United States Department of Agriculture
National Agricultural Statistics Service

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, 2016

Florida All Orange Production Unchanged
Florida Non-Valencia Orange Production Unchanged
Florida Valencia Orange Production Unchanged
Florida All Grapefruit Production Down 6 Percent
Florida All Tangerine Production Down 18 Percent
Florida Tangelo Production Unchanged
FCOJ Yield 1.50 Gallons per Box (42º Brix)

2015-2016 SEASON FORECAST DATES

February 9, 2016	May 10, 2016
March 9, 2016	June 10, 2016
April 12, 2016	July 12, 2016

Citrus Production by Type and State – United States

Crop and State	Production [1]			2015-2016 Forecasted Production [1]	
	2012-2013	2013-2014	2014-2015	December	January
	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)
Non-Valencia Oranges [2]					
Florida	**67,100**	**53,300**	**47,400**	**36,000**	**36,000**
California	42,500	38,700	39,500	43,000	42,000
Texas	1,504	1,401	1,170	1,317	1,130
United States	111,104	93,401	88,070	80,317	79,130
Valencia Oranges					
Florida	**66,500**	**51,400**	**49,400**	**33,000**	**33,000**
California	12,000	10,800	9,500	9,500	10,000
Texas	289	376	282	366	280
United States	78,789	62,576	59,182	42,866	43,280
All Oranges					
Florida	**133,600**	**104,700**	**96,800**	**69,000**	**69,000**
California	54,500	49,500	49,000	52,500	52,000
Texas	1,793	1,777	1,452	1,683	1,410
United States	189,893	155,977	147,252	123,183	122,410
Grapefruit					
Florida-All	**18,350**	**15,650**	**12,900**	**11,500**	**10,800**
White	**5,250**	**4,150**	**3,250**	**2,500**	**2,300**
Red	**13,100**	**11,500**	**9,650**	**9,000**	**8,500**
California	4,500	3,850	3,800	3,500	3,700
Texas	6,100	5,700	4,250	4,000	5,100
United States	28,950	25,200	20,950	19,000	19,600
Lemons					
California	21,000	18,800	20,500	19,500	20,000
Arizona	1,800	1,800	2,000	1,600	1,600
United States	22,800	20,600	22,500	21,100	21,600
Tangelos					
Florida	**1,000**	**880**	**680**	**400**	**400**
Tangerines					
Florida-All	**3,280**	**2,900**	**2,270**	**1,700**	**1,400**
Early [3]	**1,910**	**1,750**	**1,445**	**1,000**	**800**
Honey	**1,370**	**1,150**	**825**	**700**	**600**
California [4]	13,000	14,700	18,200	19,000	21,000
Arizona [4 5]	160	150	170	(NA)	(NA)
United States	16,440	17,750	20,640	20,700	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] Fallglo and Sunburst varieties.

[4] Includes tangelos and tangors.

[5] Estimates discontinued in 2015-2016.

All Oranges 69.0 Million Boxes

The 2015-2016 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 69.0 million boxes, unchanged from December and 29 percent less than last season's production. The forecast consists of 36.0 million boxes of the non-Valencia oranges (early, midseason, Navel, and Temple varieties) and 33.0 million boxes of the Valencia oranges.

Regression data used are from the 2006-2007 through 2014-2015 seasons. For those previous 9 seasons, the January forecast has deviated from final production by an average of 4 percent, with 6 seasons above and 3 below, and with differences ranging from 1 percent below to 10 percent above. All references to "average", "minimum", and "maximum" refer to the previous 9 seasons unless noted.

Non-Valencia Oranges 36.0 Million Boxes

The forecast of non-Valencia production remains unchanged from December at 36.0 million boxes. Non-Valencia weekly harvest reached nearly 3.3 million boxes the final week of December. Estimated utilization to the end on the month, with an allocation for non-certified fruit is 12.7 million boxes. Final fruit size is slightly above minimum, requiring 284 pieces of fruit to fill a 90-pound box. Final droppage at 32 percent is well above the maximum. The Row Count survey conducted December 30-31, 2015, showed 35 percent of the non-Valencia (excluding Navels) rows harvested. The Navel forecast, included in the non-Valencia forecast, is lowered 100,000 boxes to 1.0 million boxes and represents 3 percent of the non-Valencia total.

Valencia Oranges 33.0 Million Boxes

The forecast of Valencia production remains unchanged at 33.0 million boxes with offsetting component projections. Although current fruit size is slightly below average, the projected increase in size would require 6 fewer fruit to fill a 90-pound box. Current droppage is well above maximum, and if realized, the projected droppage would be the highest in a series dating back to the 1960-1961 season except for the 1962-1963 freeze-affected season.

All Grapefruit 10.8 Million Boxes

The forecast of all grapefruit production is lowered 700,000 boxes to 10.8 million boxes with changes in both fruit types. The white grapefruit forecast is lowered 200,000 boxes to 2.3 million boxes, and the red grapefruit forecast is lowered 500,000 boxes to 8.5 million boxes. Current fruit size for white grapefruit is lower than the minimum, while the red grapefruit size is slightly above the minimum. Current droppage for both white and red grapefruit is above the maximum and is projected to be above the maximum at harvest.

All Tangerines 1.4 Million Boxes

The forecast of all tangerine production is lowered 300,000 boxes to 1.4 million boxes with changes in both the early and late fruit types. The early tangerine forecast (Fallglo and Sunburst) is lowered 200,000 boxes to 800,000 boxes, and the later maturing Honey forecast is lowered 100,000 boxes to 600,000 boxes. The Fallglo tangerine harvest is over, and the Sunburst harvest is nearly complete. Very limited harvesting of the late maturing Honey tangerine has begun. Projected Honey fruit size is well below average, while the projected droppage rate is above the maximum.

Tangelos 400 Thousand Boxes

The forecast of tangelo production is unchanged at 400,000 boxes. The Row Count survey conducted December 30-31, 2015, showed 60 percent of the tangelo rows were harvested. Harvest of the Orlando variety is almost complete for the season with the Minneola variety remaining.

FCOJ Yield 1.50 Gallons per Box

The projection for frozen concentrated orange juice (FCOJ) is lowered to 1.50 gallons per box of 42° Brix concentrate. First yield projections for the components are 1.38 gallons per box for the early-midseason portion, and 1.65 for the late (Valencia) portion. Last season's final yields for all oranges, as reported by the Florida Department of Citrus were: 1.502203 gallons per box for all oranges, 1.419546 gallons per box for early-midseason oranges, and 1.584149 gallons per box for late (Valencia) oranges.

Forecast Components, by Variety — Florida: January 2016

[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	Droppage	Fruit per box
	(1,000 trees)	(number)	(percent)	(number)
ORANGES				
Early-midseason	21,650	744	32	284
Navel	944	229	24	141
Valencia	30,249	520	40	225
GRAPEFRUIT				
White	1,087	449	36	131
Red	3,236	439	36	124

Maturity

Regular bloom fruit samples were collected on December 30-31, 2015, from groves on established routes in Florida's five major citrus producing areas and tested January 4-5, 2016. All comparisons are made to January 1, 2015. Solids (Brix) are higher for early and midseason oranges. Lower acid levels have resulted in higher ratios for all fruit types. Unfinished juice per box is lower for early oranges but higher for midseason and late oranges. Solids per box is higher for early and midseason oranges, but lower for late oranges.

All Indian River comparison are made to fruit from other areas for this test period. Indian River early oranges have lower acid levels compared to other areas this month, resulting in higher ratios. Midseason and late oranges in the Indian River have higher acid levels. Ratios were higher for late oranges but lower for midseason oranges when compared to other areas. Unfinished juice per box is lower for early but higher for midseason and late oranges. Solids per box is higher for all orange types in the Indian River District when compared to other areas.

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)
ORANGES										
Early (81-85)										
Sep 1	1.41	1.26	9.10	9.13	6.56	7.32	43.92	44.64	3.99	4.08
Oct 1	1.03	0.91	9.03	9.45	8.95	10.54	49.42	52.51	4.46	4.96
Nov 1	0.89	0.76	9.69	10.35	11.11	13.96	51.92	50.00	5.03	5.17
Dec 1	0.81	0.66	10.33	10.77	12.97	16.54	51.67	50.91	5.34	5.48
Jan 1	0.74	0.58	10.79	11.16	14.77	19.71	50.22	50.03	5.42	5.59
Midseason (42-38)										
Sep 1	1.54	1.44	9.04	8.99	6.00	6.38	43.66	45.89	3.95	4.12
Oct 1	1.14	1.08	9.03	9.19	8.04	8.76	49.39	49.68	4.46	4.56
Nov 1	1.01	0.92	9.82	10.36	9.90	11.57	52.14	51.44	5.12	5.33
Dec 1	0.93	0.77	10.76	10.95	11.78	14.56	52.71	52.08	5.66	5.70
Jan 1	0.81	0.70	11.21	11.39	14.11	16.68	51.62	53.15	5.79	6.05
Late (150-150)										
Sep 1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oct 1	2.08	1.91	8.69	8.57	4.23	4.55	45.17	48.46	3.92	4.15
Nov 1	1.76	1.60	9.10	9.35	5.22	5.91	50.35	52.44	4.58	4.90
Dec 1	1.48	1.31	9.70	9.75	6.62	7.52	53.83	54.53	5.22	5.31
Jan 1	1.26	1.05	10.85	10.26	8.72	9.94	54.84	57.20	5.95	5.87

NA Not available.

Citrus Maturity Test Averages, by Areas — Florida: January 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)
ORANGES										
Early										
Indian River (8-6)	0.72	0.55	11.39	11.93	16.15	22.23	48.45	48.43	5.52	5.81
Other Areas (73-79)	0.74	0.58	10.73	11.10	14.62	19.52	50.41	50.15	5.40	5.57
Midseason										
Indian River (11-7)	0.79	0.76	11.47	11.64	14.78	15.88	52.01	55.97	5.96	6.53
Other Areas (31-31)	0.81	0.69	11.12	11.33	13.87	16.86	51.47	52.51	5.73	5.95
Late										
Indian River (29-29)	1.30	1.07	11.14	10.71	8.68	10.07	53.83	57.33	6.00	6.14
Other Areas (121-121)	1.25	1.04	10.78	10.15	8.73	9.90	55.08	57.17	5.94	5.80

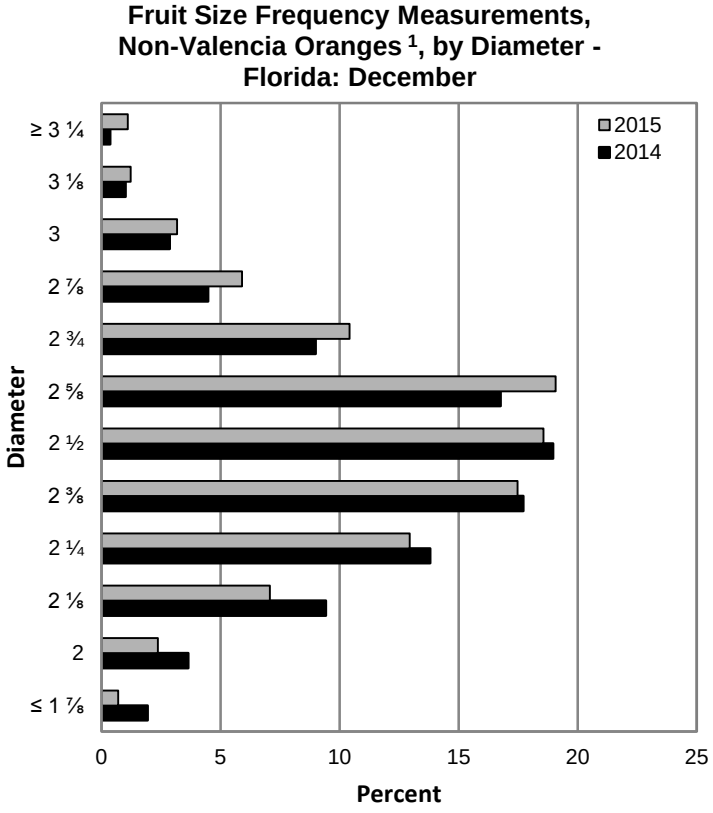
Citrus Size Frequency Measurement Distributions, by Type — Florida: December Survey

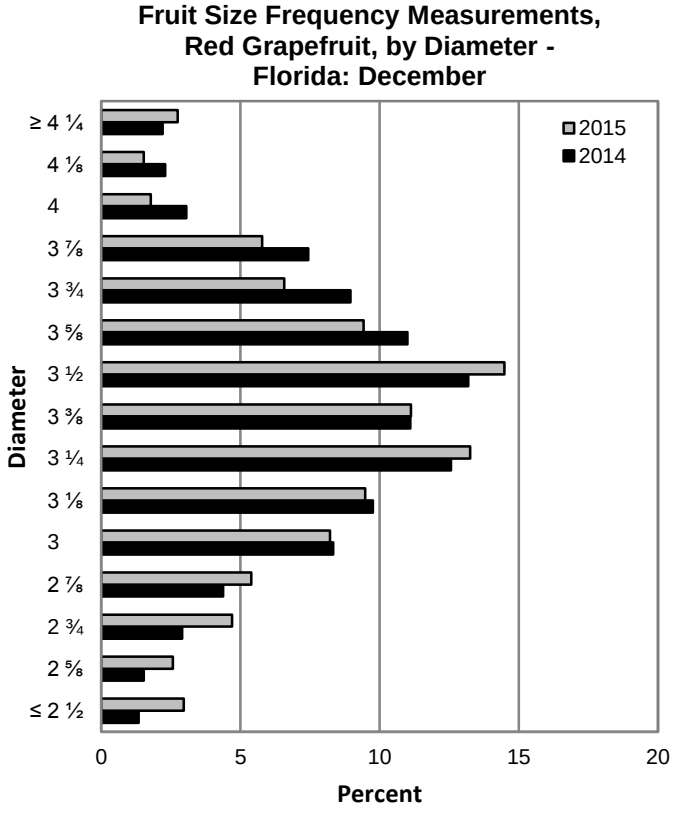
Type and number of fruit per 4/5 – bushel containers	2013	2014	2015
	(percent)	(percent)	(percent)
NON-VALENCIA ORANGES [1]			
64 or less	1.2	0.8	1.6
80	6.2	5.5	6.5
100	21.5	17.9	21.4
125	31.9	29.3	29.9
163 or more	39.2	46.5	40.6
VALENCIA ORANGES			
64 or less	1.6	1.3	3.8
80	9.1	9.0	13.9
100	27.2	29.1	31.3
125	32.4	32.7	29.2
163 or more	29.7	27.9	21.8
HONEY TANGERINES			
80 or less	8.3	8.7	10.3
100	18.5	21.5	19.0
120	24.9	17.7	25.5
176	18.1	11.0	12.9
210 or more	30.2	41.1	32.3

Type and number of fruit per 4/5 – bushel containers	2013	2014	2015
	(percent)	(percent)	(percent)
WHITE GRAPEFRUIT [2]			
32 or less	4.6	3.3	1.4
36	8.1	8.9	4.9
40	10.3	13.1	8.6
48	13.3	15.3	11.6
56	12.7	13.4	13.0
63 or more	51.0	46.0	60.5
RED GRAPEFRUIT			
32 or less	2.0	3.2	3.6
36	5.6	8.2	5.5
40	9.3	12.5	9.3
48	17.4	16.6	15.2
56	12.7	12.4	13.8
63 or more	53.0	47.1	52.6

[1] Excludes Navel and Temple varieties.
[2] 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.





[1] Excludes Navel and Temple varieties.