



CITRUS MARCH FORECAST

MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department of Agriculture and Consumer Services
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March 9, 2016

Florida All Orange Production Up 3 percent
Florida Non-Valencia Orange Production Unchanged
Florida Valencia Orange Production Up 6 percent
Florida All Grapefruit Production Up 2 Percent
Florida All Tangerine Production Down 7 percent
Florida Tangelo Production Unchanged
Florida FCOJ Yield 1.45 Gallons per Box (42° Brix)

2015-2016 SEASON FORECAST DATES	
[Release time 12:00 p.m. EDT]	
April 12, 2016	May 10, 2016
June 10, 2016	July 12, 2016

Citrus Production by Type and State – United States

Crop and State	Production ¹			2015-2016 Forecasted Production ¹	
	2012-2013 (1,000 boxes)	2013-2014 (1,000 boxes)	2014-2015 (1,000 boxes)	February (1,000 boxes)	March (1,000 boxes)
Non-Valencia Oranges ²					
Florida	67,100	53,300	47,400	36,000	36,000
California ³	42,500	38,700	39,500	42,000	42,000
Texas ³	1,504	1,401	1,170	1,130	1,130
United States	111,104	93,401	88,070	79,130	79,130
Valencia Oranges					
Florida	66,500	51,400	49,400	33,000	35,000
California	12,000	10,800	9,500	10,000	10,500
Texas ³	289	376	282	280	280
United States	78,789	62,576	59,182	43,280	45,780
All Oranges					
Florida	133,600	104,700	96,800	69,000	71,000
California	54,500	49,500	49,000	52,000	52,500
Texas ³	1,793	1,777	1,452	1,410	1,410
United States	189,893	155,977	147,252	122,410	124,910
Grapefruit					
Florida-All	18,350	15,650	12,900	10,500	10,700
White	5,250	4,150	3,250	2,300	2,500
Red	13,100	11,500	9,650	8,200	8,200
California ³	4,500	3,850	3,800	3,700	3,700
Texas ³	6,100	5,700	4,250	5,100	5,100
United States	28,950	25,200	20,950	19,300	19,500
Lemons					
California ³	21,000	18,800	20,500	20,000	20,000
Arizona ³	1,800	1,800	2,000	1,600	1,600
United States	22,800	20,600	22,500	21,600	21,600
Tangelos					
Florida	1,000	880	680	400	400
Tangerines					
Florida-All	3,280	2,900	2,270	1,500	1,400
Early ⁴	1,910	1,750	1,445	800	800
Honey	1,370	1,150	825	700	600
California ^{3,5}	13,000	14,700	18,200	21,000	21,000
Arizona ^{5,6}	160	150	170	(NA)	(NA)
United States	16,440	17,750	20,640	22,500	22,400

NA Not available.

¹ 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.

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

³ Estimates carried forward from previous forecast.

⁴ Fallglo and Sunburst varieties.

⁵ Includes tangelos and tangors.

⁶ Estimates discontinued in 2015-2016.

Regressions

Regression data used are from the 2006-2007 through 2014-2015 seasons. All references to “average”, “minimum”, and “maximum” refer to these 9 seasons unless noted.

All Oranges 71.0 Million Boxes

The 2015-2016 Florida all orange forecast released today by the USDA Agricultural Statistics Board is up 2.0 million boxes to 71.0 million, with the change being made in the Valencia (late) variety. The total now includes 36.0 million boxes of non-Valencia oranges (early, midseason, Navel, and Temple varieties) and 35.0 million boxes of Valencia oranges. For the previous 9 seasons used in the regressions, the March forecast has deviated from final production by an average of 3 percent, with 3 seasons below and 6 above, with differences ranging from 3 percent below to 9 percent above.

Non-Valencia Oranges 36.0 Million Boxes

The forecast of non-Valencia orange production is unchanged at 36.0 million boxes. The Row Count survey conducted February 29 and March 1 showed 99 percent of the rows harvested. The Navel portion of the non-Valencia forecast is final at 1.0 million boxes, 3 percent of the non-Valencia total.

Valencia Oranges 35.0 Million Boxes

The forecast of Valencia production is increased 2.0 million boxes due to changes in component projections. Current fruit size is about average and is expected to be near average at harvest, requiring 224 pieces of fruit to fill a 90-pound box. The droppage rate is less than previously projected. The droppage projection is lowered to 36 percent.

All Grapefruit 10.7 Million Boxes

The forecast of all grapefruit production forecast increased to 10.7 million boxes. The white grapefruit forecast is increased 200,000 boxes based on utilization while the red grapefruit forecast is unchanged at 8.2 million boxes. The Row Count survey conducted February 29 and March 1, 2016, indicated 74 percent of the red grapefruit rows and 69 percent of the white grapefruit rows are harvested.

All Tangerines 1.40 Million Boxes

The forecast of all tangerine production is lowered 100,000 boxes due to a decrease in forecasted utilization of the later maturing Honey variety. The early tangerine varieties (Fallglo and Sunburst) remain at 800,000 boxes while the Honey tangerine variety is now forecasted at 600,000 boxes. Early tangerine harvest is complete for this season, while the harvesting of the Honey tangerine continues.

Tangelos 400 Thousand Boxes

The tangelo forecast remains at 400,000 boxes. The Row Count survey conducted February 29 and March 1, 2016, showed 89 percent rows are harvested.

FCOJ Yield 1.45 Gallons per Box

The projection for frozen concentrated orange juice (FCOJ) remains at 1.45 gallons per box of 42° Brix concentrate. The projection for Valencia oranges remains at 1.60 gallons per box. The final yield for non-Valencia oranges is 1.347046, as reported by the Florida Department of Citrus (FDOC) in Report No. 20. Last season’s final yield for all oranges was 1.502203 gallons per box, as reported by the Florida Department of Citrus. Last season’s final yields for the components were 1.419546 for non-Valencia oranges and 1.584149 for Valencia oranges.

Forecast Components, by Type — Florida: March 2016

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

Type	Bearing trees (1,000 trees)	Fruit per tree (number)	Droppage (percent)	Fruit per box (number)
ORANGES				
Early-midseason	21,650	744	32	284
Navel	944	229	24	141
Valencia	30,249	520	36	224
GRAPEFRUIT				
White	1,087	449	34	132
Red	3,236	439	40	127

Maturity

Regular bloom fruit samples of Valencia oranges were collected from groves on established routes on February 29 and March 1, 2016, in Florida's five major citrus producing areas and tested March 2, 2016. The acid level this season is lower than the previous season and solids (Brix) are lower, resulting in higher ratios. In comparison to last season, unfinished juice per box is up, while solids per box is the same as the previous season.

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: 2014-2015 and 2015-2016

[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	
	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
LATE ORANGES (148-128)										
Oct 1	2.08	1.92	8.69	8.60	4.22	4.53	45.19	48.28	3.93	4.15
Nov 1	1.76	1.60	9.10	9.36	5.22	5.90	50.36	52.47	4.58	4.91
Dec 1	1.48	1.31	9.70	9.74	6.61	7.53	53.87	54.75	5.23	5.33
Jan 1	1.26	1.04	10.85	10.25	8.72	10.01	54.83	57.20	5.95	5.86
Feb 1	1.18	0.97	11.32	10.68	9.71	11.18	55.20	56.16	6.25	6.00
Mar 1	1.09	0.87	11.78	11.35	10.88	13.16	54.51	56.55	6.42	6.42

Citrus Maturity Test Averages, by Areas – Florida: March 1, 2014-2015 and 2015-2016

Fruit type (number of groves)	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
LATE ORANGES										
Indian River (29-25).....	1.12	0.89	12.23	11.92	11.04	13.57	54.09	55.69	6.62	6.64
Other Areas (119-103)..	1.09	0.87	11.67	11.21	10.84	13.06	54.61	56.76	6.37	6.36

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 $\frac{4}{5}$ -bushel container. These frequency distributions include fruit from regular bloom and exclude fruit from summer bloom.

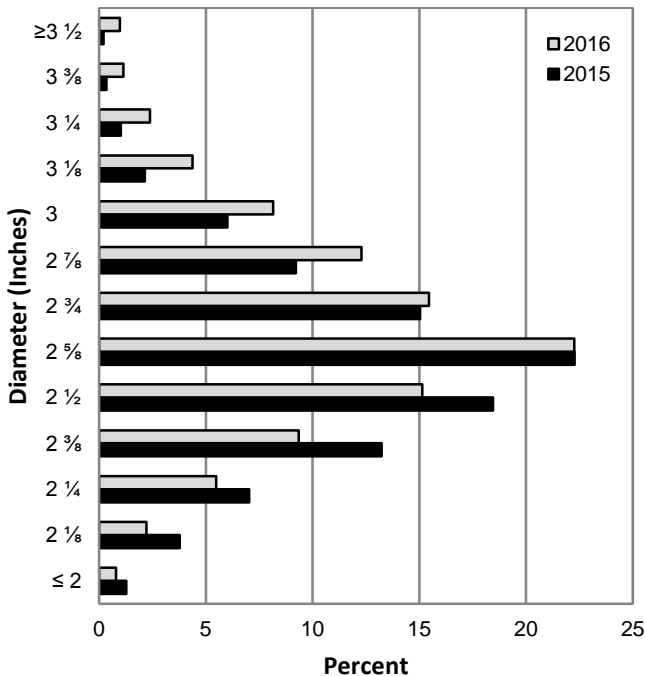
Citrus Size Frequency Measurement Distributions, by Type – Florida: February Survey

Type and number of fruit per 4/5 – bushel containers	2014	2015	2016	Type and number of fruit per 4/5 – bushel containers	2014	2015	2016
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
VALENCIA ORANGES				WHITE GRAPEFRUIT ¹			
64 or less	3.0	2.5	6.5	32 or less	8.1	4.1	2.1
80	12.2	11.2	15.7	36	10.9	11.2	5.0
100	30.1	30.1	31.9	40	8.9	13.5	6.2
125	31.2	30.9	28.0	48	12.1	18.1	7.6
163 or more	23.5	25.3	17.9	56	9.3	16.3	11.5
				63 or more	50.7	36.8	67.6
HONEY TANGERINES				RED GRAPEFRUIT			
80 or less	8.1	8.0	13.6	32 or less	4.8	6.3	3.6
100	13.7	15.2	20.9	36	6.1	10.3	8.1
120	21.9	17.4	25.2	40	8.3	14.3	13.4
176	17.1	12.9	12.1	48	12.6	14.1	16.9
210 or more	39.2	46.5	28.2	56	11.2	13.0	10.9
				63 or more	57.0	42.0	47.1

¹ Excludes seedy.

The charts below show the distribution of fruit sizes in 2016 compared to 2015. 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, Red Seedless Grapefruit, by Diameter - Florida: February Survey

