25	9.10	5.08	5.22	50.84	50.36	4.70	4.58
Dec 1 .....	1.51	1.48	10.06	9.70	6.76	6.61	54.28	53.87	5.46	5.23
Jan 1 .....	1.27	1.26	10.88	10.85	8.66	8.72	54.21	54.83	5.90	5.95
Feb 1 .....	1.20	1.18	11.22	11.32	9.50	9.71	55.47	55.20	6.22	6.25
Mar 1 .....	1.06	1.09	11.90	11.78	11.34	10.88	55.76	54.51	6.63	6.42

## Citrus Maturity Test Averages, by Areas — Florida: March 1, 2013-2014 and 2014-2015

Fruit type (number of groves)	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2013-2014	2014-2015	2013-2014	2014-2015	2013-2014	2014-2015	2013-2014	2014-2015	2013-2014	2014-2015
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>LATE ORANGES</b>										
Indian River (29-29).....	1.05	1.12	11.78	12.23	11.45	11.04	55.61	54.09	6.55	6.62
Other Areas (118-119)..	1.07	1.09	11.93	11.67	11.32	10.84	55.80	54.61	6.65	6.37

## 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.

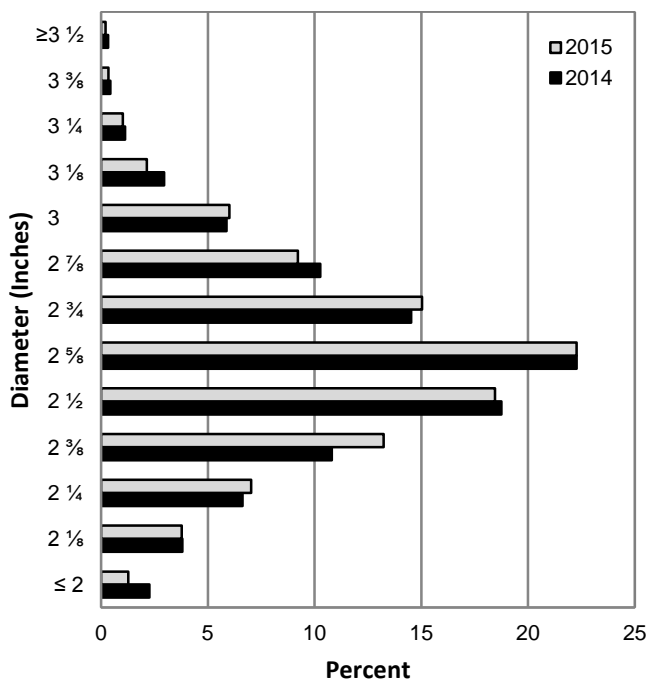
### Citrus Size Frequency Measurement Distributions, by Type — Florida: February Survey

Type and number of fruit per 4/5 – bushel containers	2013	2014	2015	Type and number of fruit per 4/5 – bushel containers	2013	2014	2015
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
<b>VALENCIA ORANGES</b>				<b>WHITE GRAPEFRUIT <sup>1</sup></b>			
64 or less .....	4.1	3.0	2.5	32 or less .....	6.3	8.1	4.1
80 .....	15.5	12.2	11.2	36 .....	9.7	10.9	11.2
100 .....	34.8	30.1	30.1	40 .....	8.8	8.9	13.5
125 .....	29.3	31.2	30.9	48 .....	14.3	12.1	18.1
163 or more .....	16.3	23.5	25.3	56 .....	10.1	9.3	16.3
				63 or more .....	50.8	50.7	36.8
<b>HONEY TANGERINES</b>				<b>COLORED GRAPEFRUIT</b>			
80 or less .....	17.2	8.1	8.0	32 or less .....	1.3	4.8	6.3
100 .....	24.6	13.7	15.2	36 .....	7.0	6.1	10.3
120 .....	23.2	21.9	17.4	40 .....	10.3	8.3	14.3
176 .....	11.6	17.1	12.9	48 .....	13.9	12.6	14.1
210 or more .....	23.4	39.2	46.5	56 .....	12.0	11.2	13.0
				63 or more .....	55.5	57.0	42.0

<sup>1</sup> Excludes seedy.

The charts below show the distribution of fruit sizes in 2015 compared to 2014. 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, Colored Seedless Grapefruit, by Diameter - Florida: February Survey**

