United States Department of Agriculture
National Agricultural Statistics Service

CITRUS

JANUARY FORECAST
MATURITY TEST RESULTS AND FRUIT SIZE

Cooperating with the Florida Department and Agriculture and Consumer Services
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January 12, 2017

Florida All Orange Production Down 1 percent from December Forecast
Florida Non-Valencia Orange Production Unchanged
Florida Valencia Orange Production Down 3 percent
Florida All Grapefruit Production Down 3 percent
Florida All Tangerine and Tangelo Production Up 1 percent
FCOJ Yield at 1.44 Gallons per Box (42º Brix)

FORECAST DATES – 2016-2017 SEASON	
February 9, 2017	May 10, 2017
March 9, 2017	June 9, 2017
April 11, 2017	July 12, 2017

Crop and State	Production [1]		2016-2017 Forecasted Production [1]	
	2014-2015	2015-2016	December	January
	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)	(1,000 boxes)
Non-Valencia Oranges [2]				
Florida	**47,400**	**36,100**	**36,000**	**36,000**
California	39,000	45,500	42,000	44,000
Texas	1,170	1,351	1,000	1,450
United States	87,570	82,951	79,000	81,450
Valencia Oranges				
Florida	**49,550**	**45,500**	**36,000**	**35,000**
California	9,200	8,700	8,500	9,000
Texas	282	340	350	350
United States	59,032	54,540	44,850	44,350
All Oranges				
Florida	**96,950**	**81,600**	**72,000**	**71,000**
California	48,200	54,200	50,500	53,000
Texas	1,452	1,691	1,350	1,800
United States	146,602	137,491	123,850	125,800
Grapefruit				
Florida-All	**12,900**	**10,800**	**9,300**	**9,000**
White	**3,250**	**2,490**	**2,000**	**1,700**
Red	**9,650**	**8,310**	**7,300**	**7,300**
California	4,800	3,800	4,000	4,100
Texas	4,250	4,800	4,700	5,300
United States	21,950	19,400	18,000	18,400
Lemons				
California	20,600	20,500	21,000	20,000
Arizona	2,000	1,750	1,800	1,550
United States	22,600	22,250	22,800	21,550
Tangelos				
Florida	**665**	**390**	**(NA)**	**(NA)**
Tangerines and Tangelos [3]				
Florida-All	**2,265**	**1,415**	**1,500**	**1,520**
Early [4]	**1,445**	**785**	**600**	**620**
Royal [5]	**(NA)**	**(NA)**	**220**	**220**
Honey	**820**	**630**	**360**	**360**
Tangelo	**(NA)**	**(NA)**	**320**	**320**
California	18,700	21,700	23,000	23,000
Arizona [6]	170	(NA)	(NA)	(NA)
United States	21,135	23,115	24,500	24,520

NA Not available.

[1] Net pounds per box: oranges in California-80, Florida-90, Texas-85; grapefruit in California and Texas-80, Florida-85; 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 for 2014-2015 and 2015-2016.

[3] Includes tangelos and tangors in California. Beginning in 2016-2017, includes tangelos in Florida.

[4] Fallglo and Sunburst varieties.

[5] Beginning in 2016-2017, Temples have been reclassified as Royal tangerines.

[6] Estimates discontinued in 2015-2016.

All Oranges 71.0 Million Boxes

The 2016-2017 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 71.0 million boxes, down 1.00 million boxes from December, and 13 percent less than last season's production. The forecast consists of 36.0 million boxes of the non-Valencia oranges (early, midseason, and Navel varieties) and 35.0 million boxes of the Valencia oranges. Regression data used are from the 2006-2007 through 2015-2016 seasons. For those previous 10 seasons, the January forecast has deviated from final production by an average of 5 percent, with 6 seasons above and 4 below, and with differences ranging from 15 percent below to 10 percent above. All references to "average", "minimum", and "maximum" refer to the previous 10 seasons unless noted.

Non-Valencia Oranges 36.0 Million Boxes

The forecast of non-Valencia production is unchanged at 36.0 million boxes. Estimated utilization through December, including an allocation for non-certified fruit, is 12.0 million boxes, compared to 13.9 million boxes last season. Final fruit size is below the minimum, requiring 317 pieces of fruit to fill a 90-pound box. Final droppage at 26 percent is above average but below last season's record of 32 percent. The Navel forecast, included in the non-Valencia forecast, is lowered 100,000 boxes to 900,000 boxes.

Valencia Oranges 35.0 Million Boxes

The forecast of Valencia production is down 1.00 million boxes to 35.0 million boxes. Current fruit size is below the average, and is projected to be below average at harvest. Current droppage is near the maximum and projected to continue to be near the maximum until harvest.

All Grapefruit 9.00 Million Boxes

The forecast of all grapefruit production is lowered 300,000 boxes to 9.00 million boxes. The white grapefruit forecast is lowered 300,000 boxes to 1.70 million boxes. The red grapefruit forecast is unchanged at 7.30 million boxes. Current fruit size of white grapefruit is slightly below the minimum while droppage is above the maximum. Current fruit size of red grapefruit is below the minimum while droppage is slightly below the maximum.

Tangerines and Tangelos 1.52 Million Boxes

The forecast of tangerine and tangelo production is up 20,000 boxes to 1.52 million boxes. The early tangerine forecast (Fallglo and Sunburst varieties) is raised to 620,000 boxes, consisting of 220,000 boxes of Fallglo tangerines and 400,000 boxes of Sunburst tangerines. The Royal tangerine forecast is held at 220,000 boxes. The forecast of the later maturing Honey variety is unchanged at 360,000 boxes. Fallglo tangerine harvest is over, and the Sunburst harvest is nearly complete. Current Honey size is slightly below the minimum, but is projected to be above the minimum at harvest. Projected Honey droppage at 46 percent is close to the maximum.

The forecast of tangelo production is unchanged at 320,000 boxes. The Row Count survey conducted December 27-28, 2016, showed 41 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 1.44 Gallons per Box

The projection for frozen concentrated orange juice (FCOJ) is unchanged at 1.44 gallons per box of 42° Brix concentrate. Projections for the components are 1.36 gallons per box for the early-midseason portion, and 1.54 gallons per box for the late (Valencia) portion. Last season's final yield, as reported by the Florida Department of Citrus were: 1.405527 gallons per box for all oranges, 1.347046 gallons per box for early-midseason oranges, and 1.472983 gallons per box for late (Valencia) oranges.

Forecast Components, by Type – Florida: January 2017

[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	Fruit per tree	Droppage	Fruit per box
	(1,000 trees)	(number)	(percent)	(number)
ORANGES				
Early-midseason	20,872	766	26	317
Navel	1,005	219	27	144
Valencia	28,925	450	29	241
GRAPEFRUIT				
White	832	410	45	135
Red	3,092	393	36	137

Maturity

Regular bloom fruit samples were collected on December 27-28, 2016, from groves on established routes in Florida's five major citrus producing areas and tested December 29-30, 2016. All comparisons in the first table are made to January 1, 2016. Acids are higher on all orange types. Solids are lower only on early oranges, and ratios are lower on all fruit types. Unfinished juice per box and solids per box are lower for midseason and late oranges, but higher for early oranges.

All Indian River comparisons are made to fruit from other areas for this test period. Indian River early oranges have lower acid levels and higher solids compared to other areas this month, resulting in higher ratios. Indian River late oranges have higher acid levels and higher solids compared to other areas this month, with higher ratios. Unfinished juice per box is lower for both early and late oranges. Solids per box is lower for early oranges samples but higher for late oranges samples collected in the Indian River District.

Citrus Unadjusted Maturity Tests — Florida: January 1, 2015-2016 and 2016-2017

[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	
	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
ORANGES										
Early (85-84)										
Sep 1	1.26	1.40	9.13	9.23	7.32	6.69	44.64	41.60	4.08	3.84
Oct 1	0.91	0.99	9.45	9.45	10.54	9.77	52.51	47.46	4.96	4.48
Nov 1	0.76	0.82	10.35	9.95	13.96	12.38	50.00	49.49	5.17	4.92
Dec 1	0.66	0.75	10.77	10.88	16.54	14.65	50.91	50.70	5.48	5.52
Jan 1	0.58	0.70	11.16	11.13	19.71	16.23	50.03	50.35	5.59	5.61
Midseason (38-45)										
Sep 1	1.44	1.55	8.99	9.14	6.38	5.97	45.89	42.03	4.12	3.84
Oct 1	1.08	1.14	9.19	9.38	8.76	8.43	49.68	47.40	4.56	4.44
Nov 1	0.92	0.90	10.36	9.91	11.57	11.21	51.44	50.08	5.33	4.96
Dec 1	0.77	0.85	10.95	10.80	14.56	12.79	52.08	50.98	5.70	5.51
Jan 1	0.70	0.78	11.39	11.42	16.68	14.84	53.15	51.81	6.05	5.92
Late (150-148)										
Sep 1	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oct 1	1.91	1.99	8.57	8.83	4.55	4.52	48.46	46.01	4.15	4.07
Nov 1	1.60	1.67	9.35	9.16	5.91	5.57	52.44	49.97	4.90	4.58
Dec 1	1.31	1.42	9.75	10.07	7.52	7.18	54.53	52.34	5.31	5.27
Jan 1	1.05	1.22	10.26	10.82	9.94	8.99	57.20	54.06	5.87	5.85

NA Not available.

Citrus Maturity Test Averages, by Areas — Florida: January 1, 2015-2016 and 2016-2017

Fruit type (number of groves)	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017	2015-2016	2016-2017
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
ORANGES										
Early										
Indian River (6-5)	0.55	0.68	11.93	11.22	22.23	16.59	48.43	47.79	5.81	5.37
Other Areas (79-79)	0.58	0.70	11.10	11.13	19.52	16.21	50.15	50.52	5.57	5.63
Midseason										
Indian River (7-1)	0.76	(D)	11.64	(D)	15.88	(D)	55.97	(D)	6.53	(D)
Other Areas (31-44)	0.69	0.78	11.33	11.42	16.86	14.85	52.51	51.91	5.95	5.93
Late										
Indian River (29-29)	1.07	1.25	10.71	11.18	10.07	9.08	57.33	54.02	6.14	6.04
Other Areas (121-119)	1.04	1.21	10.15	10.74	9.90	8.97	57.17	54.08	5.80	5.81

D Withheld to avoid disclosing data for individual operations.

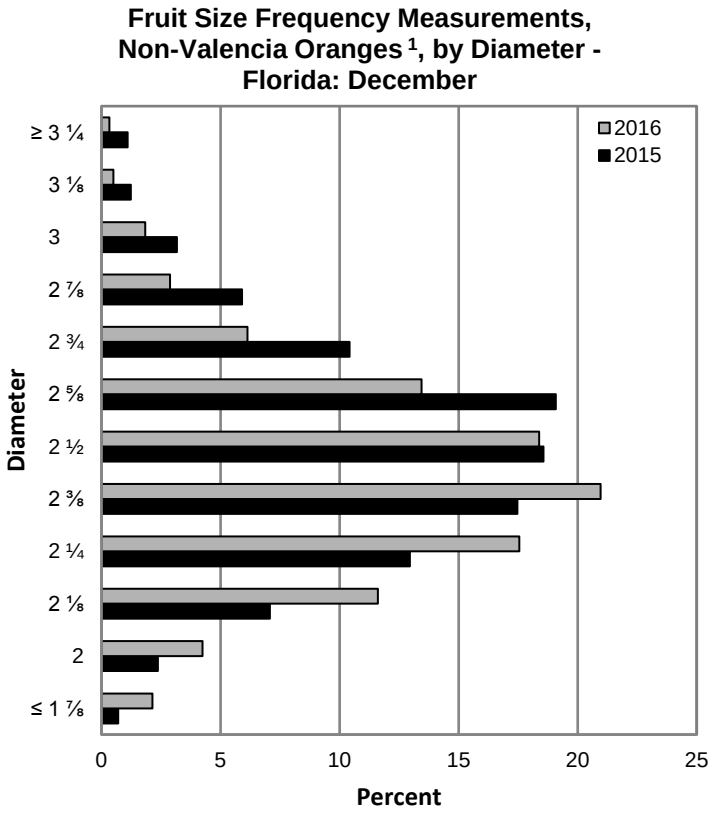
Citrus Size Frequency Measurement Distributions, by Type — Florida: December Survey

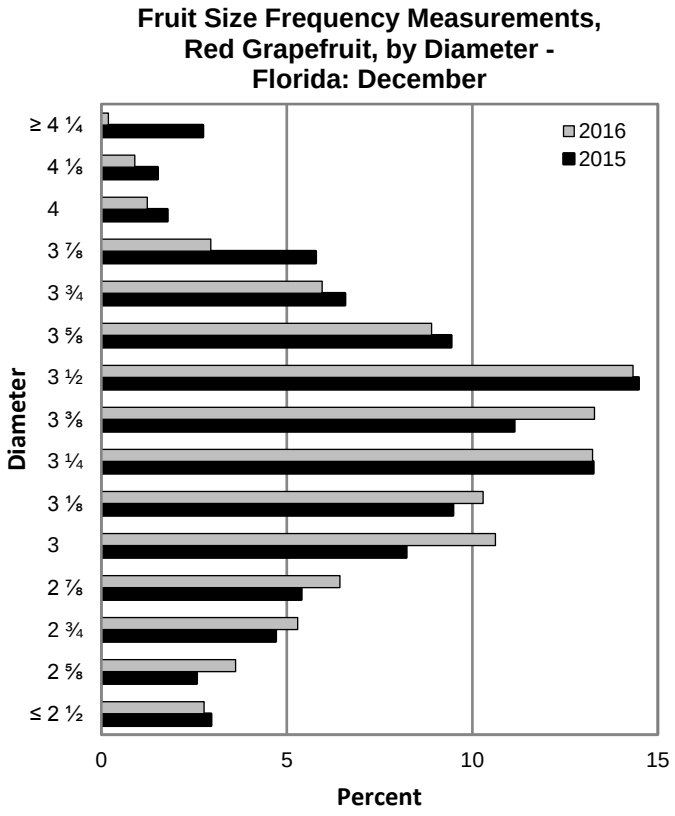
Type and number of fruit per 4/5 – bushel containers	2014	2015	2016
	(percent)	(percent)	(percent)
NON-VALENCIA ORANGES [1]			
64 or less	0.8	1.6	0.6
80	5.5	6.5	3.3
100	17.9	21.4	12.7
125	29.3	29.9	26.9
163 or more	46.5	40.6	56.5
VALENCIA ORANGES			
64 or less	1.3	3.8	3.1
80	9.0	13.9	10.2
100	29.1	31.3	23.7
125	32.7	29.2	29.6
163 or more	27.9	21.8	33.4
HONEY TANGERINES			
80 or less	8.7	10.3	3.5
100	21.5	19.0	19.3
120	17.7	25.5	25.1
176	11.0	12.9	17.4
210 or more	41.1	32.3	34.7

Type and number of fruit per 4/5 – bushel containers	2014	2015	2016
	(percent)	(percent)	(percent)
WHITE GRAPEFRUIT [2]			
32 or less	3.3	1.4	0.8
36	8.9	4.9	2.6
40	13.1	8.6	6.5
48	15.3	11.6	13.4
56	13.4	13.0	13.4
63 or more	46.0	60.5	63.3
RED GRAPEFRUIT			
32 or less	3.2	3.6	0.4
36	8.2	5.5	3.3
40	12.5	9.3	7.5
48	16.6	15.2	14.2
56	12.4	13.8	15.1
63 or more	47.1	52.6	59.5

[1] Excludes Navel varieties.
[2] 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.





[1] Excludes Navel varieties.