



# CITRUS MARCH FORECAST

## MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department of Agriculture & Consumer Services  
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March 8, 2013

**All Orange Production Down 1 Percent**  
**Valencia Orange Production Down 4 Percent**  
**All Grapefruit Production Down 6 Percent**  
**All Tangerine Production Unchanged**  
**Tangelo Production Unchanged**  
**FCOJ Yield 1.61 Gallons per Box (42° Brix)**

FORECAST DATES	–	2012-2013 SEASON
[Release time 12:00 p.m. EDT]		
April 10, 2013		May 10, 2013
June 12, 2013		July 11, 2013

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

Crop and State	Production <sup>1</sup>			2012-2013 Forecasted Production <sup>1</sup>	
	2009-2010 (1,000 boxes)	2010-2011 (1,000 boxes)	2011-2012 (1,000 boxes)	February (1,000 boxes)	March (1,000 boxes)
<b>Non-Valencia Oranges<sup>2</sup></b>					
Florida.....	68,600	70,300	74,200	66,000	67,000
California <sup>3</sup> .....	42,500	48,000	45,500	46,500	46,500
Texas <sup>3</sup> .....	1,360	1,700	1,108	1,220	1,220
United States.....	112,460	120,000	120,808	113,720	114,720
<b>Valencia Oranges</b>					
Florida.....	65,100	70,200	72,400	75,000	72,000
California.....	15,000	14,500	13,500	13,000	12,500
Texas <sup>3</sup> .....	275	249	311	286	286
United States.....	80,375	84,949	86,211	88,286	84,786
<b>All Oranges</b>					
Florida.....	133,700	140,500	146,600	141,000	139,000
California.....	57,500	62,500	59,000	59,500	59,000
Texas <sup>3</sup> .....	1,635	1,949	1,419	1,506	1,506
United States.....	192,835	204,949	207,019	202,006	199,506
<b>Grapefruit</b>					
Florida-All.....	20,300	19,750	18,850	18,000	17,000
White.....	6,000	5,850	5,350	5,000	4,500
Colored.....	14,300	13,900	13,500	13,000	12,500
California <sup>3</sup> .....	4,500	4,310	4,400	4,000	4,000
Texas <sup>3</sup> .....	5,600	6,300	4,800	5,280	5,280
United States.....	30,400	30,360	28,050	27,280	26,280
<b>Lemons</b>					
California <sup>3</sup> .....	21,000	20,500	20,500	20,500	20,500
Arizona <sup>3</sup> .....	2,200	2,500	750	1,800	1,800
United States.....	23,200	23,000	21,250	22,300	22,300
<b>Tangelos</b>					
Florida.....	900	1,150	1,150	1,000	1,000
<b>Tangerines</b>					
Florida-All.....	4,450	4,650	4,290	3,700	3,700
Early <sup>4</sup> .....	2,250	2,600	2,330	2,000	2,000
Honey.....	2,200	2,050	1,960	1,700	1,700
California <sup>3,5</sup> .....	9,900	10,600	10,900	11,800	11,800
Arizona <sup>3,5</sup> .....	350	300	200	200	200
United States.....	14,700	15,550	15,390	15,700	15,700

<sup>1</sup> Net pounds per box: oranges in California-80 (75 prior to the 2010-2011 crop year), Florida-90, Texas-85; grapefruit in California-80 (67 prior to the 2010-2011 crop year), Florida-85, Texas-80; lemons-80 (76 prior to the 2010-2011 crop year); tangelos-90; tangerines and mandarins in Arizona and California-80 (75 prior to the 2010-2011 crop year), 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 previous forecast.

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

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

## **All Oranges 139.0 Million Boxes**

The 2012-2013 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 139.0 million boxes, down 2.0 million boxes from February and 5 percent less than last season's production. The total includes 67.0 million boxes of non-Valencia oranges (early, midseason, Navel, and Temple varieties) and 72.0 million boxes of Valencia oranges. The hurricane seasons of 2004-2005 and 2005-2006 have been excluded from the usual 10-year regression analysis and from comparisons of the current season to previous seasons. For those previous 8 seasons, the March forecast has deviated from final production by an average of 2 percent with 4 seasons below and 4 above, with differences ranging from 3 percent below to 2 percent above. All references to "average" or "minimum" refer to the previous 8 non-hurricane seasons unless noted.

## **Non-Valencia Oranges 67.0 Million Boxes**

The forecast of non-Valencia orange production is increased by 1.0 million boxes to 67.0 million boxes, based on utilization to the 1<sup>st</sup> of the month. The route survey (Row Count) conducted February 26-27 showed 99 percent of the rows have been harvested. The Navel portion of the non-Valencia forecast remains unchanged at 2.2 million boxes, 3 percent of the total.

## **Valencia Oranges 72.0 Million Boxes**

The forecast of Valencia production is lowered by 3.0 million boxes to 72.0 million boxes. Estimated utilization to the 1<sup>st</sup> of the month is 1.8 million boxes. Fruit size is projected to be near the minimum, requiring 229 pieces of fruit to fill a 90-pound box. Fruit droppage has increased sharply in the past 2 months. The projection of 22 percent droppage is above the maximum.

## **All Grapefruit 17.0 Million Boxes**

The forecast of all grapefruit production is lowered by 1.0 million boxes to 17.0 million boxes. Both the white and colored components were reduced by 500 thousand boxes, resulting in forecasts of 4.5 million boxes of white and 12.5 million boxes of colored grapefruit. The drop surveys conducted in February continue to show droppage for white and colored grapefruit to be the highest in any season not affected by a significant weather event. The size surveys also confirmed fruit size to be the smallest in the series which began with the 1968-1969 season. The Row Count Survey conducted February 26-27 indicated 30 percent of the white grapefruit and 50 percent of the colored grapefruit rows have been harvested.

## **All Tangerines 3.7 Million Boxes**

The forecast of all tangerine production is unchanged at 3.7 million boxes, consisting of the early varieties (Fallglo and Sunburst) at 2.0 million boxes and the Honey tangerine variety at 1.7 million boxes. Harvest of the early tangerines is over for the season and the forecast remains unchanged. The Row Count Survey showed 41 percent of the Honey tangerine rows have been harvested. February surveys confirmed Honey fruit size to be the smallest in a series which began with the 1980-1981 season and droppage continued above the mean.

## **Tangelos 1.0 Million Boxes**

The forecast of tangelo production remains unchanged at 1.0 million boxes, including an allocation of 100,000 boxes for non-certified use. The harvest of tangelos is concluding. Estimated utilization for the week ending March 3, as reported by the Citrus Administrative Committee, is 3,000 boxes. The Row Count Survey conducted February 26-27 showed 99 percent of the rows have been harvested.

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

The projection for frozen concentrated orange juice (FCOJ) is lowered to 1.61 gallons per box of 42° Brix concentrate. The yield projection for the non-Valencia oranges is raised to 1.51 gallons per box while the projection for Valencia oranges is lowered to 1.71 gallons per box. Last season's final yield for all oranges was 1.628480 gallons per box, as reported by the Florida Department of Citrus. Last season's final yield for the components were 1.529715 for non-Valencia oranges and 1.745597 for Valencia oranges.

## Forecast Components, by Type — Florida: March 2013

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

Type	Bearing trees	Fruit per tree	Dropage	Fruit per box
	(1,000 trees)	(number)	(percent)	(number)
<b>ORANGES</b>				
Early-midseason .....	23,741	1,032	18	274
Navel .....	1,013	409	27	137
Valencia .....	32,049	661	22	229
<b>GRAPEFRUIT</b>				
White .....	1,314	550	22	120
Colored .....	3,581	492	20	125

## Maturity

Regular bloom fruit samples of Valencia oranges were collected from groves on established routes on February 26-27, 2013, in Florida's five major citrus producing areas and tested February 28, 2013. Acid levels are higher than the previous season while solids (Brix) are lower, resulting in lower ratios. Unfinished juice per box is down from last month but solids per box are up this month; both are lower than last season at this time.

Acids and solids (Brix) are higher in the Indian River than in other areas, with lower ratios. Unfinished juice per box and solids per box are also higher for Indian River fruit.

## Citrus Unadjusted Maturity Tests — Florida: 2011-2012 and 2012-2013

[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	
	2011-2012	2012-2013	2011-2012	2012-2013	2011-2012	2012-2013	2011-2012	2012-2013	2011-2012	2012-2013
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>LATE ORANGES</b> (142-149)										
Oct 1 .....	2.11	2.16	8.93	8.81	4.28	4.17	48.45	44.92	4.32	3.96
Nov 1 .....	1.53	1.69	9.45	9.29	6.30	5.60	51.56	51.30	4.87	4.76
Dec 1 .....	1.37	1.51	10.32	10.10	7.63	6.83	54.98	53.53	5.68	5.41
Jan 1 .....	1.17	1.34	11.38	10.90	9.85	8.26	55.92	54.52	6.36	5.94
Feb 1 .....	1.12	1.13	12.16	11.80	11.04	10.62	55.44	55.56	6.74	6.55
Mar 1 .....	1.00	1.04	12.52	12.19	12.74	11.93	55.55	54.92	6.96	6.69

## Citrus Maturity Test Averages, by Areas — Florida: March 1, 2011-2012 and 2012-2013

Fruit type (number of groves)	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2011-2012	2012-2013	2011-2012	2012-2013	2011-2012	2012-2013	2011-2012	2012-2013	2011-2012	2012-2013
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>LATE ORANGES</b>										
Indian River (26-27).....	1.05	1.09	12.78	12.33	12.36	11.44	56.58	55.86	7.23	6.88
Other Areas (116-122)..	0.99	1.02	12.46	12.16	12.83	12.04	55.33	54.71	6.90	6.65

## Fruit Size Comparisons by Types to Previous Seasons

Size frequency distributions from the January 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.

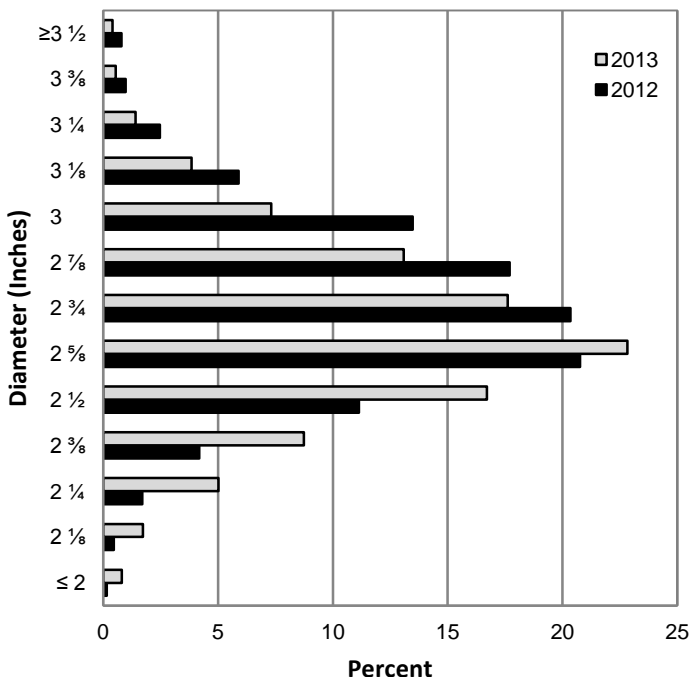
### Citrus Size Frequency Measurement Distributions, by Type — Florida: February Survey

Type and number of fruit per 4/5 – bushel containers	2011	2012	2013	Type and number of fruit per 4/5 – bushel containers	2011	2012	2013
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
<b>VALENCIA ORANGES</b>				<b>WHITE GRAPEFRUIT <sup>1</sup></b>			
64 or less .....	3.6	6.5	4.1	32 or less .....	12.1	15.9	6.3
80 .....	14.8	25.3	15.5	36 .....	21.7	19.6	9.7
100 .....	37.1	40.1	34.8	40 .....	18.7	14.7	8.8
125 .....	29.6	21.6	29.3	48 .....	16.7	14.6	14.3
163 or more .....	14.9	6.5	16.3	56 .....	11.3	9.4	10.1
				63 or more .....	19.5	25.8	50.8
<b>HONEY TANGERINES</b>				<b>COLORED GRAPEFRUIT</b>			
80 or less .....	20.9	16.4	17.2	32 or less .....	7.2	12.2	1.3
100 .....	35.8	24.1	24.6	36 .....	14.3	11.9	7.0
120 .....	25.9	25.9	23.2	40 .....	13.8	14.3	10.3
176 .....	6.5	15.9	11.6	48 .....	18.4	16.9	13.9
210 or more .....	10.9	17.7	23.4	56 .....	13.5	12.9	12.0
				63 or more .....	32.8	31.8	55.5

<sup>1</sup> Excludes seedy.

The charts below show the distribution of fruit sizes in 2013 compared to 2012. 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**

