



# CITRUS JANUARY FORECAST MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department of Agriculture and Consumer Services  
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January 12, 2018

**Florida All Orange Production Unchanged from December Forecast**  
**Florida Non-Valencia Orange Production Unchanged**  
**Florida Valencia Orange Production Unchanged**  
**Florida All Grapefruit Production Unchanged**  
**Florida All Tangerine and Tangelo Production Down 5 Percent**

FORECAST DATES - 2017-2018 SEASON	
February 8, 2018	March 8, 2018
April 10, 2018	May 10, 2018
June 12, 2018	July 12, 2018

Crop and State	Production <sup>1</sup>		2017-2018 Forecasted Production <sup>1</sup>	
	2015-2016 (1,000 boxes)	2016-2017 (1,000 boxes)	December (1,000 boxes)	January (1,000 boxes)
<b>Non-Valencia Oranges <sup>2</sup></b>				
<b>Florida</b> .....	<b>36,100</b>	<b>33,000</b>	<b>19,000</b>	<b>19,000</b>
California .....	47,200	39,300	35,000	35,000
Texas .....	1,351	1,090	1,350	1,430
United States.....	84,651	73,390	55,350	55,430
<b>Valencia Oranges</b>				
<b>Florida</b> .....	<b>45,600</b>	<b>35,750</b>	<b>27,000</b>	<b>27,000</b>
California .....	11,300	11,000	11,000	11,000
Texas .....	340	280	300	400
United States.....	57,240	47,030	38,300	38,400
<b>All Oranges</b>				
<b>Florida</b> .....	<b>81,700</b>	<b>68,750</b>	<b>46,000</b>	<b>46,000</b>
California .....	58,500	50,300	46,000	46,000
Texas .....	1,691	1,370	1,650	1,830
United States.....	141,891	120,420	93,650	93,830
<b>Grapefruit</b>				
<b>Florida-All</b> .....	<b>10,800</b>	<b>7,760</b>	<b>4,650</b>	<b>4,650</b>
<b>White</b> .....	<b>2,490</b>	<b>1,480</b>	<b>850</b>	<b>850</b>
<b>Red</b> .....	<b>8,310</b>	<b>6,280</b>	<b>3,800</b>	<b>3,800</b>
California .....	3,800	4,000	4,200	4,200
Texas .....	4,800	4,800	5,300	4,100
United States.....	19,400	16,560	14,150	12,950
<b>Lemons</b>				
California.....	21,000	20,500	21,000	20,500
Arizona.....	1,600	1,650	1,600	1,250
United States.....	22,600	22,150	22,600	21,750
<b>Tangelos</b>				
<b>Florida</b> .....	<b>390</b>	<b>(NA)</b>	<b>(NA)</b>	<b>(NA)</b>
<b>Tangerines and Tangelos</b>				
<b>Florida-All</b> <sup>3</sup> .....	<b>1,415</b>	<b>1,620</b>	<b>910</b>	<b>860</b>
<b>Early</b> <sup>4</sup> .....	<b>785</b>	<b>600</b>	<b>(NA)</b>	<b>(NA)</b>
<b>Royal</b> <sup>5</sup> .....	<b>(NA)</b>	<b>210</b>	<b>(NA)</b>	<b>(NA)</b>
<b>Honey</b> .....	<b>630</b>	<b>530</b>	<b>(NA)</b>	<b>(NA)</b>
<b>Tangelo</b> .....	<b>(NA)</b>	<b>280</b>	<b>(NA)</b>	<b>(NA)</b>
California <sup>6</sup> .....	21,700	23,900	23,000	21,000
United States.....	23,115	25,520	23,910	21,860

NA Not available.

<sup>1</sup> Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California and Texas-80, Florida-85; lemons-80; tangelos-90 in Florida for 2015-2016, and tangerines and mandarins in 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 Temples in Florida for 2015-2016.

<sup>3</sup> Prior to 2016-2017 includes Fallglo, Sunburst, and Honey tangerine varieties only. In 2016-2017, includes Fallglo, Sunburst, Royal, and Honey tangerine varieties and tangelos. Beginning in 2017-2018, includes all certified varieties of tangerines and tangelos.

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

<sup>5</sup> Beginning in 2016-2017, Temples have been reclassified as Royal tangerines.

<sup>6</sup> Includes tangelos and tangors in California.

## All Oranges 46.0 Million Boxes

The 2017-2018 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 46.0 million boxes, unchanged from the December forecast. If realized, this will be 33 percent less than last season's production. The forecast consists of 19.0 million boxes of non-Valencia oranges (early, midseason, and Navel varieties) and 27.0 million boxes of Valencia oranges. Regression data used are from the 2007-2008 through 2016-2017 seasons. For those previous 10 seasons, the January forecast has deviated from final production by an average of 4 percent, with 6 seasons above and 4 below, with differences ranging from 16 percent below to 10 percent above. All references to "average", "minimum", and "maximum" refer to the previous 10 seasons unless otherwise noted.

## Non-Valencia Oranges 19.0 Million Boxes

The forecast of non-Valencia production is unchanged at 19.0 million boxes. Final fruit size is below average, requiring 286 pieces of fruit to fill a 90 pound box. Final droppage, at 62 percent, is above the maximum. The Row Count survey conducted January 1-2, 2018, showed 73 percent of early-midseason rows, and 83 percent of Navel rows are harvested. Estimated utilization through December for non-Valencia oranges, including an allocation for non-certified fruit, is 11.2 million boxes, compared to 12.1 million boxes last season. The Navel forecast, included in the non-Valencia forecast, is 500 thousand boxes.

## Valencia Oranges 27.0 Million Boxes

The forecast of Valencia production is unchanged at 27.0 million boxes. Current fruit size is below average and is projected to be below average at harvest. Current droppage is above the maximum and projected to be above the maximum at harvest.

## All Grapefruit 4.65 Million Boxes

The forecast of all grapefruit production is unchanged at 4.65 million boxes. The white grapefruit forecast is unchanged at 850 thousand boxes. The red grapefruit forecast is unchanged at 3.80 million boxes. Projected fruit size of white grapefruit at harvest is above average while projected droppage is above the maximum. Projected fruit size of red grapefruit at harvest is above average and droppage is projected to be above the maximum.

## Tangerines and Tangelos 860 Thousand Boxes

The forecast for the tangerine and tangelo production is reduced 50 thousand boxes to 860 thousand, down 5 percent from last month, and 47 percent less than last season's production. This forecast number includes all certified tangerine and tangelo varieties.

### Forecast Components, by Type – Florida: January 2018

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

Type	Bearing trees (1,000 trees)	Fruit per tree (number)	Droppage (percent)	Fruit per box (number)
<b>ORANGES</b>				
Early-midseason non-Valencia ....	19,569	741	62	286
Navel.....	913	252	68	140
Valencia .....	28,390	510	55	237
<b>GRAPEFRUIT</b>				
White.....	722	396	55	106
Red .....	2,834	385	51	113

## Maturity

Regular bloom fruit samples were collected on January 1-2, 2018, from groves on established routes in Florida's five major citrus producing areas and tested January 3-4, 2018. All comparisons in the first table are made to January 1, 2017. Acids and solids are lower on all orange types; ratios are higher. Unfinished juice per box is higher on all varieties, and solids per box are lower.

All Indian River comparisons are made to fruit from other areas for this test period. Indian River early non-Valencia and Valencia oranges have higher acid levels compared to other areas. Solids (Brix) are lower on early non-Valencia oranges and higher on Valencia oranges. Ratios are lower for both early non-Valencia and Valencia oranges. Unfinished juice per box is higher for early non-Valencia but lower for Valencia oranges. Solids per box for samples collected in the Indian River District are lower for early non-Valencia orange samples but higher for Valencia orange samples.

### Unadjusted Maturity Tests — Florida: January 1, 2016-2017 and 2017-2018

[Averages of regular bloom fruit from sample groves. Juice and solids per box are unadjusted and not comparable to juice processing plant test results. For 2016-2017 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 on all cups. For 2017-2018, samples were run through an FMC 091B machine using pneumatic pressure. This machine utilizes a 0.025 short strainer and a 1.00 inch orifice tube for the 3 inch cup and a 1.25 inch orifice tube for the 4 inch and 5 inch cups]

Fruit type (number of groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2016-2017	2017-2018	2016-2017	2017-2018	2016-2017	2017-2018	2016-2017	2017-2018	2016-2017	2017-2018
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>ORANGES</b>										
Early N-V (84-30)										
Sep 1 .....	1.40	1.20	9.23	9.13	6.69	7.73	41.60	42.83	3.84	3.91
Oct 1 .....	0.99	0.90	9.45	9.14	9.77	10.31	47.46	47.40	4.48	4.30
Nov 1 .....	0.82	0.74	9.95	9.67	12.38	13.37	49.49	52.62	4.92	5.08
Dec 1 .....	0.75	0.63	10.88	10.03	14.65	16.13	50.70	51.49	5.52	5.17
Jan 1 .....	0.70	0.60	11.13	10.49	16.23	17.72	50.35	51.76	5.61	5.44
Midseason N-V (45-19)										
Sep 1 .....	1.55	1.30	9.14	8.87	5.97	7.01	42.03	44.68	3.84	3.97
Oct 1 .....	1.14	0.99	9.38	9.21	8.43	9.49	47.40	50.93	4.44	4.69
Nov 1 .....	0.90	0.78	9.91	9.68	11.21	12.52	50.08	54.54	4.96	5.27
Dec 1 .....	0.85	0.70	10.80	9.94	12.79	14.65	50.98	53.59	5.51	5.34
Jan 1 .....	0.78	0.72	11.42	10.35	14.84	14.91	51.81	53.70	5.92	5.56
Valencia (148-150)										
Sep 1 .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oct 1 .....	1.99	1.84	8.83	8.74	4.52	4.83	46.01	48.52	4.07	4.24
Nov 1 .....	1.67	1.54	9.16	8.80	5.57	5.82	49.97	51.74	4.58	4.56
Dec 1 .....	1.42	1.25	10.07	9.18	7.18	7.43	52.34	53.12	5.27	4.88
Jan 1 .....	1.22	1.06	10.82	10.11	8.99	9.71	54.06	54.27	5.85	5.48

N-V non-Valencia

NA Not available.

### Unadjusted Maturity Test Averages, by Areas — Florida: January 1, 2016-2017 and 2017-2018

Fruit type (number of groves)	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2016-2017	2017-2018	2016-2017	2017-2018	2016-2017	2017-2018	2016-2017	2017-2018	2016-2017	2017-2018
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
<b>ORANGES</b>										
Early N-V										
Indian River (5-5) .....	0.68	0.61	11.22	10.21	16.59	16.76	47.79	52.62	5.37	5.38
Other Areas (79-25) .....	0.70	0.59	11.13	10.55	16.21	17.92	50.52	51.58	5.63	5.45
Midseason N-V										
Indian River (1-1) .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other Areas (31-18) .....	0.78	0.72	11.42	10.37	14.85	14.88	51.91	53.93	5.93	5.60
Valencia										
Indian River (29-29) .....	1.25	1.15	11.18	10.55	9.08	9.28	54.02	53.35	6.04	5.63
Other Areas (119-121) .....	1.21	1.03	10.74	10.00	8.97	9.82	54.08	54.50	5.81	5.45

N-V non-Valencia

D Withheld to avoid disclosing data for individual operations.

## Size Frequency Measurement Distributions, by Type — Florida: December

[Size frequency distributions from the December 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]

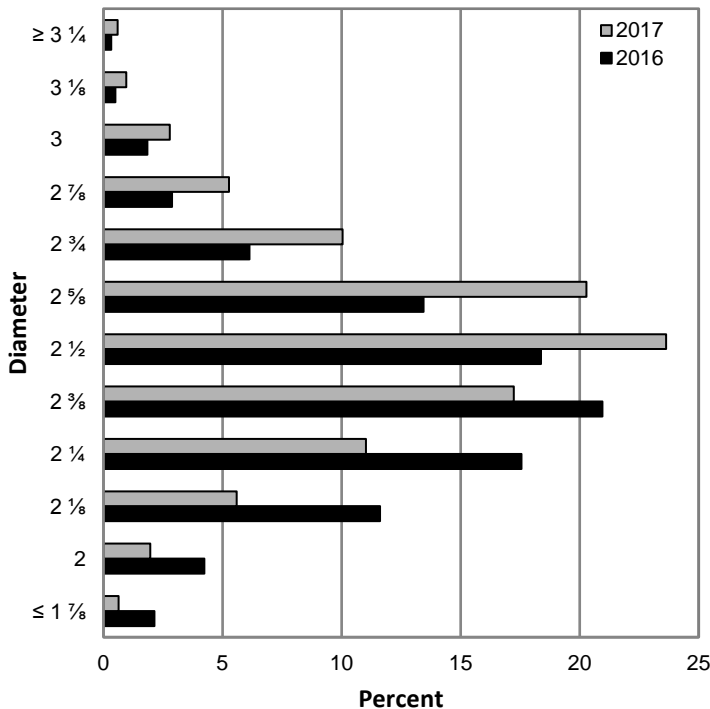
Type and number of fruit per 4/5 – bushel containers	2015	2016	2017	Type and number of fruit per 4/5 – bushel containers	2015	2016	2017
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
<b>NON-VALENCIA ORANGES <sup>1</sup></b>				<b>WHITE GRAPEFRUIT <sup>2</sup></b>			
64 or less .....	1.6	0.6	0.9	32 or less .....	1.4	0.8	5.4
80 .....	6.5	3.3	5.3	36 .....	4.9	2.6	13.2
100 .....	21.4	12.7	21.3	40 .....	8.6	6.5	13.7
125 .....	29.9	26.9	36.0	48 .....	11.6	13.4	17.0
163 or more .....	40.6	56.5	36.5	56 .....	13.0	13.4	13.5
				63 or more .....	60.5	63.3	37.2
<b>VALENCIA ORANGES</b>				<b>RED GRAPEFRUIT <sup>2</sup></b>			
64 or less .....	3.8	3.1	2.1	32 or less .....	3.6	0.4	4.8
80 .....	13.9	10.2	10.2	36 .....	5.5	3.3	10.6
100 .....	31.3	23.7	27.9	40 .....	9.3	7.5	13.8
125 .....	29.2	29.6	33.5	48 .....	15.2	14.2	18.3
163 or more .....	21.8	33.4	26.3	56 .....	13.8	15.1	12.2
				63 or more .....	52.6	59.5	40.3
<b>HONEY TANGERINES</b>							
80 or less .....	10.3	3.5	3.9				
100 .....	19.0	19.3	14.1				
120 .....	25.5	25.1	28.6				
176 .....	12.9	17.4	17.5				
210 or more .....	32.3	34.7	35.9				

<sup>1</sup> Excludes Navels.

<sup>2</sup> Excludes seedy.

The charts below show the distribution of fruit sizes in 2017 compared to 2016. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.

**Fruit Size Frequency Measurements, Non-Valencia Oranges <sup>1</sup>, by Diameter - Florida: December**



<sup>1</sup> Excludes Navel varieties.

**Fruit Size Frequency Measurements, Red Grapefruit, by Diameter - Florida: December**

